ONEIDA COUNTY DEPARTMENT OF WATER QUALITY & WATER POLLUTION CONTROL

51 Leland Ave, PO Box 442, Utica, NY 13503-0442

(315) 798-5656 wpc@ocgov.net

FAX 724-9812

Anthony J. Picente, Jr. County Executive

Karl E. Schrantz, P.E. Commissioner

January 30, 2023

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

Carol Lamb-Lafay, 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 Annual Work Plan - 2023

Consent Order No. R6-20060823-67

Dear Mr. McCullouch and Ms. Lamb-Lafay:

On behalf of Oneida County, I am providing for your review Oneida County's Annual Work Plan -2023. This work plan summarizes the progress made by the County during 2022 and outlines proposed efforts continuing in 2023 in support of the Consent Order compliance requirements.

As Consent Order requirements have been fulfilled and the compliance date of December 31, 2022 has been reached, this report will be the last formal Annual Work Plan issued to the NYSDEC.

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

Kock E. Schants

Karl E. Schrantz, P.E. Commissioner

Enclosure: Annual Work Plan - 2023

ecc: Anthony J. Picente, Jr. – Oneida County Executive Peter M. Rayhill, Esq. – Oneida County Attorney Randall Young – NYSDEC Matthew Duffany, P.E. – NYSDEC Daniel Hayes - NYSDEC Karen Rusin – NYSEFC Dorian Di Cocco, P.E. - NYSEFC Howard LeFever, P.E. – GHD Consulting Services Inc. John Story, P.E. – GHD Consulting Services Inc. Colin Lautz, P.E. – Ramboll FedEx



ANNUAL WORK PLAN 2023

ONEIDA COUNTY SEWER DISTRICT

NYSDEC CONSENT ORDER R620060823-67

Prepared for

Oneida County Department of Water Quality & Water Pollution Control Karl E. Schrantz, P.E., Commissioner 51 Leland Avenue Utica, NY 13502

January 30, 2023



Syracuse, NY





Syracuse, NY

Utica, NY

ANNUAL WORK PLAN 2023

ONEIDA COUNTY SEWER DISTRICT

NYSDEC CONSENT ORDER R620060823-67

Prepared for

Oneida County Department of Water Quality & Water Pollution Control

January 30, 2023

Prepared by

GHD Consulting Services, Inc.

5788 Widewaters Parkway Syracuse, NY 13214

1.0	INTR	ODUCTION	1-1
	1.1	HISTORICAL BACKGROUND	1-1
	1.2	CONSENT ORDER	1-1
2.0	SUM	MARY OF 2022 PROGRESS	2-1
	2.1	INVESTIGATIONS	2-1
		2.1.1 Sanitary Sewer Televising	2-1
	2.2	MANAGEMENT PROGRAMS	2-3
		2.2.1 Steering Committee	
		2.2.2 Capacity, Management, Operations & Maintenance Program	
		2.2.3 Private Property I/I Reduction Program	
		2.2.4 Flow Monitoring	2-5
	2.3	SEWER SYSTEM REHABILITATION CONTRACTS	2-7
	2.4	WATER POLLUTION CONTROL PLANT AND SAUQUOIT CREEK	
		PUMPING STATION/FORCE MAIN UPGRADES	2-8
	2.5	PROJECT FINANCING	2-9
		2.5.1 Clean Water State Revolving Fund (CWSRF) Financing	2-9
		2.5.2 Green Innovation Grant Program (GIGP)	
3.0	PLA	NNED WORK 2023	3-1
	3.1	ENGINEERING INVESTIGATIONS	3-1
		3.1.1 Closed Circuit Televising	3-1
	3.2	MANAGEMENT PROGRAMS	3-1
		3.2.1 Steering Committee	3-1
		3.2.2 Capacity, Management, Operations, and Maintenance Program	
		3.2.3 Private Property I/I Reduction Program	
		3.2.4 Flow Monitoring Program	
	3.3	SEWER REHABILITATION CONTRACTS	3-3

TABLE OF CONTENTS

	3.4	WPCP/SCPS/FM UPGRADE CONTRACTS	3-3
4.0	REPO	RTING	4-1
5.0	FUND	ING	5-1
	5.1	CONSOLIDATED FUNDING APPLICATIONS	5-1

TABLES

- 2.1 SUMMARY OF CONTRACTS SEWER REHABILITATION
- 2.2 SUMMARY OF CONTRACTS WATER POLLUTION CONTROL PLANT AND SAUQUOIT CREEK PUMPING STATION/FORCE MAIN

1.0 INTRODUCTION

1.1 HISTORICAL BACKGROUND

The Oneida County Sewer District (OCSD or District) was formed in 1965 through an act by the former Oneida County Board of Supervisors. It is administered by Oneida County through the Oneida County Department of Water Quality and Water Pollution Control (WQ&WPC) which is responsible for the operation of the District's facilities and personnel. District facilities include 45-miles of interceptor sewers, the Sauquoit Creek and the Barnes Avenue pumping stations, and the Water Pollution Control Plant (WPCP). The District services 15 municipalities, 9 of which are within the Sauquoit Creek Pumping Station (SCPS) Basin. These municipalities own and operate their own collection systems.

1.2 CONSENT ORDER

The New York State Department of Environmental Conservation (NYSDEC) and Oneida County (County) entered into a Consent Order No. R620060823-67 due to sanitary sewer overflows (SSO) at the Sauquoit Creek Pumping Station. In addition to the required mitigation of those SSOs, the Consent Order, with an effective date of December 12, 2011, requires the submission of an Annual Work Plan (Work Plan). The intent of this Work Plan is to summarize the progress made by the County during the previous year and outline the proposed efforts that will be undertaken by the County during the upcoming year in support of the Consent Order compliance requirements.

In a letter dated June 16, 2021 to the NYSDEC, the County requested an extension of the SSO Mitigation Consent Order Compliance deadline to December 31, 2022. The basis for this request was to address project conditions beyond the control of the County, including program scheduling impacts due to the COVID-19 pandemic, numerous flooding events, and delays in completion of the new Sauquoit Creek Force Main construction due to unforeseen soil conditions. Through cooperative discussions with the NYSDEC, Modification No. 2 to the Consent Order was agreed upon which included a one-year extension to December 31, 2022. The modification was executed by the NYSDEC on November 24, 2021.

As of December 31, 2022, the County has fully complied with all requirements of the Consent Order. Specifically, the requirements listed in "Schedule A" of the Consent Order have been met. The County will be submitting a formal request to NYSDEC that the Consent Order be suspended. While the work directly associated with the Consent Order is complete, the County remains committed to continuous system improvements. Initiatives that will continue into the future include coordination with the satellite communities regarding collection system rehabilitation; identification of private property inflow and infiltration sources and approaches toward mitigation; and capacity, management, operations and maintenance (CMOM) activities for the wastewater conveyance and treatment systems. Additionally, the County acknowledges the importance of properly maintaining their infrastructure with the use of the recently deployed computerized maintenance management system (CMMS).

It should be noted the WPCP upgrade and expansion includes work which is beyond the scope of the Consent Order. Construction Contract C-8, currently approximately 75 percent complete, includes the refurbishment of the secondary treatment system (i.e., final settling tanks and aeration basins). Although this project is important to replace equipment and structures that were approaching the end of their design life, the upgrades in Contract C-8 were not necessary to provide the peak capacity of 111 million gallons per day (mgd) and are therefore not directly related to the Consent Order.

2.0 SUMMARY OF 2022 PROGRESS

The County submitted an Annual Work Plan for 2022 (dated January 26, 2022) to the NYSDEC. That document outlined the County's proposed approach toward achieving interim Consent Order milestones during 2022. The following sections summarize the major efforts initiated and/or completed through December 31, 2022.

In March 2020, the COVID-19 crisis began affecting daily work routines for the County, Consultant Team and contractors and resulted in various restrictions because of New York State and Oneida County Executive Orders. While COVID restrictions have since been lifted, the County, Consultant Team and contractors continue to abide by CDC regulations and their own company guidance with respect to COVID-19, as necessary. The pandemic created several challenges early on for the various projects, and the County continues to deal with industry-wide challenges such as supply chain disruption and scheduling issues.

2.1 INVESTIGATIONS

2.1.1 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). In 2011, the County 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.

As a result of that initial televising contract, approximately 171-miles of the 216-miles of sewers were televised. The remaining 21% or 47-miles of sewers were not inspected at that time 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 sewers, and buried manholes. These obstacles are primarily maintenance-related and are being addressed

through the District's Capacity, Management, Operation, and Maintenance (CMOM) program currently in the various stages of implementation. Efforts are being made to CCTV and inspect additional sewers as a component of current and future sewer rehabilitation contracts. Including the original CCTV contract, and subsequent CMOM and rehabilitation related CCTV, a total of approximately 195-miles of sewer, or 90% of the total sewers in the SCPS basin, have been televised.

No additional televising was completed in 2022; however, the results of sewer televising performed in the Town of New Hartford, Village of New Hartford, and Village of Yorkville in 2021, were used to identify areas for potential rehabilitation. The sewer rehabilitation design has been completed and is currently under review, with bidding anticipated for mid- 2023.

In 2021, the Villages of New Hartford and Yorkville applied for and were awarded Engineering Planning Grant (EPG) funding through the New York State Environmental Facilities Corporation (EFC) in the amount of \$100,000 each to conduct additional sewer investigations to further refine rehabilitation projects. to reduce I/I in their systems. This EPG funding is independent from Oneida County sponsored work. GHD was retained by both communities to provide engineering/technical services in support of the EPG. The EPG work began in March 2022, when Duke's (a subconsultant to GHD) installed over 100 depth sensors in sanitary manholes in the Villages of Yorkville and New Hartford to collect depth of flow data. The sensors collected depth of flow data for three months. The monitoring data is being reviewed and used to analyze the micro-basins and prioritize areas for more detailed investigations in the future. Other additional flow metering and/or SSES investigations may also be considered in other areas based upon review of the flow metering data and mapping.

To further assist in refining sewer rehabilitation project scopes, the County purchased five level sensor devices (ADS ECHOTM) that are easily installed in a manhole without the need for confined space entry. These level sensors were installed in select areas in the Town of New Hartford in late 2021 to collect I/I data on a sub-sewer basin scale. Eight of the 10 sub-basins showed signs of high

I/I. Discussions with the Town are planned to further investigate the eight sub-basins. The County is planning for a future phase of SSES work and NHD-23 will be included in this investigation.

2.2 MANAGEMENT PROGRAMS

2.2.1 Steering Committee

The project Steering Committee consists of representatives from each District municipality. Over the past 12 years, this group has provided valuable system data and insights, as well as feedback on remediation efforts to help advance the Oneida County SSO Mitigation Project. The Steering Committee serves an essential role in decisions affecting systems operations, management, and costs.

Throughout 2022, the Steering Committee continued to provide system insights, data and project feedback to help advance the Oneida County SSO Mitigation Project. Specifically, engagement of the OCSD Steering Committee in 2022 included:

- A funding workshop was held on October 11, 2022 with the Steering Committee and NYSEFC, Empire State Development (ESD), and Mohawk Valley Economic Development District (MVEDD).
- Two steering committee Workgroups were established:
 - PPII: To provide input and guidance on the Private Property I/I program and implementation plan
 - CMOM: To further the development and implementation of a community-based Capacity, Management, Operations and Maintenance program
- Distribution of the OCSD Project News Bulletin containing the latest information on project milestones, upcoming project deadlines and project funding. Bulletins are sent via email to Steering Committee members and to legislators via the Legislative Analysts.
- Additional email alerts to the OCSD Steering Committee regarding developments related to the NYSDEC Consent Order, sewer rate schedule and public hearing dates, funding sources for sewer rehab, etc.

<u>Community Outreach and Education</u> – For 2022, Oneida County was in the final period leading up to the NYSDEC Consent Order deadline of December 31, 2022 to mitigate SSOs from occurring at the Sauquoit Creek Pump Station. In 2022, the community outreach activities were focused mainly on public education and member municipality outreach, all in support of the compliance with more stringent state and federal wastewater mandates. Additional project stakeholder outreach in 2022 included:

- Insert in water/sewer bills related to proposed sewer rate schedule and related system improvements.
- Posting of rate change information on the OCSD and MVWA web sites.
- Public educational materials on the legal, environmental, and operational impacts of water runoff.
- Public hearing presentation materials.
- Sump pump impacts instructional video.
- Continued collaboration with Oneida County Department of Health regarding conducting FOG inspections concurrent with routine inspections.
- Posting of project reports and other documents to the project website <u>https://rippleeffectocsd.org</u>.

2.2.2 Capacity, Management, Operations and Maintenance (CMOM) 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 following is a summary of notable CMOM related items undertaken in 2022:

<u>Fats, Oils, and Grease (FOG)</u> – OCSD and Oneida County Department of Health (OCDOH) are collaborating on the implementation of the Fats, Oils, and Grease (FOG) program. Inspections of Food Service Establishments (FSEs) began during the 3rd quarter of 2018, but were put on hold in 2020 and 2021 due to COVID restrictions and staffing issues at the OCDOH. The OCDOH recently hired staff and assigned an individual to assist with FOG inspections. A total of 94 FSE inspections were conducted in 2022. During visits, inspectors

verify that proper plumbing fixtures are in place and that FSEs follow the local and County sewer use ordinance with respect to not releasing fat-laden wash water or cooking oils to the sanitary sewer system. Inspectors look for evidence that FSEs are utilizing best management practices, tracking grease trap maintenance, and keeping grease hauling records. In the future, information on each FSE will be entered in the County's Computerized Maintenance Management System (CMMS) so that it can be linked with the growing collection system database.

Additionally, New York State has adopted a permanent rule (effective July 6, 2022) that adds specific provisions regarding the installation, modification, use and maintenance for grease traps/interceptors to the New York State Uniform Fire Prevention and Building Code ("Uniform Code"). The County disseminated educational materials to the local municipalities for their distribution to the FSEs in their municipality in 2022.

2.2.3 Private Property I/I Reduction Program

In accordance with the Consent Order, Schedule A, PPII program implementation began in May 2013. Planning among the Consultant Team regarding the 2022 program elements includes legal review of potential modifications to the County's Sewer Use Rules and Regulations and drafting policy documents relative to private property I/I. The Consultant Team continues to conduct public outreach and provide educational materials as needed. The team is exploring options for private property inspections with the goal of disconnecting illicit discharges. Two meetings with the PPII and CMOM Working Groups were held in 2022, October 26 and December 7 to discuss ongoing efforts to mitigate PPII, such as private home inspection programs, CMOM, public outreach and updates to the Oneida County Sewer Use Law.

2.2.4 Flow Monitoring

The County worked closely with the Dormitory Authority of the State of New York (DASNY) to secure the \$950,000 Economic Development Assistance Program (EDAP) funding allocation that

is supporting the extensive flow monitoring program proposed by the County and approved by NYSDEC on August 24, 2012.

The EDAP funds were ultimately made available by DASNY to the County in March 2014. Procurement of the flow monitoring equipment was advertised on June 9, 2014. Contract was awarded on September 10, 2014 to ADS Environmental Services, LLC (ADS). ADS completed the installation of 63 flow meters and five rain gauges in 2015. Forty-four meters were installed in the Sauquoit Creek Pump Station (SCPS) drainage basin, and 14 meters were installed in the North Utica drainage basin and other smaller basins. Two of the meters were installed to monitor flow to the County's Barnes Ave Pumping Station, and three are used to monitor flow in the City of Utica's combined sewers to aid in hydraulic model calibration and confirmation. Three new flowmeters were installed within the collection system tributary to the Starch Factory Interceptor (outside of the SCPS Basin) in December 2019. Currently, 66 flow meters are installed under the County's flow monitoring program.

In 2018, the County's engineering consultants completed the calibration and update to the original 2010 hydraulic model of the collection system. Since the update, flow monitoring data continued to be collected and evaluated by the Consultant Team. The 2022 1st Quarter report presented an update on the 2021 flow monitoring data and rainfall-derived I/I (RDII) analysis for the Sauquoit Creek Pump Station basin. A noted decrease in annual overflow volumes over the period of 2017 to 2021 was observed, which is likely attributed to a combination of sewer rehabilitation work performed in the upstream service area and upgrades to the Sauquoit Creek Pump Station and forcemain resulting in improved service. Additional flow monitoring and RDII analyses were conducted during the remainder of 2022 to evaluate sewer rehabilitation effectiveness and analyze select areas that still exhibit elevated levels of I/I. Based on the high I/I observed in certain areas of the collection system, additional sewer investigation commenced in the areas of Town of New Hartford, Village of New Hartford, and Village of Yorkville in 2021.

Overall, the results of the flow monitoring evaluations indicate that the significant amount of sewer investigation and subsequent rehabilitation work completed to date has had a generally positive impact on I/I abatement and reducing sanitary sewer overflow volumes at the Sauquoit Creek Pump Station, although results may vary depending on the rainfall intensity and storm characteristics. Furthermore, since Contact C-4 (Sauquoit Creek Force Main Upgrades) became substantially complete and operational in the 3rd Quarter 2022, there have been no overflows at the Sauquoit Creek Pump Station.

While not part of the SCPS basin, flow metering continued in the Starch Factory drainage basin in 2022. The purpose of the meters installed in the Starch Factory drainage basin was to isolate portions of the Starch Factory Interceptor basin so that areas of excess infiltration and inflow (I/I) could be identified. The data collected by these flowmeters continues to be reviewed and analyzed by GHD. Preliminary results reviewed during the 1st Quarter 2022 indicate that the sewershed tributary to meter "Oneida_205" located within Proctor Park, appears to be contributing proportionally the most Rain Derived I/I (RDII) in the Starch Factory Interceptor area. The City of Utica installed three additional temporary flow meters in this drainage basin in 2022 to further investigate suspect cross-connections and develop a plan for mitigation. This flow monitoring data has already been used to design and construct stormwater extensions to eliminate cross-connected catch basins.

2.3 SEWER SYSTEM REHABILITATION CONTRACTS

Sewer rehabilitation work financed under CWSRF Project No. C6-6070-08-00, C6-6070-08-10, and C6-6071-02-00 are closed out with the exception of Contract 16 that is being administratively closed out. A new sewer rehabilitation project, Contract 17, is in the design phase. The prior rehabilitation contracts were undertaken in order to reduce the amount of inflow and infiltration entering the system due to defects in interceptor sewers, mainline sewers, lateral connections and manhole structures. Work under these sewer rehabilitation contracts typically included: a mix of CIPP lining; pipe joint and lateral grouting; open cut repairs; spot repairs; manhole

repairs/replacement; and supplemental CCTV inspections. Projects were being tracked by a unique contract number. The status and details of the rehabilitation contracts to date are presented in Table 2.1. Contract C-17 focuses on sewer rehabilitation work in the Village of Yorkville. The sewer rehabilitation design has been completed and is currently under review, with bidding anticipated for early 2023.

Recognizing the need for additional sewer rehabilitation work in the system and that funding will be necessary to support this work, the County applied in 2022 for financing through the NYSEFC's Clean Water State Revolving Fund (CWSRF), which is being funded by the Bipartisan Infrastructure Law (BIL). The County submitted an application and engineering report in June 2022 for a collection system rehabilitation project to be listed on the Intended Use Plan (IUP). The collection system rehabilitation project recommends \$26 million in rehabilitation work to help further reduce wet weather flows received at the SCPS and the WPCP. The Draft IUP was issued in August 2022 and this project was included on the Annual List for BIL grant and subsidized financing eligibility.

2.4 WATER POLLUTION CONTROL PLANT AND SAUQUOIT CREEK PUMPING STATION/FORCE MAIN UPGRADES

Table 2.2 summarizes how the WPCP, SCPS and new force main upgrades have been segregated and the status of each construction contract. Note: Contract numbers identified for the work at the WPCP and the SCPS/Force Main (C-1 through C-8), do not correlate to the sanitary sewer rehabilitation contracts (Contracts 2-17). Other than the Contract C-5.1 (Barnes Avenue Pumping Station Upgrades), which was not under than Consent Order, and Contract C-8 (WPCP Secondary Treatment Process Upgrades), all other contracts are complete or substantially complete and upgrades are operational. As noted in Section 1, Contract C-8, currently approximately 75 percent complete, includes refurbishment of the secondary treatment system (i.e., final settling tanks and aeration basins) which is beyond the scope of the Consent Order.

2.5 **PROJECT FINANCING**

2.5.1 Clean Water State Revolving Fund (CWSRF) Financing

The overall program was financed through the CWSRF program administered by the New York State Environmental Facilities Corporation (NYSEFC). Through December 2022, \$314M of financing has been issued. An additional \$66.8M remains available under the \$380.8M total bonding authorization for the Consent Order Compliance program.

2.5.2 Green Innovation Grant Program (GIGP)

The County applied for and was awarded \$1,250,000 in funding though the Green Innovation Grant Program (GIGP) in 2021. Monies are being used to offset costs for two additional microturbines (energy efficiency measures) being installed under Contract C-8. The microturbines are part of the energy recovery system that was initially constructed under Contract C-2 Solids Handling Upgrades.

3.0 PLANNED WORK 2023

As presented in Section 1, the County has fully complied with all requirements of the Consent Order and this report will be the last formal Annual Work Plan issued to the NYSDEC. The County remains committed to continuous system improvements and this section presents ongoing initiatives planned for 2023.

3.1 ENGINEERING INVESTIGATIONS

3.1.1 Closed Circuit Televising

Closed Circuit Televising (CCTV) for 2023 is anticipated to be done in conjunction with sewer rehabilitation contracts, including Contract 17 in the Village of Yorkville. Other sewer investigation efforts will be focused in the Town of New Hartford and Village of New Hartford in 2023 and may incorporate CCTV work.

3.2 MANAGEMENT PROGRAMS

3.2.1 Steering Committee

With completion of the Consent Order, the role of the Steering Committee will transform in 2023. However, the PPII and CMOM Working Groups will continue in 2023 as described in subsequent sections.

<u>Community Outreach and Education</u> – Community outreach and education will become more focused in 2023 and will be integrated into the PPII and CMOM programs. Outreach and education efforts will be in a direct support role to the County and their Engineering Consultant, as necessary.

3.2.2 Capacity, Management, Operations, and Maintenance (CMOM) Program

The CMOM working group will provide continued guidance to the County and consultant team as the CMOM Framework is further refined, including implementation efforts for 2023. This includes:

- <u>Fat, Oil, and Grease (FOG) Program</u> The Consultant team will continue to work with the County to progress the implementation of the FOG inspection program and provide technical guidance as needed. The OCSD and OCDOH began implementing the inspection program in 2018 and were not able to perform inspections in 2020 and 2021 due to staffing and COVID-19, but resumed inspections in 2022. The consultant team will continue to support the FOG program as necessary in 2023.
- <u>Municipal Collection System Coordination</u> The Consultant team will continue to provide engineering/technical support on an as-needed basis to assist the County and/or municipalities with the investigation of sanitary sewer system issues.

3.2.3 Private Property I/I Reduction Program

The Private Property I/I (PPII) Reduction Program's goal is to address the private property contribution of I/I. The County plans to continue its efforts to address PPII in 2023 and beyond, including:

- <u>Facilitation of PPII Working Group</u> Collaborate with the Town/Village representatives who will be responsible for helping implement community-based PPII reduction programs.
- <u>Long-term Program Implementation</u> This includes formalizing modifications to the Oneida County Sewer Use Rules and Regulations and continuing to assist communities with PPII implementation efforts.
- <u>Direct Resident Education</u> Advance household/property owner understanding of PPII impacts and ordinance requirements via public information and education, as necessary. This will include direct mailings to households and via social media, mass media, planning and facilitating of community education events, and conducting focus groups and public information briefings related to project activities.

 <u>Operation Ripple Effect Website</u> –Maintenance and regular updating of the Operation Ripple Effect website will continue in 2023 to share critical information related to items such as home inspections and PPII, cost and funding information, and other project aspects. This also includes development of visuals and other illustrative materials to deliver user-friendly, easyto-understand content via the website.

3.2.4 Flow Monitoring Program

The County continues to allocate significant funds within its operations budget to continue its flow monitoring program. Data will be used to evaluate collection system functionality and capacity anomalies, sewer rehabilitation effectiveness, and analyze select areas that appear exhibit elevated levels of I/I as needed. This includes EPG funded work in the Villages of Yorkville and New Hartford. Independently from County work, the City of Utica plans to continue their own additional flow monitoring in the Starch Factory Creek area through 2023. Additionally, the County and City of Utica are considering redeploying some flow meters to more strategic locations based on discussions with ADS.

3.3 SEWER REHABILITATION CONTRACTS

Sanitary sewer rehabilitation will continue to be an important element of the overall collection system CMOM. As detailed in Table 2.1, all sewer rehabilitation projects undertaken in conjunction with the Consent Order are now complete. Contract 17 is a pending CMOM sewer rehabilitation project that is in the design phase. Approximately \$5 million in funding is available for additional CMOM sewer rehabilitation contracts, and additional work will be identified for design as part of continued system evaluations.

3.4 WPCP/SCPS/FM UPGRADE CONTRACTS

As referenced in Section 2.4, Table 2.2 summarizes the construction contracts status at the WPCP and the SCPS/FM. Other than the Contract C-5.1 (Barnes Avenue Pumping Station Upgrades) and Contract C-8 (WPCP Secondary Treatment Process Upgrades), all other contracts (which are

required elements of the Consent Order) are complete and/or functionally operational. As noted in Section 1, the WPCP upgrade and expansion includes work which is beyond the scope of the Consent Order. Construction Contract C-8, currently approximately 75 percent complete, includes the refurbishment of the secondary treatment system (i.e., final settling tanks and aeration basins) that were approaching the end of their design life.

4.0 **REPORTING**

As Consent Order requirements have been fulfilled and the compliance date of December 31, 2022 has been reached, this report will be the last formal quarterly progress report issued to the NYSDEC. The County will continue to collaborate with NYSDEC Region 6 Division of Water staff regarding future projects and initiatives

5.0 FUNDING

The following funding activities are anticipated in 2023.

5.1 CONSOLIDATED FUNDING APPLICATIONS (CFA)

The County will continue to identify potential supplemental project funding opportunities through the annual CFA process.

	TABLE 2.1												
	Oneida County Sewer District												
	SUMMARY OF CONTRACTS Sewer Rehabilitation												
Contract	Status of Estimated I/I Contract CWSRF Project Status of DEC/EFC/COUNTY Miles of Current Contract												
No.*	Title of Contract	Project Location/Description	No.	Design	Review	Rehabilitation ⁽²⁾	(gal/day)	Amount ⁽¹⁾	Contractor	Contract Status			
2	Sanitary Sewer Manhole Rehabilitation - Phase 2	<u>District-wide</u> : Rehabilitation of approximately 1,278 sanitary sewer manholes	C6-6070-08-00	Final	Approved	47	5,411,910	\$ 1,529,131.73	Green Mountain Pipeline Services	Complete			
3	Sanitary Sewer Mainline Rehabilitation - Phase 1	Villages of New York Mills, Oriskany, New Hartford, Whitesboro, and Yorkville; Towns of New Hartford and Whitestown	C6-6070-08-00	Final	Approved	13	1,503,360	\$ 1,916,428.54	Insituform	Complete			
4	Sewer Separation - Clinton/Henderson Street, NY Mills	<u>NY Mills</u> : Storm/Sanitary sewer separation	C6-6070-08-00	Final	Approved	2	264,000	\$ 155,007.51	JJ Lane Construction	Complete			
5	Sewer Repairs and Rehabilitation	<u>Villages of Whitesboro, New Hartford, Yorkville, New York</u> <u>Mills</u> : Storm/Sanitary sewer repairs and rehabilitation; manhole replacement and UV-CIPP lining.	C6-6070-08-00	Final	Approved	1	120,000	\$ 411,841.66	Central Paving	Complete			
6	Sanitary Sewer Mainline Rehabilitation - Phase 2	<u>Villages of New Hartford and Clayville; Towns of New</u> <u>Hartford and Paris; City of Utica</u>	C6-6070-08-00	Final	Approved	15	1,130,000	\$ 2,086,525.00	Green Mountain Pipeline Services	Complete			
7	Sanitary Sewer Mainline Rehabilitation - Phase 3	<u>Towns of New Hartford and Whitestown:</u> <u>Glenhaven area (HHI-1 and WHN-31), the area west of the</u> <u>Whitesboro Parkway School and south of Clinton Street area</u> <u>(WHN-33), and Kellogg Road area (NHD-18)</u>	C6-6070-08-00	Final	Approved	13	630,000	\$ 2,060,644.00	Green Mountain Pipeline Services	Complete			
8	Sanitary Sewer Mainline Rehabilitation - Phase 4	<u>Town of New Hartford:</u> Paris Road area (NHD-23)	C6-6070-08-00	Final	Approved	14	249,000	\$ 1,143,410.78	National Water Main Cleaning Co.	Complete			
10	Sanitary Sewer Mainline Rehabilitation - Phase 5	<u>Town of Whitestown and Village of Whitesboro:</u> Area west of Henderson St., north of Mud Creek, south of Clinton St. and east of Clinton Rd; and areas of V. of Whitesboro that have not been previously rehabbed.	C6-6070-08-10	Final	Approved	17	1,120,000	\$ 3,429,370.00	Green Mountain Pipeline Services	Complete			

	TABLE 2.1												
					County Sewer Di								
	SUMMARY OF CONTRACTS												
				Sewe	er Rehabilitatio	on							
Contract No.*	Title of Contract	Project Location/Description	CWSRF Project No.	Status of Design	Status of DEC/EFC/COUNTY Review	Miles of Rehabilitation ⁽²⁾	Estimated I/I Reduction (gal/day)	Current Contract Amount ⁽¹⁾	Contractor	Contract Status			
11	Sanitary Sewer Mainline Rehabilitation - Phase 6	Town of New Hartford/Hamlet of Washington Mills: Chapman Rd, Higby Rd., and Mohawk St. as well as side streets in T. of New Hartford (NHD-20).	C6-6070-08-10	Final	Approved	7	260,640	\$ 632,029.26	National Water Main Cleaning Co.	Complete			
12 ⁽³⁾	Sewer Rehabilitation Project	<u>Village of Yorkville:</u> Areas of the Village not previously rehabbed (YKV-1).	C6-6071-02-00	Final	Approved	11	824,832	\$ 3,420,966.19	National Water Main Cleaning Co.	Base Project Complete			
13	Sanitary Sewer Mainline Rehabilitation - Phase 8	<u>Town of New Hartford:</u> <u>R</u> esidential subdivisions along Routes 12B and Merritt Place, situated south of Route 5B and Seneca Turnpike, and north of Sherrill Brook Park (NHD-6).	C6-6070-08-10	Final	Approved	5	280,000	\$ 802,838.50	National Water Main Cleaning Co.	Complete			
14	Sanitary Sewer Mainline Rehabilitation - Phase 9	Town of New Hartford: Commercial district along Seneca Turnpike surrounding Sangertown Square Shopping Mall, south to a residential area situated between Seneca Turnpike and Clinton Rd., and a small residential area south of Clinton Rd. along Merritt Place (NHD-9)	C6-6070-08-10	Final	Approved	7	360,000	\$ 995,407.25	National Water Main Cleaning Co.	Complete			
16	Sanitary Sewer Mainline Rehabilitation - Phase 10	<u>Town of Whitestown:</u> Residential area along Westmoreland Rd. and West St., south of the NYS Thruway, and north of Clinton Rd. (WHN-34, WHN-35, WHN-12 & WHN-36).	C6-6070-08-10	Final	Approved	3	270,000	\$ 386,042.00	National Water Main Cleaning Co.	Complete			
17	Sewer Rehabilitation Project - Phase 11	<u>Village of Yorkville</u> The planned sewer rehabilitation area is generally along Whitesboro Street, Edwards Street, Meyers Avenue, Campbell Avenue, and Dudley Avenue. Both sanitary and storm sewers will be lined. House laterals may be lined as needed.	C6-6070-08-10	Preliminary	Approved by County Submit to DEC/EFC early 2023	<1	To be determined from the assessment	\$ 600,000.00	TBD	Bid documents are nearly complete. Tentative Bid Date - early 2023			

* - Contract 9 - Flow Monitoring Contract

(1) - Values are subject to change upon submission of final contractor close-out documentation. Some entries are contract bid amounts and will be updated when project closes out.

(2)- In order to estimate the manhole repairs in equivalent miles, the following calculation was used:

In the April 2012, Engineering Report, Sauquoit Creek Pumping Station Basin – Phase I-Mainline Pipe Rehabilitation – Contract No. 3, the length of line to be rehabilitated was 13-miles, and the corresponding flow to be removed is 1,503,360 gal/day, which calculates to 116,000 gpd/mile. Using the same 116,000 gpd/mile figure for Contract No. 2, an estimated 5,411,910 gal/day divided by 116,000 gpd/mile, is equivalent to 47-miles of rehabilitated sewers.

(3) - formerly Contract 12 - Sanitary Sewer Mainline Rehabilitation - Phase 7. Financed by the Village of Yorkville.

BOLD - Value represents the Engineers estimate

		TABLE 2.2 Oneida County Sewer District SUMMARY OF CONTRACTS Water Pollution Control Plant and Sauquoit Creek Pumping Station/Force Main								
Contract No.	Title of Contract	Wa Components of System Addressed	ter Pollu Status of Design	tion Control Status of DEC Review	Plant and Sa Status of other Agency Reviews	Estimated	Estimated ⁽¹⁾ Construction Start			
1	Incinerator No. 2 Demolition	Demolition of Incinerator No. 2	Final	Approved	n/a			ever, due to the outcome of bids, th		
2	WPCP Solids Handling Upgrades	2 new egg-shaped digesters, 1 secondary digester w/gas holding cover, new waste activated sludge pumps, refurbish 4 gravity thickeners, new stand-by lime stabilization system, 2 new belt filter presses	Final	Approved	n/a	Advertised April 4, 2016	Notice to Proceed September 27, 2016	Construction is substanti		
ЗA	Electrical Equipment Pre-Purchase (Digester 15kV)	Pre-purchase of major electrical components such as switch gears, transformers, and supporting power distribution equipment	Final	n/a	n/a	April 2017	Equipment delivery October 2017	Equipment has been installed and		
4	Sauquoit Creek Force Main Upgrades	New 48-inch force main and rehabilitation of the existing force main, new flow metering and flow control vaults.	Final	Approved	Approved	Advertised December 15, 2017	July 2018	The 42-inch force main is in servic the existing 30-inch force m		
5	Sauquoit Creek Pumping Station Upgrades	Replacement of existing pump station mechanical screen contained in a new screen building, 2 screenings washer/compactors and conveyor; replacement of existing standby generator capable of operating the station to pump peak flow during a power outage; electrical/HVAC upgrades; flow distribution structure at the WPCP.	Final	Approved	n/a	November 2016	July 2017	<u>Note - Site and buildings impac</u> ja <u>New Screenings Building</u> : Facility pending); new emergency gene equipment with a new, modified s results of WAP are being monitore specifications. General Contractor performance. Engineer and Cour performance of the washer/co		

onstruction Progress

, the demolition was added to Contract 2 by addendum on May 25, 2016.

ntially complete and all equipment is on-line.	April 2019
nd tested. Training has been provided to the Owner.	n/a
vice and conveying peak flows up to 38 mgd. Rehab of main began in Q2-2021 and is ongoing (CIPP).	June 30, 2022
acted by 7/1/2017, 1/24/2019, and 10/31/2019 ice jam/flooding events. ity is generally operational (building access/security nerator fully operational; Huber replaced the WAP d system intended to improve drainage. Operational red, although still not properly functioning per project for to install hot water system (for WAP) for improved bunty are reviewing contractual remedies if the non- compactor is not resolved. Most punch list items completed. Iding: Electrical, HVAC, and plumbing renovations complete.	HVAC, Electrical, and Plumbing Contracts completed June 2022. With exception of Huber screen equipment, anticipated completion of General Contract September 2022 (pending inspection by NYS Code Enforcement officials).

Estimated Construction Complete

	TABLE 2.2 Oneida County Sewer District SUMMARY OF CONTRACTS												
	Water Pollution Control Plant and Sauquoit Creek Pumping Station/Force Main												
Contract No.	Title of Contract	Components of System Addressed	Status of Design		Status of other Agency Reviews	Estimated	Estimated ⁽¹⁾ Construction Start		Estimated Construction Complete				
5.1	Barnes Avenue Pumping Station Upgrades	Upgrading existing 1.5 mgd pump station to replace equipment that has reached the end of its useful service life. Installation of a new backup generator. Electrical, mechanical, and architectural upgrades to existing building. Service road improvements for better access to the station. New discharge piping configuration and interconnection to new and rehabilitated SCPS forcemains.	30%	n/a	n/a	July 2022	December 2022	The Basis of Design Report was approved by the EFC in the 3rd quarter 2021; EFC financing was approved in 1st Quarter 2022 and GHD has commenced the final design. Bidding is on hold until resolution with CSX Rail Road regarding access is resolved.	Tentatively December 2023 (pending access agreement with CSX is resolved)				
6	WPCP Headworks Upgrades	New screening facility and pump station dedicated to sanitary flows from North Utica & Starch Factory Creek Interceptors; repurpose existing raw waste building for combined flow from City of Utica; new grit removal facilities; remodeling of the administrative building including new laboratory, control room, offices, training room, etc.	Final	Approved	Approved	March 2017	September 2017	 <u>Influent Building:</u> 4 new influent pumps and 3 mechanically cleaned bar screens are complete. <u>Combined Influent Building:</u> Refurbishment of building and equipment (4 pumps, 3 screens) is complete. <u>Grit Removal:</u> Grit buildings No. 2 and 3 are complete. Grit Building No. 3 was impacted by a flooding event on June 1, 2020; damaged equipment repairs/replacement are now complete, although the insurance claim is ongoing. <u>Administration Building:</u> Rehabilitation of the building is complete. <u>Electrical:</u> New receiving structure/tower for 46kV equipment is installed and energized by National Grid. New pre-fabricated Switchgear Building and Generator Buildings are complete. Generator system is fully operational. All 4 prime contractors (General, HVAC, Electrical, and Plumbing) are working on addressing final punch list items and/or final close out documentation. 	November 2022				

						ABLE 2.2			
						Inty Sewer Distric			
		Wa	ter Pollu	tion Control				on/Force Main	
Contract No.	Title of Contract	Components of System Addressed	Status of Design		Status of other Agency Reviews	Estimated	Estimated ⁽¹⁾ Construction Start		Estimated Construction Complete
7	WPCP Primary Treatment Upgrade/Disinfection	New rectangular primary settling tanks to replace existing circular tanks; new high rate disinfection system for wet weather combined sewer flows; new HRD outfall.	Final	Submitted December 9, 2016	n/a	Advertised November 28, 2017	May 2018	HRD: HRD tank work is complete. Primary Settling Tanks No. 1 and 2: PSTs No. 1 and 2 are complete and operational and troubleshooting of primary sludge pumps operation is ongoing. Primary Settling Tanks No. 3 and 4: PSTs No. 3 and 4 are complete and operational and troubleshooting of primary sludge pumps operation is ongoing. Disinfection Building: Disinfection Building is substantially complete and operational. Administration and Operations Building: Admin and Ops Building is complete and operational. Aeration Tank Distribution Structure: Aeration Tank Distribution Structure is complete and operational. HRD Outfall Structure and Outfalls: HRD Outfall Structure and Outfalls are complete and operational. All 4 prime contractors (General, HVAC, Electrical, and Plumbing) are working on addressing final punch list items and/or final close out documentation.	December 2021 (substantially complete)
8	WPCP Secondary Treatment Process Upgrades	Replacement of existing blowers with more efficient units; refurbishment of the existing Blower Building including upgrades to electrical, HVAC, plumbing and structural systems; refurbishment of existing Aeration Tanks including replacement of existing diffusers and structural upgrades, refurbishment of existing Final Settling Tanks including replacement of existing clarifier mechanisms and structural upgrades; new Asset Management Building; upgrades to site wide civil infrastructure including stormwater, fencing and gates; revisions to site electrical system including demolition of existing substation.	Final	Approved	Approved	Advertised November 17, 2020	Notice to Proceed May 13, 2021	Blower Building: Installation of RAS pump Nos. 5 -7 is complete. New blower installation and startup is complete. Delivery of the Blower Building unit substation is delayed due to supply chain issues; delivery is expected in March 2023. Installation of electrical duct bank and conduit is ongoing. Aeration Tanks: At Aeration Tank Nos. 1, 2 and 3, installation of diffusers, aeration piping, concrete repairs and railing installation are complete. Aeration Tank Nos. 1 and 3 have been started up (Aeration Tank No. 2 startup is pending). <u>Final Settling Tanks:</u> Installation of equipment, railings and electrical conduit is ongoing. Concrete repairs are ongoing. FST Nos. 1, 5, 6, 7 and 8 startups are complete. Administration and Operations Building: Concrete floor infill at the former Incinerator 1 and 3 locations is complete. Electrical feeder installation to the new Switch Bank Room is complete. Asset Management Structure: Installation of pile foundations, concrete slab, and inslab utilities is complete. Asset Management Structure: Installation of pile foundations, concrete and wall/roof panels are under construction.	Estimated October 2023

* - Estimated construction start = Notice to Proceed