

B U F F A L O

S E W E R A U T H O R I T Y

SPDES Permit No. NY0028410

**Long Term Control Plan
Annual Post Construction Monitoring
Status Report**

Reporting Period: *July 2021 through June 2022*

Amended Administrative Order

CWA-02-2014-3033

(Amends CWA-02-2012-3024)

September 2022

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ATTACHMENT:

- A. RTC Monthly Performance Report
- B. Niagara Street Green Infrastructure Post-Construction Monitoring
- C. KPI Dashboards Memo

1. INTRODUCTION

The Buffalo Sewer Authority (Authority) received approval of its Long Term Control Plan (LTCP) from the United States Environmental Protection Agency (USEPA) and New York State Department of Environmental Conservation (NYSDEC) on March 18, 2014. The Authority entered into an Amended Administrative Order on April 16, 2014 (herein after referred to as the AO), with the USEPA. This AO establishes a schedule for implementation of the Authority's LTCP, approved by the USEPA and NYSDEC.

The AO in part requires that the Authority submit written Annual Post Construction Monitoring (PCM) Status Reports to the USEPA and NYSDEC to be included with the Semi-Annual Status Report. This report covers July 2021 through June 2022 which serves as Annual PCM Report No. 6.

2. DISCUSSION OF PCM TASKS BEGUN OR COMPLETED

Post construction monitoring of the Bird, Lang and Hazelwood, North Bailey, Hertel at Deer, and Smith St. Real-Time Control (RTC) projects has continued in the last reporting period. For Bird, Hazelwood and Land, North Bailey, and Hertel at Deer RTCs, the number of Sewer Patrol Point (SPP) overflow events and volume of overflow that the structures have prevented is being monitored. For Smith St. RTC, the total volume captured is being recorded. The monthly performance reports for the reporting period are included in Appendix A.

Monthly Key Performance Indicator (KPI) reports for Lang RTC were combined with Hazelwood RTC starting in August 2019. Operations at Hazelwood RTC are triggered by depth immediately upstream of the Lang RTC. In general, the Hazelwood RTC will start storing when the depth at Lang indicates wet weather flow. The Lang RTC control is based on the depth at the downstream SPP. In general, the Lang RTC begins storing when the depth at the SPP indicates wet weather flow.

Post-construction monitoring of the Babcock Pump Station and Smith at Eagle RTCs will commence in the next reporting period. These projects are currently functioning, but connectivity for monitoring purposes has been delayed.

Per previous discussions with the USEPA and NYSDEC there was an interest in reviewing the reports of work to date by the United State Geological Survey (USGS) in regard to the Niagara Street GI project, interim reports regarding this work is enclosed in Appendix B.

At this time, Buffalo Sewer is not pursuing any additional GI credit on the basis of demolitions, as such post-construction monitoring for this work is not enclosed in this report.

3. RESULTS OF PCM EFFORTS

During the reporting period, a total of 92 SPP overflow events, or approximately 184.5 million gallons of overflow, have been prevented by the Bird, Lang, Hazelwood, North Bailey, and Hertel at Deer RTC projects. Since June 2017 a total of 350 SPP overflow events or approximately 581.2 million gallons of overflow, has been prevented by the Bird, Lang, Hazelwood, North Bailey, and Hertel at Deer RTC projects. (Please note that the number and volume of overflow events has been significantly impacted in recent years by the commencement of monitoring at Hazelwood, North Bailey, and Hertel at Deer in 2020 with over half of the volume diversion occurring at Hertel at Deer.)

As discussed in the Semi-Annual Report, due to ongoing supply chain and COVID-19 related labor shortages, the Smith Street RTC had been off-line since August 2021, significantly reducing its efficacy over this reporting period, however it still prevented 23 million gallons of overflow in the reporting period (for a total of 2816 million gallons over the life of this project). In November of 2021, Hertel at Deer suffered a similar outage which was able to be rectified in a much more expeditious manner. During June of 2022, July 2021, and August 2021, Bird RTC also suffered outages which have since been corrected. Efforts are ongoing to ensure that spare parts and sufficient staffing and equipment are available to maintain greater reliability of these and all new RTC facilities.

4. MODEL UPDATES COMPLETED

The Model Calibration Report (2018) was approved by the USEPA and NYSDEC in October 2021. The recalibrated model, as discussed, has triggered a review of the proposed gray and real-time control infrastructure projects included in the LTCP and their viability in completing the goals and positively impacting water quality. Based on model results and post construction monitoring of installed projects, BSA expects to present proposed projects to achieve LTCP goals in the next period.

5. CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



Oluwale A. McFoy, P.E., General Manager

9/1/2022

Date