AECOM Imagine it. Delivered.

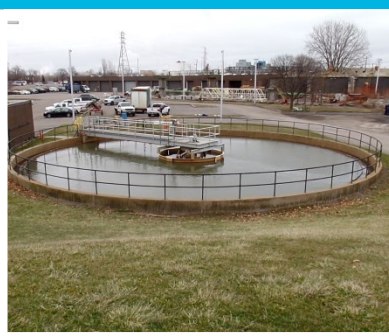
Q2 2026 Quarterly Progress Report
Niagara Falls Water Board
Order on Consent R9-20170906-129

Prepared for submission to:
New York State Department of Environmental Conservation Region 9
700 Delaware Avenue
Buffalo, New York 14209

Prepared by:
AECOM
50 Lakefront Blvd Suite 110
Buffalo, New York 14202

July 31, 2026



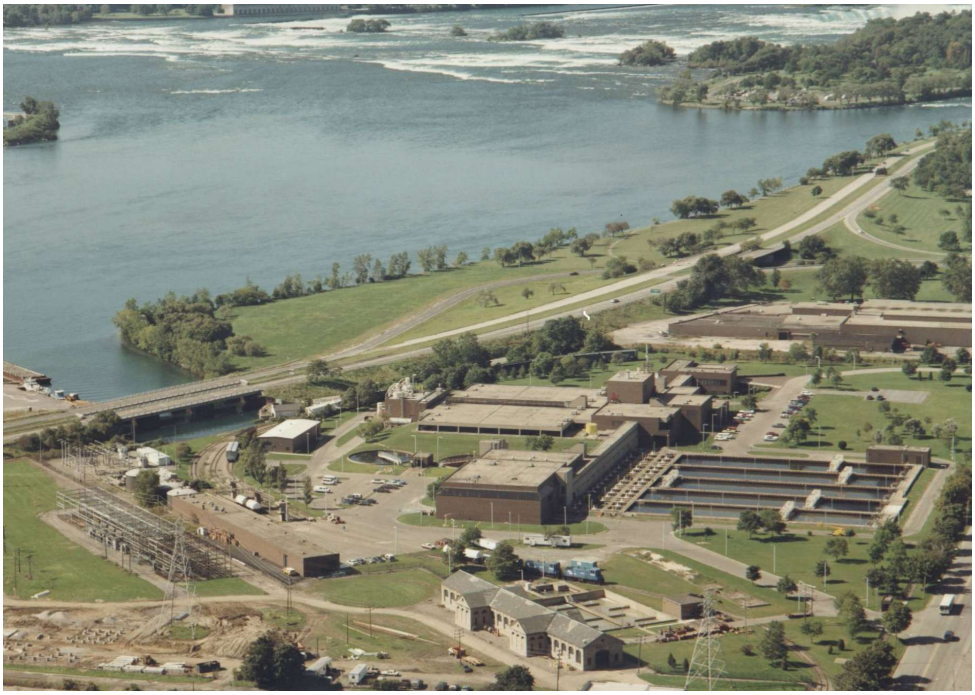






Q2 2026 Quarterly Progress Report

Niagara Falls Water Board Order on Consent R9-20170906-129



NIAGARA FALLS WATER BOARD

Prepared for Submission to:

New York State Department of Environmental Conservation Region 9
700 Delaware Avenue
Buffalo, NY 14209

Prepared By:

AECOM

50 Lakefront Boulevard Suite 111
Buffalo, New York 14202

July 31, 2026

Niagara Falls Water Board Order on Consent R9-20170906-129
Q2 2026 Quarterly Progress Report

Table of Contents

Table of Contents ..... **i**

Executive Summary **ES-1**

1. WWTP Performance **1-1**
1.1. Treatment Plant Operations 1-1
1.2. Solids Removal Performance 1-2
1.3. Treatment Plant Equipment Readiness 1-2

2. Deliverables and Routine Communications **2-1**
2.1. Deliverables Status 2-1
2.1.1. Existing WWTP Optimization Efforts 2-1
2.2. Deliverables in Next Quarter 2-1
2.3. Routine Communications in Past Quarter 2-1
2.4. Unresolved Issues/Delays 2-1

3. Capital Improvement Program **3-1**
3.1. In-House Capital Upgrades Completed/Underway 3-1
3.2. Capital Improvement Projects 3-1

Figures

Figure 1 – Capital Projects Schedule 3-2

Tables

Table 1 – NFWB WWTP Solids Balance 1-4
Table 2 - NFWB Submissions to NYSDEC per Schedule A of the Consent Order 2-1

Niagara Falls Water Board Order on Consent R9-20170906-129
Q2 2026 Quarterly Progress Report

July 31, 2026

Executive Summary

This document is the thirty fourth (34th) quarterly progress report for the Niagara Falls Water Board (NFWB) Order on Consent R9-20170906-129 (Consent Order) as originally required by Schedule A Item 15 of the Consent Order. This progress report covers the period from April 1, 2026 through June 30, 2026.

During the past quarter, the NFWB has properly operated the wastewater treatment plant (WWTP) and has met all State Pollution Discharge Elimination System (SPDES) permit requirements. Solids processing (settling, thickening, dewatering) during this period has functioned as intended. Primary effluent is clean which has allowed the WWTP's activated carbon filters to efficiently process the plant's flow. Dewatering throughput during this period has kept up with incoming solids, compared to influent solids loadings. The WWTP was operated substantially free of odors during the past quarter. Sodium hypochlorite usage continues to be lower than historical averages and the WWTP's effluent turbidity has been significantly reduced.

Maintenance activities during the reporting period have been ongoing, and as of the end of the quarter major treatment systems and components are functional with a couple of exceptions that affect redundancy. The WWTP is undertaking capital upgrades and improvements that are within the capability of the WWTP's maintenance staff and/or contractors awarded service contracts. In addition to the projects being undertaken by the WWTP's staff and outside contractors, project planning, design, and construction of $27 million in major capital upgrades are taking place. Projects 2, 4, 6, 7, 8, 9, and 11 have been completed and work continues on Projects 1, 3, 5 and 10. Project 6 was reopened in Q4 2023 by the addition of sodium hypochlorite storage tank upgrades to the existing Project 6 scope. This work includes replacement of Tank 216 along with some sodium hypochlorite pump, piping, and secondary containment upgrades.

The NFWB has met all scheduled requirements of the Consent Order as identified in Schedule A of the Consent Order. Specific submissions during the past quarter include:

- The thirty third (33rd) quarterly report for the first quarter of 2026 (Q1 2026) was submitted April 30, 2026 to the New York State Department of Environmental Conservation (NYSDEC) and posted on the NFWB's website (Consent Order Item 15).

In May 2024 the NFWB and NYSDEC entered into Order on Consent R9-20230411-13, which also pertains to the WWTP. This major development must be noted here though it does not require quarterly reports or an Onsite Environmental Monitor (OEM) in connection with its requirements. The schedule in the new Order on Consent may be regarded as providing a roadmap for future improvements to the WWTP facility. The new Order on Consent is posted to the NFWB website, like these quarterly reports, and should be consulted for further details. In December 2024 a revised draft State Pollution Discharge Elimination System (SPDES) permit was received from the NYSDEC Albany, New York office. The draft permit contains a number of substantially revised effluent permit limits. The NFWB submitted its comments on the revised draft SPDES permit to the NYSDEC on March 25, 2025. Additionally, on December 10, 2025, the NFWB submitted to the NYSDEC a technical memorandum and CORMIX prediction files with additional

information relevant to the draft SPDES permit's proposed dilution factors and TRC limit. The NFWB is committed to working cooperatively and openly with the NYSDEC to improve the Niagara Falls WWTP and operate it to the best of its capability.

Niagara Falls Water Board Order on Consent R9-20170906-129
Q2 2026 Quarterly Progress Report

July 31, 2026

1. WWTP Performance

This section discusses the operation of the NFWB WWTP during the reporting period of April 1, 2026 through June 30, 2026. In the following sections, Treatment Plant Operations, Solids Removal Performance, and Treatment Plant Equipment Readiness are discussed.

1.1 Treatment Plant Operations

As of March 1, 2026 Mr. Gary Golombek (Grade 3 Certificate No. 18240) took over as Acting Chief operator previously held by Mr. Dennis Kirkland. This information was communicated to the NYSDEC (Mr. Rob Locey) on February 27, 2026 via email from Mr. Sean Costello, Executive Director; and acknowledged by the NYSDEC on that same date via email from Mr. Rob Locey. Mr. Paul Drof (New York State Grade 4A Licensed Operator #7593) continues to serve as the WWTP's temporary Grade 4 license holder for the purposes of plant operations until a permanent Grade 4 operator is available. Mr. Drof's principal work location is at the WWTP where he is responsible for plant operations and maintenance and is present an average of three days and approximately 20 hours per week.

During Q2 2026 solids processing has kept up with the incoming solids, and equipment maintenance and repair activities have been conducted as promptly as possible. Sodium hypochlorite consumption remained relatively low throughout Q2 2026 averaging 3,420 gallons per day. Although there has been an increase in sodium hypochlorite usage compared to Q1 2026 (1,980 gallons per day), this usage is less than used during the same period in 2025 (4,600 gallons per day April 1, 2025 – June 30, 2025). The trend of reduced sodium hypochlorite usage is likely attributable to decreased wastewater temperature and discharge reductions from significant industrial users. Ultimately the reduction in sodium hypochlorite usage is a direct result of less sulfide being produced in the carbon filters, which directly translates into a reduction in the WWTP's effluent turbidity. The trend of reduced effluent turbidity which became apparent in Q4 2025, has continued throughout Q2 2026.

The following operational considerations were noted during Q2 2026:

- With the shutdown of a portion of the Cascades facility, total suspended solids (TSS) and soluble organic carbon (SOC) loadings from the facility have continued to be low. Q2 2026 averages were 1,230 lbs. per day TSS and 702 lbs. per day SOC. These values are comparable to Q1 2026 values of 870 lbs. per day TSS and 690 lbs. per day SOC.
- Due to the amount of wet weather during Q2 2026, filter backwash numbers have remained somewhat elevated (40 to 60 per day), although these remain much fewer than historical averages. During Q2 2026 filter backwash water continues to be directed to the head of plant (Rapid Mix Tanks) where it is treated through the sedimentation basins and activated carbon.

1.2 Solids Removal Performance

A solids balance for April, May and June 2026 is presented in Table 1. The data is based upon effluent flow meter measurements and influent/effluent total suspended solids sample results generated by

the facility. The data shows that the quantity of solids sent to the landfill generally equals or exceeds the amount of solids removed from the wastewater plus chemical solids added (ferric chloride and lime).

Influent suspended solids loadings increased during Q2 2026 to 215 dry tons per month (DTPM) which is the highest quarterly average in the past 3 years and may be related to the amount of wet weather during Q2 2026 which tends to flush the collection system. The Q2 2026 influent suspended solids loading was greater than the 2025 annual average of 190 DTPM.

1.3 Treatment Plant Equipment Readiness

During the reporting period there were several treatment plant equipment breakdowns that required maintenance staff to repair or replace equipment. Minor repairs have been made this past quarter to pumps, belt filter presses, and sedimentation basin equipment to address issues that have arisen. Although these repairs may have kept equipment out of service for periods of time during the past quarter, it has not significantly affected the plant performance. In general, a sufficient number of sedimentation basins with fully functional sludge removal equipment have been available to treat all incoming flows. As of the close of Q2 2026, the following can be said regarding treatment equipment operability:

- Four (4) Main Pumps are operational with no issues. During Q2 2026, temperature monitoring equipment associated with Main Pumps 1 and 2 (Allen Bradley 857 units) were eliminated and these instruments were directly connected to the IP1 control panel. This completes the elimination of the 857 units from the main pump control panel with all temperature monitoring equipment now connected directly to the IP1 control panel.
- At the end of Q2 2026, five (5) sedimentation basins are functional and available for use. During Q2 2026, two (2) sedimentation basins have been used for flows up to 40 million gallons per day (mgd), three (3) basins used for flows between 40 mgd and 60 mgd, and four (4) basins for flows over 60 mgd.
- Both rapid mix tanks are in service, although flow in the influent channel is only partially being routed through the rapid mix tanks. One of the gates in the influent channel has been removed on April 1, 2026 to allow a portion of the flow in the influent channel to bypass the rapid mix tanks. This was done because the flow in the influent channel was being partially obstructed by the gates and it is believed that more flow can be sent to the sedimentation tanks if additional gates in and out of the rapid mix tanks were opened. Unfortunately, the gates that were attempted to be removed would not budge. The fallback position was to remove one gate in the influent channel and allow a portion of the flow to bypass the rapid mix tanks. In order to maximize the efficiency of ferric chloride utilization, plans are being developed to relocate the point of ferric chloride addition to a point upsteam of the rapid mix tanks. This plan should be implemented in Q3 2026.
- Both grit classifiers are in service.

- Four (4) Intermediate Pumps are operational and control/drive issues are being monitored. Changes in the operation of the intermediate pumps that were made in Q2 2025 have been successful in minimizing check valve slamming. IP1 however is generating noise/vibration that is being monitored.
- The six (6) replacement weir troughs were received in Q3 2025 and three (3) filter troughs have been replaced. Fiberglass repairs to two additional weir troughs will be undertaken in 2026, and these filters remain in service. As of the end of Q1 2026, twenty-eight (28) activated carbon filters are functional.
- Two filter backwash pumps are operational.
- One backwash blower (#1) is in-service and one backwash blower (#2) is out-of-service as it suffered a catastrophic failure during Q1 2026. A new blower is being procured and is expected to be delivered in early Q3 2026. Installation of blower #2 is expected in Q3 2026.
- Sodium hypochlorite backwash pump B experienced a variable frequency drive (VFD) failure during Q1 2025. This pump is used to pump sodium hypochlorite into the backwash water during carbon filter long washes on the B-train of carbon filters (Filters 15 – 28). One of the smaller sodium hypochlorite feed pumps that was set up to deliver sodium hypochlorite to the primary effluent is being used for this purpose until the capital project slated to replace these two (2) sodium hypochlorite backwash feed pumps is completed. This project is on temporary hold until funding is assured.
- Thickened sludge pump #1 is out of service with VFD communication (control) issues. The problem will be addressed as part of the belt filter press control upgrades associated with capital project #3.
- As of the end of Q2 2026 three belt filter presses (BFPs) are functional. During Q2 2026 the leaking hydraulic cylinder on BFP 3 was replaced and BFP 3 has been returned to service.
- Two (2) pugmills, two (2) lime feed systems, and two (2) lime storage silos are fully functional.
- Work is being done in the WWTP main switchyard to facilitate automatic switching between independent power feeds 187 and 188. Currently automatic switching does not exist.

Table 1

Q2 2026 NFWB WWTP Solids Balance

Month & Year	Average Daily Flow	Average Influent TSS	Average Effluent TSS	TSS Removed (Dry)	Ferric Chloride Added to Wastewater (Dry)	Lime Added to Sludge (Dry)	Total Solids (Dry) (TSS + Lime + Ferric)	Solids Content of Landfilled Sludge	Total Solids (Wet)	Solids Landfilled (DRY)	% Landfilled
	mgd	mg/l	mg/l	Tons/day	Tons/day	Tons/day	Tons/day	%	Tons/day	Tons/day	%
Apr-26	34.9	64.2	4.2	8.7	1.57	0.88	11.2	33.1%	33.8	16.9	151%
May-26	29.2	54.8	7.0	5.8	1.25	1.41	8.5	31.1%	27.3	11.4	134%
Jun-26	24.3	52.3	7.2	4.6	1.15	1.57	7.3	30.3%	24.1	9.7	133%

NOTES: mgd million gallons per day
TSS Total Suspended Solids
[1] % greater than or equal to 100 indicates all incoming solids plus all chemicals added are removed and sent to landfill.

2. Deliverables and Routine Communications

This section presents a listing and discussion of deliverables prepared by the NFWB for submission to the NYSDEC. In addition, other related written communications between the NYSDEC and the NFWB are also discussed.

2.1 Deliverables Status

All deliverables required under the Consent Order have been submitted to the NYSDEC in accordance with the schedule in the Consent Order. Deliverables submitted during the past quarter are listed in Table 2.

Table 2
NFWB Submissions to NYSDEC per Schedule A of the Consent Order

Date	Prepared By	Consent Order Schedule A Items	Comment
April 30, 2026	AECOM	Item 15	The thirty third quarterly progress report for the first quarter of 2026 (Q1 2026) was submitted.

2.1.1 Existing WWTP Optimization Efforts

At this time, no further modifications/optimizations to the WWTP treatment process are being considered or planned. The NFWB is investigating treatment plant upgrades that likely will alter the existing treatment process in connection with Order on Consent R9-20230411-13.

2.2 Deliverables in Next Quarter

All deliverables required under the Consent Order have been submitted. No other deliverables are pending or due under the consent order other than this quarterly report.

2.3 Routine Communications in Past Quarter

A report of Noncompliance Event was submitted in relation to a 4/22/26 Gorge Pumping Station (GPS) pump shutdown due to high vibration followed by a failure of the automatic pump sequencing program that resulted in the failure to activate another pump. This resulted in a brief dry weather overflow. The sequencing issue has been resolved, and the vibration issue is being investigated internally and with the assistance of the pump manufacturer's representative. Following this report, several updates (via email) have been issued to NYSDEC Region 9 Division of Water personnel.

2.4 Unresolved Issues/Delays

There are no unresolved issues or delays.

3. Capital Improvement Program

In this section, progress on WWTP capital upgrades is discussed. Capital upgrades are proceeding on several fronts. Projects that are within the capability of in-house maintenance staff are being undertaken as quickly as possible. Additionally, outside contractors selected for WWTP work (Mechanical Contractor – Mollenberg-Betz, Electrical Contractor – Ferguson Electric) are being utilized for larger projects. Lastly, design and construction are underway to perform a number of capital upgrades that are necessary to stabilize the operation of the existing treatment plant. Each of these items is discussed in this section.

3.1 In-House Capital Upgrades Completed/Underway

This category of projects includes work being undertaken by plant maintenance staff or outside contractors without the need for extensive design and engineering documents. This work is generally considered repair and/or replace in kind and therefore NYSDEC approval is not generally required prior to performing the work. At this time all work slated to be performed in-house has been performed.

3.2 Capital Improvement Projects

A schedule for the ongoing capital projects is shown in Figure 1. Note that the NFWB has sought and obtained approval from the NYSDEC to upgrade certain chemical bulk storage facilities under the existing Project 6 engineering services agreement. As a result, Project 6 (effluent disinfection upgrades) was reopened in Q4 2024 to facilitate engineering and eventual construction of sodium hypochlorite improvements to Tank 216 and its secondary containment system. This design for this project is completed but the project is on hold until funding can be procured. NYSDEC and NYSEFC review of the design documents will be required before the construction documents can be issued.

Figure 1

Capital Projects Estimated Construction Schedule

ESTIMATED CONSTRUCTION SCHEDULE

NFWB CAPITAL IMPROVEMENT PROJECTS

Updated: 07/13/2026

TASK DESCRIPTION	PLAN START	PLAN END
Project #1: Sed. Basin Upgrades (CPL) - CA/CI Approved (10-26-20)		
Design and Bidding	5/22/2019	10/1/2020
Mobilization	11/1/2020	2/1/2021
Construction (Phase 1)	3/1/2021	6/30/2022
Construction (Phase 2)	7/1/2022	2/3/2023
Construction (Phase 3)	3/1/2023	2/3/2024
Construction (Phase 4)	3/1/2024	10/31/2025
Project Complete		
Project #3 Polymer and Grit (Arcadis) - CA/CI Approved (10-26-20)		
Design and Bidding	5/30/2019	10/1/2020
Updated Design	12/1/2023	3/31/2024
Construction	11/1/2020	6/30/2026
Project on hold due to funding		
Project #5 Electrical System Improvements (EI Team)		
Design and Bidding	4/25/2019	2/1/2022
Construction	3/1/2022	1/12/2026
Project Complete		
Project #10 SCADA Improvements (Kaman) - CA Services Not Required		
Design and Bidding	6/1/2019	12/1/2019
Construction	1/1/2020	6/30/2026
Project Complete		
Project #12 Int. Pump Improvements (GHD)		
Design	3/23/2022	8/23/2022 (RFP Pending)
Project on hold due to funding		

