City of Omaha
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Robert G. Stubbe, P.E.
Public Works Director

December 27, 2024

Mr. Reuel Anderson
Nebraska Department of Environment and Energy
245 Fallbrook Blvd.
PO Box 98922
Lincoln, NE 68509-8922

RE: 2024 CSO Annual Report - City of Omaha Combined Sewer Overflows
NPDES Permit No. NE0133680

Mr. Anderson:

Attached please find one (1) copy of the 2024 City of Omaha CSO Annual Report as required in Part VIII of NPDES Permit No. NE0133680 and the Consent Order. The report documents activities related to the City of Omaha combined sewer system for the period of October 1, 2023 to September 30, 2024.

If you have any questions or require additional information, please feel free to contact me at (402) 444-3910 or Jim Theiler at (402) 444-5225.

Sincerely,

Michael T. Arends, Manager, WRRF Engineering and Remote Facilities
City of Omaha

CC:Patrick Ducey, NDEE
Kate Bird, NDEE
Phillip Halsted, NDEE
Jim Theiler, City of Omaha,
Steve Andersen, City of Omaha
Jennifer Morales, City of Omaha
Jim Kee, City of Omaha

City of Omaha Combined Sewer Overflow Annual Report

NPDES Permit No. NE0133680

October 1, 2023 through September 30, 2024

CSO!

Clean Solutions for Omaha

Report of Certification:

"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 gathered and evaluated 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."

Signature of Authorized Representative or Cognizant Officer

12/27/2024
Date

Michael T. Arends, P.E.
Print Name

Manager, WRRF Engineering and Remote Facilities
Title

Contents

Acronyms and Abbreviations

°C	Degree(s) Celsius
<	Less Than
<=	Less Than or Equal To
%	Percent
ASCE	American Society of Civil Engineers
APPR	Annual Project Progress Report
BOD	Biochemical Oxygen Demand
BOD_5	5-day Biochemical Oxygen Demand
BP	Big Papillion Creek
CC	Cole Creek
CCTV	Closed-Circuit Television
cfs	Cubic Foot/Feet per Second
cfu	Colony Forming Unit(s)
CIP	Capital Improvements Plan
City	City of Omaha
CMMS	Computerized Maintenance Management System
COS	Cost of Service
CSO	Combined Sewer Overflow
CSO!	Clean Solutions for Omaha!
CSS	Combined Sewer System
DMR	Discharge Monitoring Reports
DO	Dissolved Oxygen
E	East
EPA	U.S. Environmental Protection Agency
EQCD	City of Omaha Environmental Quality Control Division

FOG Fats, Oils, and Grease

GIS Geographic Information System

gpm Gallons per Minute

ICM InfoWorks Integrated Catchment Model software

ID Identification

I/I Inflow and Infiltration

IMP Implementation Monitoring Plan

LPC Little Papillion Creek

LTCP Long Term Control Plan

LTCPU Long Term Control Plan Update

max Maximum

MG Million Gallon(s)

mg/L Milligram(s) Per Liter

MGD Million Gallon(s) per Day

min Minimum

mL Milliliter(s)

mMHO/cm Millimho(s) per Centimeter

MPN/100mL most probable number per 100 milliliters

MRWRRF Missouri River Water Resource Recovery Facility

MS4 Municipal Separate Storm Sewer System

N North

N/A Not Applicable

NDEE Nebraska Department of Environment and Energy, formerly the Nebraska Department of Environmental Quality (NDEQ)

NLL Next Level Learning

NMC Nine Minimum Controls

NOAA National Oceanic and Atmospheric Administration

NPDES National Pollutant Discharge Elimination System

NPP Nebraska Pretreatment Program

NWEA Nebraska Water Environment Association

O&M Operation and Maintenance

OPW Omaha Public Works

PACP Pipeline Assessment Certification Program

PCMP Post-Construction Management Plan

PCWRRF Papillion Creek Water Resource Recovery Facility

PMT Program Management Team

RTB Retention Treatment Basin

RTC Real-Time Control

S South

SCADA Supervisory Control and Data Acquisition

SCRTB Saddle Creek Retention Treatment Basin

SIFM South Interceptor Force Main

SL-RAT Sewer Line Rapid Assessment Tool

SOIA South Omaha Industrial Area

SP South Papillion Creek

SSES Sanitary Sewer Evaluation Survey

SSO Sanitary Sewer Overflow

SSOMM Sewer System Operation and Maintenance Manual

TKN Total Kjeldahl Nitrogen

TRC Total Residual Chlorine

TSS Total Suspended Solids

USGS U.S. Geological Survey

WOER Wastewater Overflow Emergency Response

WP West Papillion Creek

WRRF Water Resource Recovery Facility

WWOP Wet Weather Operations Plan

I. Introduction

The City of Omaha treats domestic and industrial wastewater at two different facilities that receive combined wastewater and stormwater: the Missouri River Water Resource Recovery Facility (MRWRRF) and the Papillion Creek Water Resource Recovery Facility (PCWRRF). The City's wastewater treatment system encompasses a total service area of 333 square miles and a population base of approximately 650,000. The City's Combined Sewer System (CSS) wastewater collection and interceptor system within the total service area covers approximately 45 square miles, containing a 754-mile wastewater collection system with approximately 402 miles of combined sewer conveyance.

Combined sewer systems are designed to carry sanitary sewage and storm water in a single wastewater collection system. During dry weather, all of the flow from the CSS is directed to the wastewater treatment facility. In periods of rainfall or snowmelt, the total flow may exceed the capacity of the combined sewer system or the treatment facilities. When this occurs, the CSS is designed to overflow directly to the receiving waters. These overflow outfalls are referred to as Combined Sewer Overflows (CSOs).

The area of the City served by the combined sewer system is generally bounded on the east by the Missouri River, the west by 76th Street, the north by Interstate I-680, and on the south by Harrison Street/Douglas County Line. CSO outfalls exist on the Missouri River, Big Papillion Creek, Little Papillion Creek, Blood Creek, and Cole Creek.

There are currently 24 CSO outfalls existing in the Omaha Combined Sewer System which includes an approved CSO related bypass discharge from the primary clarifiers at the Missouri River WRRF. There are currently 16 CSOs overflowing to the Missouri River and 8 CSOs overflowing to several tributaries of the Papillion Creek (though the Papillion Creek WRRF Interceptor discharges to the Missouri River).

Annual Report

A National Pollutant Discharge Elimination System (NPDES) Permit for City of Omaha (City) Combined Sewer Overflows (CSO) (No. NE0133680) issued by the Nebraska Department of Environment and Energy (NDEE) was reissued in 2023 and is effective from January 1, 2024, through December 31, 2028. In addition, the City submitted a Long Term Control Plan Update (LTCP Update) on March 31, 2021, which was approved by NDEE on August 11, 2021.

According to the permit issued December 21, 2023, the City of Omaha shall submit an Annual Report to the NDEE that provides a summary of the actions, activities, and measures taken by the City of Omaha to fulfill the requirements of this permit. This report is due within 90 days following each year agreed upon in the Consent Decree (Oct 1 – Sept. 30); or following a schedule agreed upon between the City and NDEE. The Annual Report shall contain at a minimum the following sections.

This Annual Report is for the period of October 1, 2023, through September 30, 2024, referred to as the reporting year or reporting period, and is submitted in accordance with the CSO Permit and Consent Order. The report meets the requirements of the permit, which is to submit a report within 90 days following each yearly (October 1 through September 30) anniversary and the requirements of paragraph

29 of (NDEE Case No. 270) Complaint and Compliance Order by Consent (Consent Order) dated October 8, 2007. Throughout the report, the permit will be referred to as the CSO Permit. The data reported in this Annual Report reflects the activities associated with the Combined Sewer System (CSS) service area in the 2021 permit application (updated for 2023-2024 existing conditions) as shown on Figure 1-1. Information provided in this Annual Report reflects the 2021 LTCP Update.

Figure 1-1 Overall CSO Map

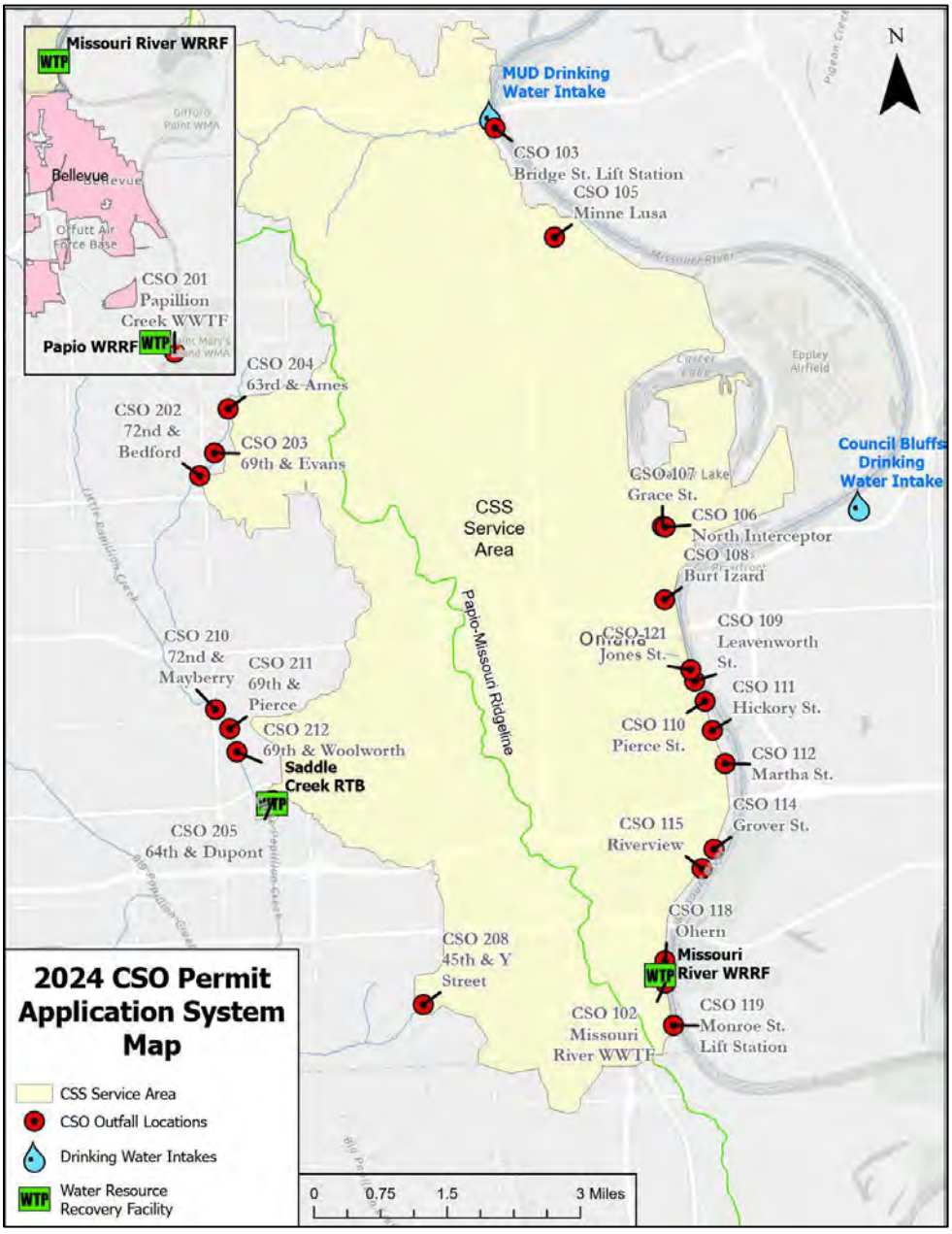
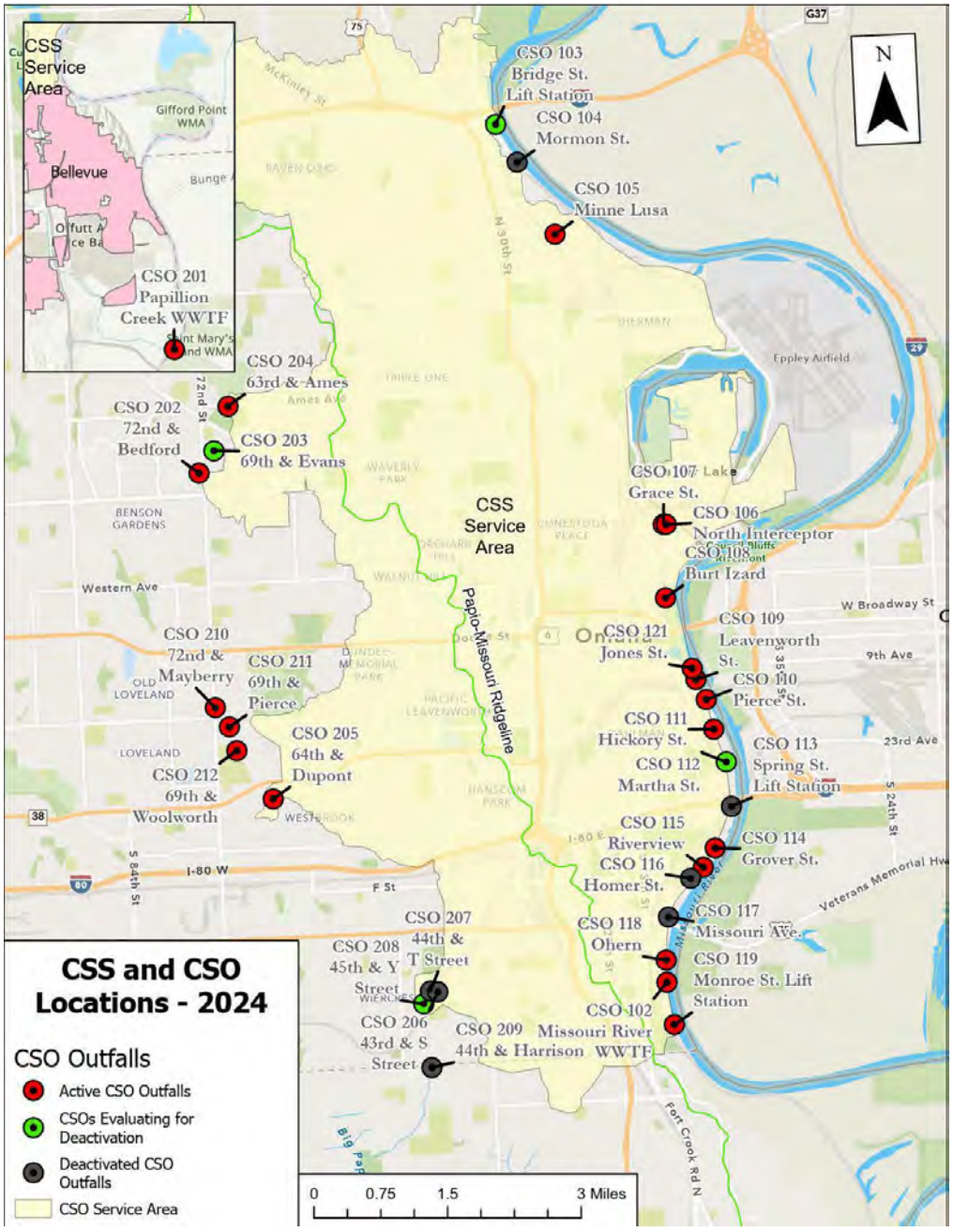


Figure 1-2 reflects the permitted CSOs as provided in the March 2021 CSO Permit Application amendment.

Figure 1-2 Overall CSO Map



II. Nine Minimum Controls (NMC)

The City of Omaha shall submit documentation in the Annual Report (Part VIII) according to the conditions and requirements specified below. The NMCs are operations and procedures that will reduce combined sewer overflows and their effects on receiving water quality that do not require significant engineering studies or major construction and are consistent with the Long Term Control Plan.

A. Proper Operation and Maintenance

Proper operation and maintenance (O&M) of the CSS and CSO outfalls consists of a program to ensure that O&M procedures are periodically reviewed, updated, and documented. A major emphasis of O&M activities shall be on the elimination of dry weather overflows. Ongoing actions taken by the City of Omaha to address operation and maintenance procedures shall be documented in the Annual Report.

The Sewer System O&M Manual (SSOMM) for the Sewer Maintenance Division (Brown and Caldwell 2006) is reviewed semiannually and has many parts. The current cover sheet of the O&M Manual is included in Attachment 1 and reflects the most current revision date of November 4, 2022.

Sewer Maintenance Division continues to implement data collection and asset management procedural improvements targeted at reducing CSOs, sanitary sewer overflows, and impacts to public safety and the environment.

B. Maximize Use of the Collection System for Storage

The City shall continue to implement their program to maximize the use of the collection system for storage. The City of Omaha shall, as appropriate, review the CSS to identify any locations where minor modifications can be made to increase in-system storage. These modifications shall be implemented as soon as practicably possible and documented in the Annual Report submitted to NDEE.

The City continues to implement NMC efforts as follows:

- Inspection of the collection system and removal of obstructions
- Maintenance, repair, and replacement of tide and control gates
- Installation and adjustment of regulators
- Reduction/retardation of inflows and infiltration
- Upgrade/adjustment of pumps
- Real time monitoring

The following demonstrates continued implementation of this NMC:

1. **Inspection of the collection system and removal of obstructions**
   The Sewer Maintenance Division is the primary organization charged with the inspection and maintenance of the collection system. According to the NMC plan, this organization performs

corrective repairs, corrective maintenance, preventive maintenance, inlet cleaning, televising, and CSO inspection.

The values provided in Table 2-1 are for the City's 2023 fiscal (calendar) year, related to the total collection system, and are performance measures accounted annually for the City's Finance Department. Inlet cleaning is not among this required metric, however, included here:

Table 2-1. 2023 Fiscal Year Total Collection System Performance Measures

Complaints Handled	1,174 each (complaints backup, complaints other)
Corrective Repairs	797 each (inlets, manholes, and pipe repairs)
Sewer Line Cleaning	3,348,791 linear feet (preventive and reactive)
Sewer Line Televised	706,500 linear feet (in-house and contracted CCTV)
Inlets/Storm Structures Cleaned	798 tasks performed (MS4 and CSS inlets, outlets, BMPs)
Structures Evaluated (condition assessed)	11,737 each (manholes, siphon structures, diversions, CSO's)
Pipelines Evaluated (condition assessed)	1,151,039 feet (PACP reviewed in jurisdiction, SL-RAT tested)

BMP = Best Management Practice

PACP = Pipeline Assessment Certification Program

SL-RAT = Sewer Line Rapid Assessment Tool

2. **Maintenance, repair, and replacement of tide (river) and control gates**
   Gate inspections at key CSO facilities occur once every year, at a minimum, and are repaired or replaced as necessary. The City's Levee and Lift station O&M staff performed flap gate inspections March 5th to April 24th and September 13th to September 19th, and found no concerning issues. The City continued to use the computerized maintenance management system (CMMS) IBM Maximo v7.6.1 software for the flood protection system, the treatment plants, and the collection system lift stations.

3. **Installation and adjustment of regulators**
   On the premise that NMCs are "operations and procedures that will reduce combined sewer overflows and their effects on receiving water quality that do not require significant engineering studies or major construction", the City committed to evaluate regulators on a case-by-case basis until a systemwide approach is instituted with the LTCP.

   In 2024, additional adjustments were made to the 2023 modifications of the existing facility at 20th and Pierce Street. The system was originally designed to detain approximately 1.3 million gallons of stormwater in perforated pipes with additional storage space in the surrounding rock layer, as well as allow infiltration to the soil. The remaining stormwater is then released back into the Combined Sewer System after a storm event has passed. Operational modifications to this facility to maximize stormwater infiltration and detention area were completed to help reduce CSO overflow volumes at CSOs 109 and 121. The City upgraded the facility's operating logic and control systems including the Supervisory Control and Data Acquisition (SCADA)

system for communications with the MRWRRF and completed collecting data during rainfall events in the Spring and Summer of 2023 to adjust these systems as needed. Initial evaluations of the upgrades suggested further adjustments to the programming to improve efficiency and a final report of all adjustments is being compiled. Due to the changes in operating logic, the facility is engaged more often than originally designed, likely reducing CSO volumes and frequencies at CSOs 109 and 121 which will be reflected in the 20th and Pierce Street project final report.

4. **Reduction and retardation of inflows and infiltration**
   The City continues to implement practices to reduce and retard inflows and infiltration, including tracking of wet weather-related system complaints, repairing pipes and manholes, enforcing city code for illicit connections, and service lateral defects. Projects to continue to maximize the collection system storage are discussed in more detail in the System Reliability Projects section and LTCP Documentation Section.

5. **Upgrade and adjustment of pumps**
   The Sewer Maintenance Division's Levee and Lift Station Group maintains the lift stations associated with the CSS area collection system. Personnel are responsible for maintaining facilities as necessary so that the lift stations perform as designed. Projects to continue to maximize the collection system storage are discussed in more detail in the System Reliability Projects section and LTCP Documentation Section.

6. **Real-time monitoring**
   The operators at the MRWRRF are responsible for monitoring the Supervisory Control and Data Acquisition (SCADA) system 24 hours per day. Most remote stations are on the SCADA system, and the remainder have auto dialers. The system includes gates that are controlled remotely to maximize flows into the MRWRRF. As new facilities are built, permanent meters are installed and connected to the SCADA system for real-time monitoring at the water resource recovery facilities. The City continues to work on upgrades to their radio network. The Saddle Creek High Rate Treatment Basin (SCHRTB) was added to the radio communication and SCADA system for local control and remote monitoring of the facility and local sewer level sensing and flow metering. Two additional collection system flow metering projects are ongoing which will send interceptor sewer capacity information to the SCHRTB and SCADA system.

   The Papillion Creek Interceptor flow meter just upstream of the PCWRRF is connected to the PCWRRF's SCADA system and transmits data to the Sewer Maintenance Division via telemetry. The City also maintains a network of permanent flow meters throughout the collection system, which has telemetry equipment and data can be observed via a website, as needed.

C. Review and Modification of Pretreatment Programs

Minimize the impacts of discharges into the CSS from nondomestic sources. As new significant industrial users are added to the CSS system, the City of Omaha shall determine what impact their discharges would have on the quality and quantity of CSO discharges during wet weather events. A summary of new significant industrial users and measures taken by the City to address any discharges during wet weather shall be documented in the Annual Report.

The Environmental Quality Control Division (EQCD) is charged with the tracking of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). The industries with Nebraska Pretreatment Program (NPP) permitted discharges, either through voluntary agreements or through the NPP permit, are requested by the City, whenever possible, to restrict or prohibit discharges during wet weather events. The Categorical Industries and/or Significant Industrial Users in this program are listed in Table 2-2. Two additional industries were added to this list during the Annual Report year. The information is documented in the City's semiannual reports to the state for the Pretreatment Program.

Table 2-2 Industries with NPP Permits Addressing Wet Weather Discharges

	Name	Address
1	ABS Corporation	7031 North 16th Street
2	Eaton Omaha Power Center	3900 Dahlman Avenue
3	G & G Manufacturing Company	4432 McKinley Street
4	Highland Dairy Foods Company LLC	2901 Cuming Street
5	Hormel Foods LLC dba Papillion Foods	10808 South 132nd Street
6	Industrial Plating Inc.	1149 Florence Blvd.
7	Kelloggs*	8601 F Street
8	Koleys, Inc.	2951 Harney Street
9	LBT Inc.	11502 "I" Street
10	Lozier Corporation North Plant	6316 John Pershing Drive
11	Lozier Corporation West Plant	4224 North 22nd Street
12	Merck Animal Health	21401 West Center Road Elkhorn NE
13	OTR Wheel Engineering	2815 Taylor Street
14	Paxton Vierling Finishing*	501 Avenue H, Carter Lake, IA
15	Radio Engineering Industries	6534 "L" Street
16	Skylark Meats LLC	4430 South 110th Street
17	Smithfield Packaged Meats Corp	5015 South 33rd Street
18	Syngenta Crop Protection LLC	4111 Gibson Road

* = New Permittee during this reporting period

D. Maximization of Flow to the POTWs for Treatment

Maximization of flow to the POTWs involves simple modifications to the CSS and treatment plant to enable as much wet weather flow as possible to reach the treatment plant. The City of Omaha shall, as appropriate, evaluate and implement simple modifications to the CSS and procedures at the

treatment plants to maximize flow to the POTWs. Any modifications shall be documented in the Annual Report.

This NMC has been addressed through the development of the LTCP and its updates. No specific evaluations were performed and no new approaches have been identified since the last Annual Report because the City is still in the process of implementation of projects in the LTCP that will maximize treatment of wet weather at the MRWRRF. Several System Reliability Projects were completed during this reporting year. These projects are as follows:

- Riverview Lift Station Replacement Project and the Blake Street Lift Station Project: Once construction is complete, it will enable the City to pump increased wet weather flows of up to 7 MGD from 3.5 MGD and take some older lift stations out of service. Operational completion was achieved on November 14, 2023.

- Monroe Street Lift Station Improvements Project: Modifications will enable the City to increase pumping of wet weather flows from 40 MGD to 65 MGD to the MRWRRF. This project was completed on October 9, 2024.

Additionally, the Saddle Creek High Rate Treatment Basin project included construction of a larger diameter sewer to send dry-weather flow and a portion of wet-weather flow to the interceptor system. This presents the opportunity to increase wet-weather flow to the Papillion Creek Water Resource Recovery Facility if downstream conditions allow. Utilization of this operational option is being reviewed.

E. Prohibition of CSOs during Dry Weather

Dry weather overflows from the City of Omaha combined sewer system are prohibited. The City of Omaha shall document all dry weather overflows and the measures taken to correct the cause of the overflow in the Annual Report. Substantial dry weather overflows shall be reported to the NDEE as soon as possible.

The City continues to work to comply with meeting the control of prohibition of dry-weather overflows. The City exercises procedures for response documentation, and reporting of dry- weather overflows to prevent subsequent events where possible. Table 2-3 includes summaries of the dry-weather overflows discovered during the reporting year that did not reach a Water of the State. Table 2-4 lists the locations where discharges did reach Waters of the State as defined in the following:

> *Waters of the State means all waters within the jurisdiction of this State including all streams, lakes, ponds, impounding reservoirs, marshes, wetlands, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, situated wholly or partly within or bordering upon the State (Title 123, Ch. 1, NDEE).*

Additional information for each event was submitted to NDEE, in accordance with reporting requirements in the CSO Permit. The Wastewater Overflow Emergency Response (WOER) Plan outlines the notification procedure, which includes in general an immediate phone call, and final report with root causes and long-term corrective actions. The City is reviewing the use of the CDX database electronic reporting system for reporting dry weather overflows beginning mid-year 2025.

The summary is as follows:

- There were four unavoidable contained overflows: 1 caused by a water main break, 1 by contractor damage, and 2 from broken pipes.
- There were five overflows that were contained: 1 caused by grease, 3 caused by roots, and 1 caused by rags. All of these have been updated for more frequent Preventive Maintenance inspections.
- There were 14 dry-weather overflows that reached Waters of the State, 10 directly through a permitted CSO discharge point and 4 that travelled overland to drainageways leading to the Missouri River. Causes included debris, grease, mechanical malfunctions, and water main breaks.
- During the 2024 Flood, CSO Outfall 119 – due to lack of safe access Monroe Street Lift Station was forced to bypass June 27th to July 1st.
- The significant May 21st rainfall event that led to flash flooding impacted CSO 105 - Minne Lusa, causing an extended bypass discharge due to debris blockage.

Water main breaks continue to be one of the leading causes of dry weather overflows at CSO points and is outside of the City's control. The protocol continues to include the inspection of sewer systems for mud and debris as part of the goal of reducing maintenance issues and eliminating dry-weather overflows.

Table 2-3. Dry-Weather Overflows – Contained

Start (Discovery) Date	Location of Overflow	Cause	Mitigation Steps	Long Term Corrective Action
10/30/2023	3425 Parker St	Water Main Break	Repaired	(None) Unavoidable
2/15/2024	1505 Woolworth Ave	Grease	Rodding/Flushing	PM Inspection
5/2/2024	3198 K St	Contractor Damage	Repaired	(None) Unavoidable
5/19/2024	5448 Fredrick St	Roots	Rodding/Flushing	PM Inspection
7/7/2024	904 S 38th Ave	Rags	Rodding/Flushing	PM Inspection
7/30/2024	932 N 28th Ave	Roots	Rodding/Flushing	PM Inspection
7/31/2024	5406 N 61st St	Roots	Rodding/Flushing	PM Inspection
8/9/2024	3017 N 28th Ave	Broken Pipe	Repaired	(None) Unavoidable
8/14/2024	6991 F St	Broken Pipe	Repaired	(None) Unavoidable

Table 2-4. Dry-Weather Overflows – Reached Waters of the State

Discovery Date	Location of Overflow	Duration	Estimated Quantity	Cause	Mitigation Steps	Long-term Corrective Action
10/31/2023	CSO 204 6245 Pratt St	Unknown	Unknown	Water Main Break	Repaired	(None) Unavoidable
11/16/2023	CSO 110 367 Pierce St	Unknown	Unknown	Water Main Break	Repaired	(None) Unavoidable
11/21/2023	CSO 204 6245 Pratt St	Unknown	< 50 gpm	Mechanical Malfunction	Repaired	Preventative Maintenance
12/27/2023	CSO 204 6059 Taylor St	Unknown	Unknown	Water Main Break	Repaired	(None) Unavoidable
1/19/2024	CSO 103 9308 N 28th St	Unknown	<25 gpm	Mechanical Malfunction	Repaired	Preventative Maintenance
1/24/2024	CSO 204 6059 Taylor St	Unknown	Unknown	Water Main Break	Repaired	(None) Unavoidable
2/15/2024	1505 Woolworth Ave	45 mins	<50 gallons	Grease	Rodding/ Flushed	PM Inspection
4/15/2024	CSO 202 7229 Bedford Ave	41 mins	360 gallons	Mechanical Malfunction	Repaired	Preventative Maintenance
5/14/2024	4295 N 48th St	3 mins	20 gallons	Operations Failure	Flushed	Operations Training
5/16/2024	CSO 204 6059 Taylor St	Unknown	Unknown	Water Main Break	Repaired	(None) Unavoidable
5/21/2024	CSO 105 Minne Lusa	Unknown	Unknown	Flash Flooding Debris	N/A	(None) Unavoidable
5/29/2024	4966 Newport Ave	1200 mins	24,000 gallons	Debris	Rodding/ Flushed	PM Inspection
6/27/2024	CSO 119 Monroe St LS	6/27/24 – 7/1/24	5 million gallons	Missouri River Flood	N/A	(None) Unavoidable
8/19/2024	4966 Newport Ave	75 mins	1875 gallons	Grease	Rodding/ Flushed	PM Inspection
8/31/2024	CSO 109 599 Marcy St	Unknown	Unknown	Mechanical Malfunction	Repaired	Preventative Maintenance
9/18/2024	CSO 202 7229 Bedford Ave	Unknown	Unknown	Mechanical Malfunction	Repaired	Preventative Maintenance

F. Control of Solid and Floatable Materials in CSOs

The control of solid and floatable materials in CSOs is intended to reduce visible floatables and solids using relatively simple measures. The City of Omaha shall, as appropriate, reassess and implement site-specific processes to control solids and floatables in CSOs using relatively simple measures. If reassessment is appropriate, the conclusions and implementation of control measures shall be documented in the Annual Report.

Based on previous evaluations, the CSO points are not conducive to the implementation of additional floatables controls without significant modification. As part of the LTCP projects additional floatables controls may be incorporated. The following are updates to existing controls:

- The floatables screen in the Grace Street ditch CSO channel, downstream of CSO 106 North Interceptor and CSO 107 Grace Street (near the access road off North 6th Street from Abbott Drive), was damaged by the March 2019 Missouri River flooding. OPW 53755 was designed and bid last year. Construction to repair the screen and screenings rake system began in June of 2023 and achieved final completion in October 2024.
- The City also continued work constructing improvements to the 6th and Leavenworth Grit Facility. The purpose of this project is to rehabilitate this existing grit facility as part of the Flood Mitigation Sewer System that conveys flow to the 4th and Leavenworth lift station. This is not a CSO Program LTCP project, however improved functionality of this facility allows more wet-weather flow to reach the Leavenworth Lift Station through the dry-weather flow pipe and with less solids content. Construction notice to proceed was issued March 29, 2023. Construction progress is ongoing with anticipated substantial completion on February 21, 2025 and final completion on March 21, 2025.
- Grit removal facilities in the collection system continued to be maintained by Sewer Maintenance Division staff (either the Levee and Lift Station Group or O&M Group). As new stormwater facilities are built, grit and floatables controls are incorporated into these designs. These stormwater facilities are either part of the separate stormwater system (Municipal Separate Storm Sewer System [MS4]) or are part of the Combined Sewer System as the stormwater recombines downstream.

G. Pollution Prevention

Pollution prevention is intended to keep contaminants from entering the CSS and accordingly the receiving waters by way of the CSOs. The City of Omaha shall document any new pollution prevention measures enacted by the City in the Annual Report.

Pollution prevention efforts are shared between several divisions and workgroups within the City. Sewer Maintenance Division performs inlet cleaning, stormwater structure maintenance, and system grit removal. EQCD manages solid waste collection, recycling, and the Stormwater Program, which includes inspection, contracted maintenance, education, and outreach. Capital Construction and Street Maintenance Division (CCSM) performs the street sweeping, open channel maintenance, and right-of-way litter removal. Parking and Mobility Division manages sweeping and litter control on city-owned surface parking and parking garages. Parks, Recreation, and Public Property Department cooperate to minimize impacts to the receiving streams and conveyance systems.

Records for pollution prevention and good housekeeping practices in the City are compiled in an annual report as required by the City's MS4 Permit (NPDES Permit NE0133698). This includes a summary of storm sewer maintenance, stormwater best management practice structure maintenance, and street sweeping efforts from January 1 to December 31, 2023. The 2023 MS4 Annual report was submitted by the City to NDEE on March 31, 2024. Additional proactive and reactive work orders for cleaning of storm inlets on the combined sewer system outside of MS4 areas are logged in the City's CMMS. These work records, along with grit pit and screen cleaning, are maintained by the Sewer Maintenance Division. The EQCD continues its outreach through the Papillion Creek Watershed Partnership and through a contract with Keep Omaha Beautiful to implement a stormwater pollution prevention and public education program that also provides benefits to the CSO Program. No additional pollution prevention measures have been implemented during this reporting year.

H. Public Notification

Public notification is intended to inform the public of location of CSO outfalls and health and environmental effects of CSOs. The City of Omaha shall document any revision or updates to public notification procedures in the Annual Report plus any public announcements related to CSO discharges.

Locations of CSO outfalls have been identified for the public through specific signage posted near the outfalls, and along marina locations and public trails that parallel receiving streams. Per standard procedure, signs at the CSO outfalls are inspected twice per year for visibility and condition. General education on CSO environmental effects is shared through the ongoing public outreach of the CSO Program. An additional summary is provided in Section III.B, Public Participation.

During the 2024 Missouri River Flood, the southern end of the MRWRRF was inaccessible. As a result CSO 119 – Monroe Street Lift Station was forced to bypass from June 27th to July 1st, 2024.. An Unscheduled Bypass Release was issued.

Procedure responsibilities continue to be carried out by the Sewer Maintenance Division staff. CSO outfall sign inspections were completed in this reporting year in Fall 2023 (between October 26, 2023 to November 9, 2023) and Spring 2024 (March 7, 2024 to March 12, 2024). As needed, outfall signs may be located at both the CSO discharge location and at the receiving stream. As of the last inspection date of March 12, 2024, a total of 45 active outfall signs were in place.

For occurrences of dry-weather overflows, overflows that continue after the effects of wet-weather have subsided, or any other instance of a non-permitted overflow or bypass, the City follows reporting requirements outlined in the City's Standard Operating Procedure for Reporting and Public Notification of Wastewater Bypass, Unpermitted Combined Sewer Overflow & Sanitary Sewer Overflow. This standard operating procedure is reviewed semiannually. Public Works Assistant Director - Environmental Services or delegee determines "significant" qualification in conjunction with NDEE, on a case-by-case basis under any of these guidelines: duration greater than 24 hours, quantity greater than 100,000 gallons, and nature of pollutants and location. No other policies or procedures for public notification have been revised or updated.

I. Monitoring to Characterize CSO Impacts and the Efficacy of CSO Controls

Monitoring to characterize CSO impacts involves inspections and other simple methods to determine the occurrence and apparent impact of CSOs. The City of Omaha shall document any additional CSOs discovered by the City during routine inspections in the Annual Report. Characterization of the CSS system and the impact of the CSO discharges shall be reported as needed, according to the requirements in the Permit.

Information on efforts made during the implementation of the LTCP to characterize the CSS system can be found in Section III.A of the report, Characterization and Modeling of the CSO System. No additional CSO outfalls were identified during this reporting year. Monitoring of all CSO outfalls performed during the reporting year is reported in Section VI, Performance Report.

During the implementation of this NMC, under requirements of a preceding Permit, a report to record beach closings, wash-up of floatables, fish kills, hazards to navigation, and basement flooding caused by CSO events was established. The following is provided to meet this requirement:

- For the period of October 1, 2023, to September 30, 2024, there were no known beach closings or fish kills.

The City monitors and tracks any occurrence of basement backup or manhole overflows in the CSS. Dry-weather occurrences are reported in Section II.E, Prohibition of CSOs during Dry Weather. Storm events that adversely affected the CSS during the reporting period are listed in Table 2-5.

Table 2-5. Storm Events

Date	Duration (Hours)	Total Rainfall (Inches)	Recurrence Interval (NOAA)
10/3/2023	10	1.5	1 year
Peak hour intensity 0.44 inches per hour			
10/12/2023	2	1.84	1 year
Peak hour intensity 0.92 inches per hour			
4/26/2023	18	1.82	1 year
Peak hour intensity 0.37 inches per hour			
5/4/2024	3	1.14	1 year
Peak hour intensity 0.55 inches per hour			
5/15/2024	0.5	2.1	25 year
Peak hour intensity 4.00 inches per hour			
5/21/2024	9	7.84	200 year
Peak hour intensity 3.16 inches per hour			
6/25/2024	8	1.9	2 year
Peak hour intensity 0.77 inches per hour			
7/2/2024	16	3.93	25 year
Peak hour intensity 1.45 inches per hour			
8/14/2024	3	2.58	10 year
Peak hour intensity 1.57 inches per hour			

All wet-weather basement backups and manhole overflows are evaluated for actual causes or conditions that led to the backup or overflow. Omaha Public Works, Environmental Services engineering group recommends properties for back-water valves if Combined Sewer System capacity is determined to be the cause. Sewer system evaluation surveys are referred to the Omaha Public Works, Environmental Services engineering group if chronic occurrences and regions of the service area are affected by wet weather. In some cases, minor repairs to reduce inflow and infiltration (I&I) sources are completed near-term. The City uses all assessment information to determine if a capital project may be required or if modifications to Operation & Maintenance (O&M) procedures are needed.

III. Reports and Documentation Applicable to the Long Term Control Plan

The City of Omaha submitted the complete LTCP to the NDEE on Sept. 25, 2009, in fulfillment of NPDES Permit requirements and the CSO Control Policy. The LTCP was subsequently approved by the NDEE on February 10, 2010. An Update to the Long Term Control Plan was submitted to the NDEE on Sept. 29, 2014, which was approved by the NDEE on Jan. 23, 2015. Minor modification to the Update to the Long Term Control Plan was approved by the NDEE on April 3, 2015. The City submitted the 2021 Update to the LTCP was received on March 31, 2021. It was reviewed by NDEE and approved on August 11, 2021. The City of Omaha shall submit documentation and reports applicable to the LTCP and subsequent Updates in the Annual Report (Part VIII) according to the conditions and requirements specified below. Any future changes or updates to the LTCP must be submitted to NDEE for review and approval.

A. Characterization, Monitoring, and Modeling of the CSS

The CSO system characterization continues to be updated as LTCP projects are designed and implemented. Design consultants are asked to review existing system data and to gather additional information to form the basis of their designs. The data and designs are then included in the City's hydraulic computer model to ensure the level of control specified in the LTCP is ultimately achieved.

While the CSS is almost completely mapped in the City's geographic information system (GIS), the City is continuously doing upkeep on the attributes of the assets.

The following is a summary of the City's activity during this report period:

1. **Characterization Efforts:**
   The CSS characterization for this reporting year can be broken down into three areas as follows:

   a. **Documentation and recording of additional collection system information**: As part of the study phase for sewer separation projects, field data are obtained on the condition of the CSS, such as smoke testing, CCTV of sewer lines, dye testing, manhole condition evaluation, and SL Rat assessment. In addition, the City conducts its own sanitary sewer evaluation surveys (SSES), either with City staff or through managed field services contracts. Survey findings are incorporated back into the City GIS, which results in updated sewer mapping. Improvements to the collection system that result from the completion of CSO and other projects are then uploaded back into the City's GIS.

   b. **CSO Block Program:** The City maintains a block program, also commonly referred to as CSO device checks. Under this program a "block" or some type of device is placed on a weir or overflow pipe, tethered, and visually inspected for movement to indicate if there is an overflow. Section VI, Performance Report, discusses the results of this program. As LTCP projects are completed, CSO points that remain open will have permanent metering installed, and eventually the CSO block program will be phased out.

c. Flow monitoring: Temporary and permanent flow monitoring continue in both the CSS and sanitary collection system to support long-term planning and individual projects. Rainfall monitoring is included in this effort. Monitoring efforts are discussed in the following sections.

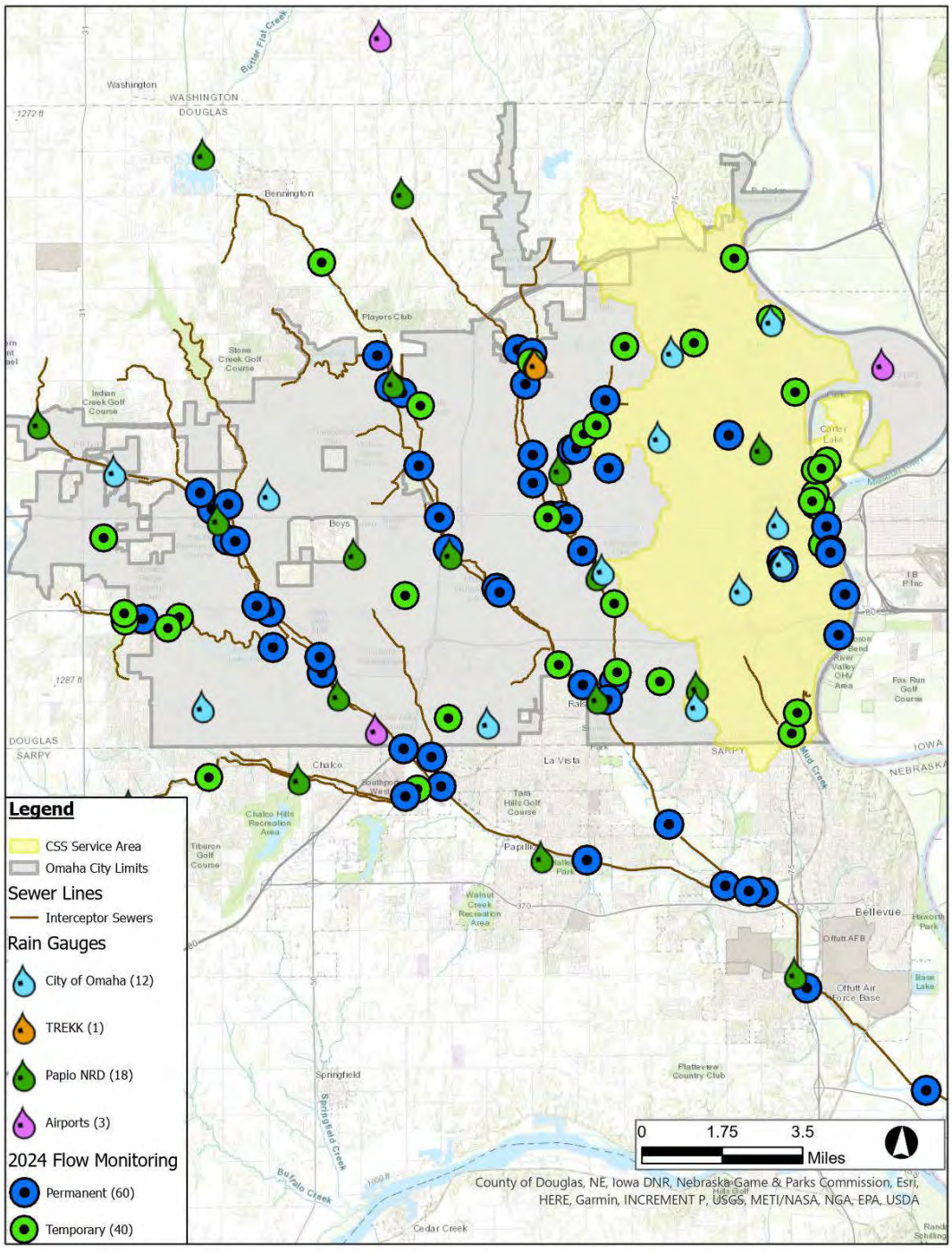
2. Monitoring Efforts:

The City has been performing flow and level monitoring of its CSS, specifically related to the characterization of the system, since 2004. The City continued to expand its fleet of metering equipment, continued City-wide flow monitoring of the Papillion Creek Interceptors, and conducted temporary flow monitoring in multiple locations. For the reporting year there were:

- 61 permanent flow monitoring sites.
- 28 temporary flow monitoring sites.
- 11 CSO surveillance locations (with camera and level sensor) supported a variety of studies. Flow monitoring for excessive inflow and capacity for lift station upgrades continued to be a focus this year.
- 13 rain monitoring locations, using 12 permanent City-managed rain gauges and one temporary gauge owned by another entity.
- 21 other rain gauges across the region through the Papillion Creek Watershed Partnership.

City and consultant rain gauges are listed in Table B-1. Permanent and temporary flow monitoring locations are listed in Tables B-2 and B-3, respectively. Temporary monitoring locations mean that a meter was put in for a short period of time (3 to 5 months) and sometimes longer. Table B-4 lists the locations where CSO surveillance cameras and level sensors were installed during the reporting year. These cameras are further described in Section VI. Figure 3-1 provides a location map for the flow monitors and rain gauges used in 2024, including locations of gauges within the Papio-Missouri River Natural Resources District alert rain gauge system (managed by U.S. Geological Survey [USGS]), which is used to supplement the City's rain gauge network.

Figure 3-1. Flow and Rain Gauge Locations



Bulk Flow Monitoring: In addition to the collection system flow monitoring locations, the City of Omaha Environmental Quality Control Division maintains several bulk monitoring flow meters for use in billing for wholesale customers in the wastewater service area. Those sites provide additional flow information used in model calibration and are listed in Table B-5.

3. Modeling Efforts:

The City uses and upgrades the Autodesk InfoWorks Integrated Catchment Model (ICM) computer model (InfoWorks model) of the combined, sanitary, and storm sewer systems during the ongoing implementation phase of the CSO Program. Updates occur as additional information in the system is identified and as the system is modified as CSO controls are implemented. During the reporting year, modeling efforts included:

- Separate modeling effort in the Urban Core, to include the smaller-diameter sanitary collectors in the combined sewer area. The goal was to understand City Planning Urban Core future growth and development impacts.
- Updates to the Current LTCP Model and 2037 LTCP Model with project as-built configuration changes.
- Updates to the design-level Model for Monroe South Barrel project
- Additional quality assurance comparison of attributes in GIS versus the model information in the Papio Watershed. A checklist of future model updates was created. These will be evaluated for relevance to the CSO model outputs.

Additionally, during the reporting year, the model files were updated for all three time horizons (2002, present, and 2037), for each watershed (Papillion Creek and Missouri River). Each time horizon is intended to represent the physical sewer system configuration in place at or planned for that time:

- 2002, which coincided with the issuance of the City's first CSO Permit and is used as the Existing Conditions (baseline) for the CSO Program. If field conditions were discovered as existing in 2002 (but discovered after the date) but were not known to include in the original baseline, these changes would be updated in the 2002 model.
- 2024, represents the current system configuration.
- 2037, is the year by which the LTCP implementation aims to be completed.

In addition, the City also has a completed model layout on the separate sanitary system in the Papillion Creek Watershed. This is relevant in that there are areas that overlap with the model configuration prepared for the CSO Program. Future efforts will compare results from each model and determining any value-added enhancements to the CSO versions. The City also tracked modeling requests from the design engineers for specific projects. These modeling modifications were reviewed by our modeling contractors and incorporated into the appropriate model(s) after the projects were completed.

B. Public Participation Plan

A public participation strategy that was used throughout the LTCP development and implementation is included in Section 7 of the 2021 LTCP Update. The City of Omaha shall continue to employ a public participation process throughout implementation of the LTCP and document public participation activities in the Annual Report.

During the reporting year, the CSO Program facilitated outreach with neighborhoods and the general public both in person and electronically. In addition to conveying timely and accurate project information, these efforts further strengthened relationships and supported community acceptance of the LTCP.

The following subsections provide a summary of this effort.

1. Informing Stakeholders

The CSO Program used direct mail and in-person meetings to inform neighbors about upcoming projects in their area. The following is a list of public meetings held this reporting year:

- March 21, 2024 – OPW 51685 CSO 212 - 64th Avenue & William Street: Pre-Construction Public Meeting
- May 1, 2024 – OPW 53969 CSO 202, Phase 2 – 70th Avenue & Spencer Street: Pre-Construction Public Meeting
- September 24, 2024 – OPW 53149 CSO 119 South Barrel Conversion & Sewer Separation: Preliminary Design Meeting with Mandan Park Neighborhood Association

2. Youth Outreach

a. World O! Water

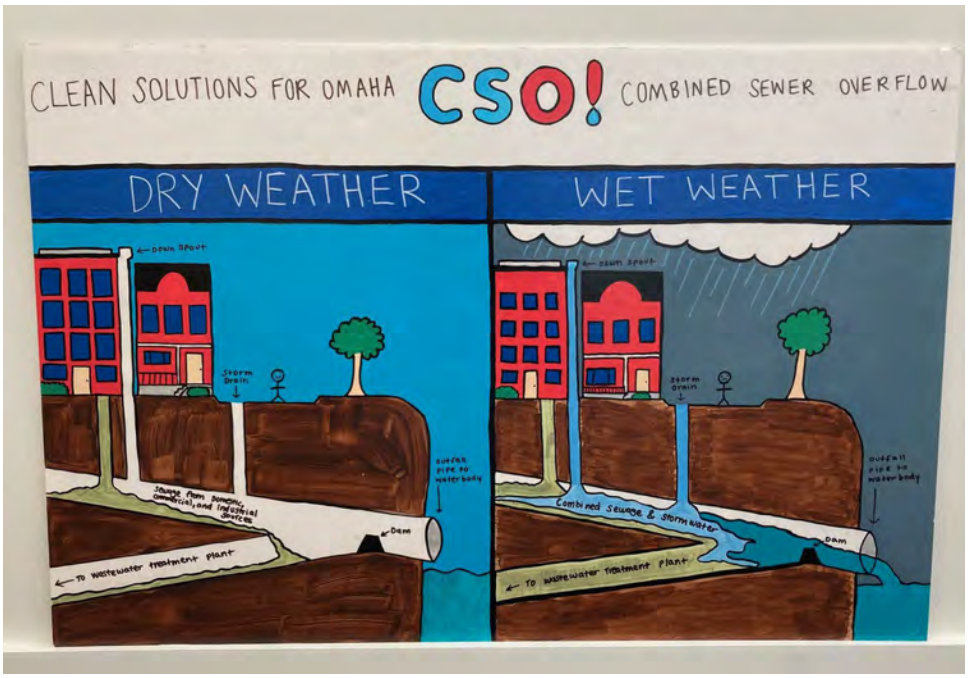
On September 7, 2024, the CSO Program once again participated in the annual World O! Water event. This all-ages event organized by the City of Omaha and several community partners, with a focus on youth, highlights the important role water plays in our lives and community; approximately 1206 people attended the 2024 event.

For the third year in a row, post pandemic, World O! Water was an in-person event, after being virtual events in 2020 and 2021. In 2024, a new game was created focused on stormwater pollution prevention as well as a new visual aid which explained the process of a combined sewer overflow. Event feedback indicates that the attendees enjoyed and appreciated the educational aspect of both new additions.

Members of the scouting community that attended the event received the Clean Water Action worksheet and patches. For greater inclusivity, a second version and a corresponding sticker version of the patch were available for non-scouts. The worksheets contain varying levels of age-based CSO activities.

Figure 3-2. WO!W Attendees Enjoying the New CSO Booth Activity

Figure 3-3. New Visual Aid Depicting Combined Sewer Systems in Dry and Wet Weather Conditions



b. Kid College

In coordination with Metropolitan Community College, we hosted an event through their "Kid College". Twelve attendees, children and their guardians, toured the Missouri River Water Resource Recovery Facility and then toured Spring Lake Park. We discussed the process that the City went through in order to build one of the larger green infrastructure projects in the CSO program. Green infrastructure components within the park were discussed along with a scavenger hunt highlighting native plants in the area.

Figure 3-4 Kid College Touring Spring Lake Park Green Infrastructure

3. Other Outreach

a. Rain Barrel Workshops and Giveaways

The City of Omaha and Keep Omaha Beautiful provided a free barrel giveaway to local residents to promote the use of residential rain barrels, with education on the importance of minimizing runoff volume. In addition to providing guidance on building, installing, and maintaining the rain barrels, we also held two Rain Barrel Build workshops in the CSO portions of the City. In total 56 participants assembled 40 complete rain barrels during the workshops.

Outside of the workshops, the City distributed an additional 156 barrels to local residents. As part of the giveaway, a barrel decorating contest was held for recipients to submit their

completed barrels for a prize. Figure 3-5 shows one of the completed barrels submitted for the decorating contest.

Figure 3-5. Rain Barrel Built by Omaha Resident as Part of Giveaway

b. Earth Day Omaha

The City of Omaha participated in this popular annual event and rolled out the Rain Barrel Giveaway campaign to the general public. At this event we handed out informational brochures, conducted a presentation on the function and importance of capturing water at its origin, and had numerous attendees sign up for a free barrel. Event organizers estimate 4000 attendees.

4. Website Transition

Since the inception of the CSO Program in 2006, the City has maintained the current CSO Program website as the primary means of communication to the public. As the CSO Program continues to evolve and the number of active projects declines, additional emphases is being placed on system improvements at the Water Resource Recovery Facilities and separate sanitary sewer collection system. Therefore, the City of Omaha plans to update the current CSO Program website (www.OmahCSO.com) and migrate content to the Keep It Current website (www.KeepitCurrentOmaha.com), the Public Works Department's dedicated website to water-related projects within the City.

A review was conducted of each element on the CSO Program website to determine recommendations for the information that needs to remain on the website, migrate to Keep it Current (KIC), or be removed. The following lists outline the content and the future location of the information. The migration of the information will occur in the 2025 Annual Reporting period.

Remain on CSO Program Website:
(https://omahacso.com/)

- CSO Program overview; mission, vision, and goals; CSO Program schedule; and funding.
- CSO Consent Order and CSO Annual Reports.
- CSO Long Term Control Plan and summary of updates to the plan since the CSO Program inception.
- Authorization to Discharge Under the National Pollutant Discharge Elimination System (NPDES) for City of Omaha Combined Sewer Overflows.
- Map of CSO project locations with a link to the Keep it Current website for active projects.
- Helpful resources, such as Program brochure in English and Spanish, e-Learnings and Program Spotlights.

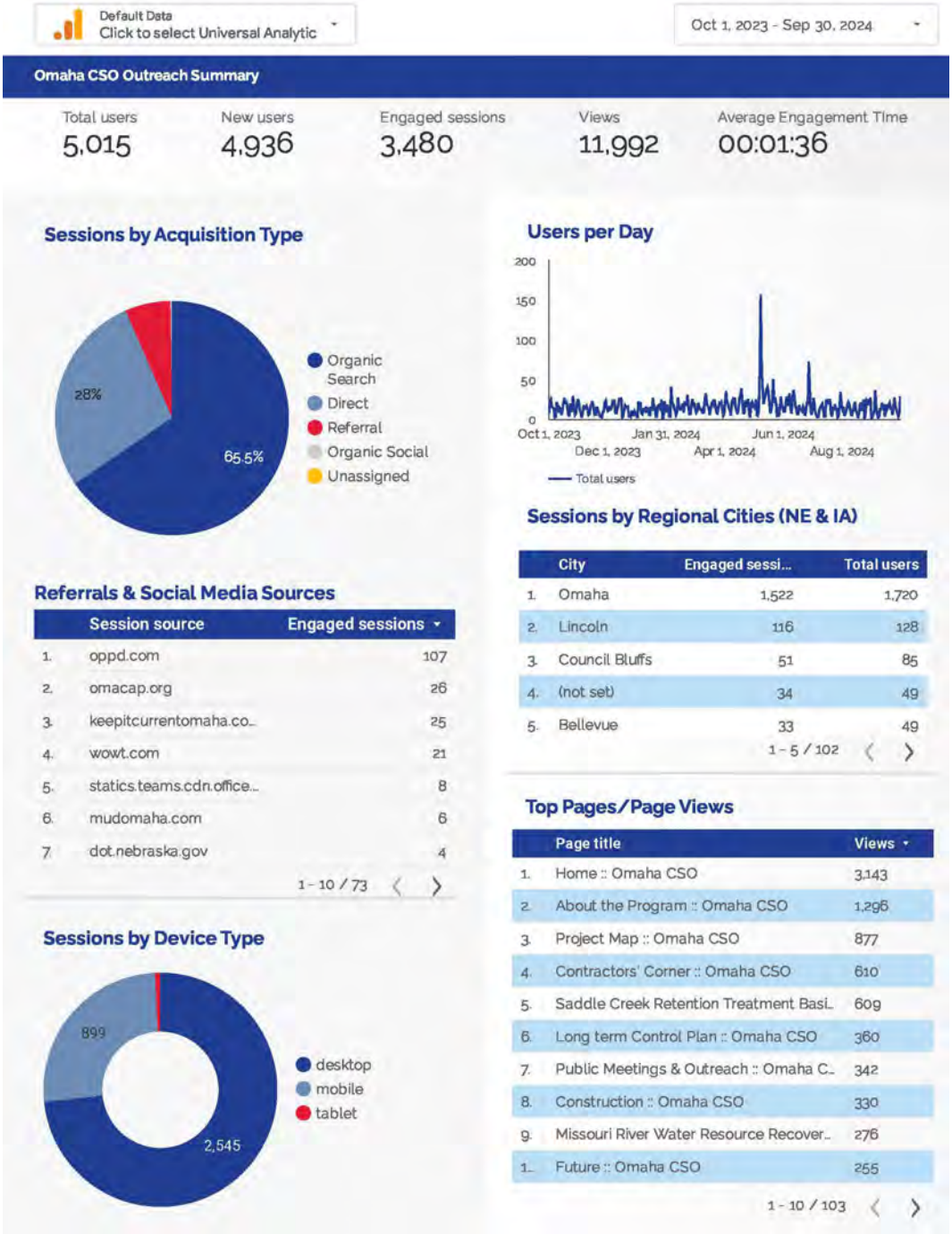
Move to Keep It Current
(https://www.keepitcurrentomaha.com/)

- Information on current/active CSO projects, including key project dates, informational materials for the public, and how to engage the Project Team and City to provide comments.
- Contractors Corner to provide information on upcoming projects and resources applicable to contractors bidding City of Omaha projects.
- Small and Emerging Small Business Program information, with links to the City's Human Rights and Relations website.
- Green Infrastructure project success stories and information.
- Water Resource Recovery Facility information, including current expansion projects and public-friendly information on the biogas program.
- How to report an issue, including CSO project-related issues, questions or concerns.

5. Website Analytics

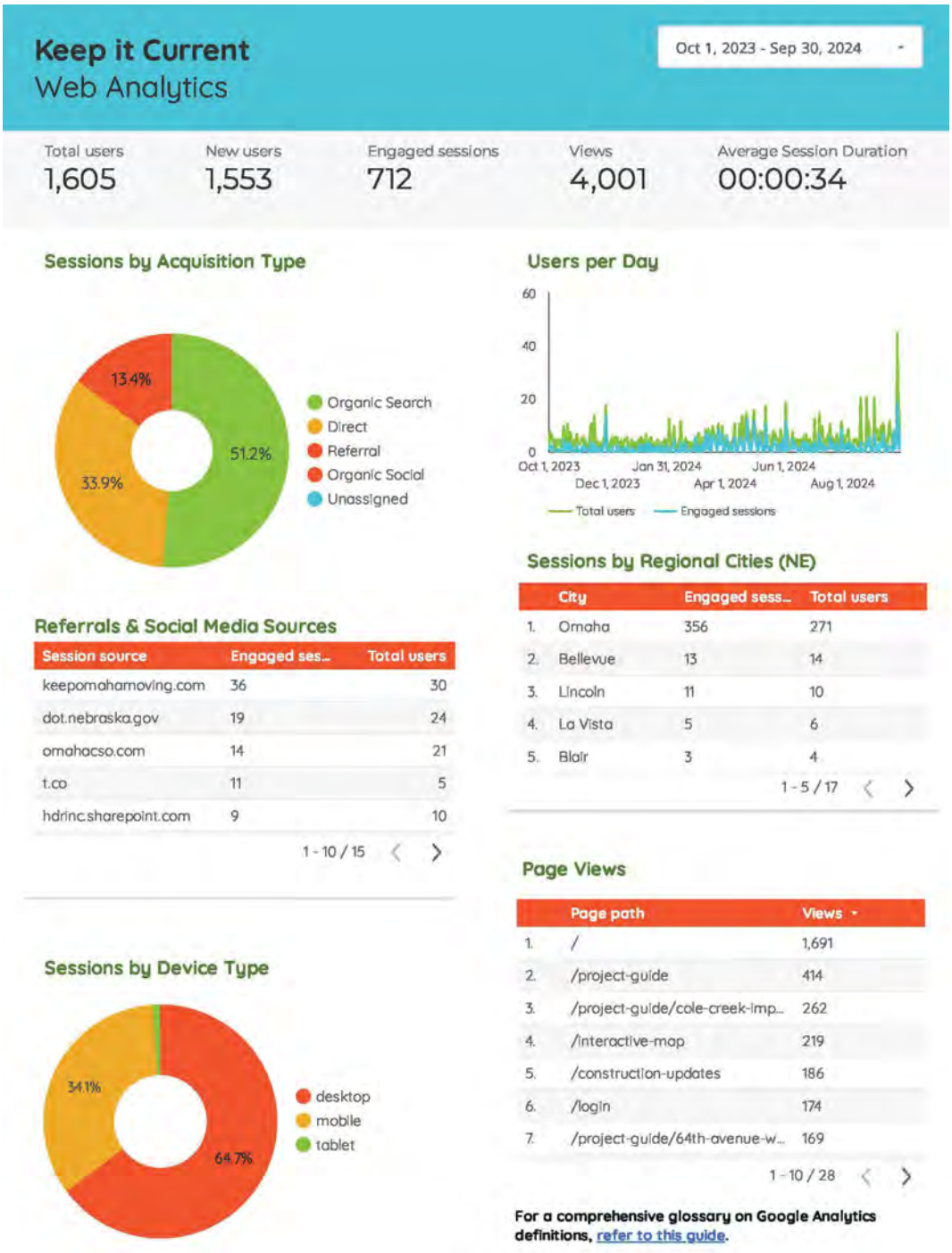
During the reporting year, the CSO! website, www.OmahaCSO.com, received almost 12,000 views from over 5,000 users. Analytics show that viewers were from the Omaha metro area and even Des Moines, Iowa. Among the most viewed pages were the "About the Program" and the project detail page for the Saddle Creek Retention Treatment Basin. The full analytics are shown in Figure 3-6.

Figure 3-6. Full Analytics for the Omaha CSO Website



The Keep it Current website, www.KeepitCurrentOmaha.com, also had 4,000 views from about 1,600 users. Viewers include users from central Nebraska. Full analytics are shown in Figure 3-7.

Figure 3-7. Full Analytics for Omaha's Keep it Current Website



C. Consideration of Sensitive Areas

The identification of sensitive areas to which the CSOs discharge is included in Section 2 of the LTCP (See the 2021 Update to LTCP). Sensitive areas include water with threatened or endangered species and their designated critical habitat, waters with primary contact recreation, public drinking water intakes, and any other areas identified by the City of Omaha or NDEE in coordination with other State or Federal Agencies. The City of Omaha shall include any changes to the status of previously identified sensitive areas in the Annual Report.

Sensitive areas include waters with threatened or endangered species and their designated critical habitat, waters with primary contact recreation, public drinking water intakes, and any other areas identified by state or federal agencies. The City is not aware of any new sensitive areas being identified in the reporting year.

D. Evaluation of Alternatives

The process that the City of Omaha undertook to identify, screen, evaluate, and select CSO control technologies and alternatives for the Missouri River and the Papillion Creek watersheds is included in Section 3 of the LTCP (See the 2021 Update to LTCP). This process resulted in a group of selected CSO controls that includes two retention treatment basins, upgrades to the MRWRRF, replacement force mains, green solutions, and sewer separation projects which are anticipated to satisfy presumption approach of the CSO Control Policy and will not preclude meeting water quality standards. Any significant changes or revisions to the controls set forth in the LTCP and a final projects list in the LTCP shall be submitted by March 31, 2028, to the NDEE for review and approval according to the Part IX.F of this permit.

The City of Omaha continues to initiate projects in accordance with the 2021 LTCP Update.

The focus during this reporting period was on the continued evaluation and review of Real Time Controls for Green Infrastructure projects.

Upon completion of preliminary design for recently initiated projects, the City will review the need to revise and update the LTCP final projects list.

E. Cost/Performance Considerations

An evaluation of the benefit cost ratios for CSO control levels and financial capability analysis is included in Section 3 and Section 4 of the 2021 LTCP Update. The City of Omaha shall submit a financial report to the NDEE by March 31, 2028, that sets forth a strategy to obtain sufficient revenue to fund the CSO program through at least the year 2033 that includes funding for the specific projects in Sections 5 and 6 of the LTCP (See the 2021 Update to LTCP).

The City uses various tools to track the costs of the LTCP projects because controlling costs ensures the program is as affordable as possible for the ratepayers while maintaining the LTCP compliance schedule. The estimated cost of the program has been escalated using the Capital Improvements Plan

(CIP) tool developed by the CSO Program. The cost of the Program was not escalated to a single future year but rather each project was escalated to the year(s) they are expected to be delivered in. The City and PMT conducted an effort to re-baseline (in June of 2023) present and future program costs due to the significant influence of COVID 19 and supply chain issues that resulted in increased construction related expenditures.

The current estimated cost of the Program with contingencies is $2.125 billion through 2037. As noted in previous annual reports, a new rate ordinance was approved in December of 2022 for years 2024 through 2028.

Through September of 2024, the City has paid $976 million to implement the LTCP and has encumbered another $42 million for a total of $1.02 billion. In the reporting year, the City initiated contracts for design of 7 additional projects. Adjustments in schedules and costs of the individual projects within the Program are included as part of the APPRs in Attachment C.

F. Operational Plan

The City of Omaha submitted a preliminary wet weather operational strategy plan that provides an overview of the collective operation of the combined sewer overflow controls to be implemented by the City in Section 9 of the LTCP. The City shall continue to meet the plan requirements and schedule. The City of Omaha shall update the wet weather operational strategy plan as CSO projects are constructed and are operationally complete. Significant updates to the wet weather operational strategy plan shall be included in the Annual Report.

The City made no significant modifications to the existing wet weather operational strategy plan during this reporting period.

The City reviewed data from the projects completed this year for eventual incorporation into the Wet Weather Operational Plan. Specifically, the planned projects for Saddle Creek High Rate Treatment Basin, Blake Street Lift Station, Riverview Lift Station, and Monroe Street Lift Station achieved operation completion during this reporting year. Operational data is being evaluated and based on these evaluations, the wet weather operations plan will be modified as needed, and submitted to the NDEE.

G. Maximizing Treatment at the Existing POTW Treatment Facilities

An evaluation of the feasibility of expanding wet weather treatment at both the MRWRRF and the PCWRRF is included in Section 3 of the LTCP (See the 2021 Update to LTCP). Permit NE0036358 and the LTCP includes requirements to maximize treatment of combined wastewater at the MRWRRF. Expansion of the treatment capacity of the PCWRRF is included in a compliance schedule in permit NE0112810. The City of Omaha shall continue to evaluate opportunities to maximize treatment at the WRRFs as part of the adaptive management strategy for implementation of the LTCP. A summary of any new approaches identified to maximize treatment of combined wastewater at the WRRFs shall be included in the Annual Report.

No specific evaluations were performed and no new approaches have been identified since the last Annual Report because the City is still in the process of implementation of projects in the LTCP that will maximize treatment of wet weather at the MRWRRF.

Several System Reliability Projects were completed during this reporting year. These projects are as follows:

- Riverview Lift Station Replacement Project and the Blake Street Lift Station Project: Once construction is complete, it will enable the City to pump increased wet weather flows of up to 7 MGD from 3.5 MGD and take some older lift stations out of service. Operational completion was achieved on November 14, 2023.
- Monroe Street Lift Station Improvements Project: Modifications will enable the City to increase pumping of wet weather flows from 40 MGD to 65 MGD to the MRWRRF. This project was completed on October 9, 2024.

Additionally, the Saddle Creek High Rate Treatment Basin project included construction of a larger diameter sewer to send dry-weather flow and a portion of wet-weather flow to the interceptor system. This presents the opportunity to increase wet-weather flow to the Papillion Creek Water Resource Recovery Facility if downstream conditions allow. Utilization of this operational option is being reviewed.

H. Implementation Schedule

An implementation schedule that complies with the October 1, 2037, deadline for completing the CSO project is included in Section 6.0 of the LTCP Schedule (See the 2021 Update to LTCP). The projects that will be designed, constructed, and operationally completed during the current permit term are included in Part VI of this permit which is the enforceable mechanism for implementation of these controls. The City of Omaha shall include progress reports on implementation of the CSO projects set forth in the compliance schedule in the Annual Report.

Project Progress Reports and schedule updates are included in IV. Compliance Schedule section of this report.

I. Post-Construction Monitoring Plan

A post-construction monitoring plan is described in Section 8 and included in Appendix A of the 2021 LTCP. The City shall follow the requirements of the approved Post-Construction Monitoring Plan in the LTCP. The goal of the plan is to monitor water quality to determine CSO program effectiveness and to monitor the effectiveness of control projects.

The City continues to follow the 2021 plan with the 2023 modification removing certain in-stream monitoring locations. The Instream monitoring data are provided in Section VII, Instream Monitoring, of this report. The effectiveness of controls continues to be monitored and measured per the PCMP:

- Continued the flow monitoring program.
- Calibrated model completed in 2023. Any new field findings or project updates significant to the modeling outputs are tracked and will be incorporated prior to the next compliance check.
- Effectiveness of sewer separation through ongoing CSO monitoring, flow monitoring, and I/I system studies, if necessary.
- Effectiveness of wet-weather facilities through unique monitoring plans.

J. Infiltration and Inflow

The City has implemented an Infiltration and Inflow (I/I) Reduction Program in the Update to the LTCP. The goal of the program is to reduce storm water inflow into the sanitary sewer system. The City shall follow the steps of the program as defined in the approved version of the LTCP and report progress in the annual report. The City shall follow its Green Infrastructure Program to reduce storm water I/I and reduce pollutants discharged to waters of the State to the maximum extent practicable.

The City continues to evaluate opportunities to utilize Real Time Controls (RTC) to maximize the efficacy of existing green infrastructure projects. In this reporting year, the City continued its evaluation of the stormwater infiltration project installed at 20th and Pierce and the subsequent project that installed a Real Time Control (RTC) gate upstream of it. This RTC gate retains a volume of water during CSO events and releases it when the system is no longer overflowing to the river. The control strategy and costs for the 20th and Pierce RTC project have been used to guide OPW 54677 Omaha CSO Program Green Infrastructure Improvements Project Study. This study is evaluating stormwater storage options and an upstream RTC gate tied to the stormwater infiltration project at 35th and Vinton as well as reviewing opportunities to enhance performance of the Hanscom Park Lagoon. The City continues to explore grants, private partnerships, and other similar opportunities to expand the real time controls communication system to improve performance of green infrastructure.

IV. Compliance Schedule for Implementation of CSO Control Projects

A summary of construction activities, actions, and other measures completed according to the Compliance Schedule for Implementation of CSO Control Projects set forth in Part VI of this permit and in compliance with the Consent Order.

Upon issuance of this permit, the City of Omaha shall implement the compliance schedule below for construction projects set forth in the Long Term Control Plan (LTCP). This schedule may be modified in accordance with NDEE Title 119 and written notice from the NDEE. The City of Omaha shall include a yearly summary of construction activities, actions, and other measures applicable to this compliance schedule in the Annual Report.

There are twelve other planned and in progress LTCP projects with milestone dates that extend beyond the effective date of this permit. The City shall meet the most current NDEE-approved compliance schedule date, whether it is in the LTCP, permit, or updated Consent Order.

Construction of the following projects must be complete by the dates shown below. Complete construction is defined as substantially complete for sewer separation projects and operationally complete for all other projects.

June 30, 2025
CSO 212 – 64th Avenue and William Street
Nicholas Street Sewer Extension – Phase 3B

December 31, 2026
Forest Lawn Creek Inflow Removal and Outfall Storm Sewer

June 30, 2027
East Cole Creek Interceptor Rehabilitation
CSO 202 Phase 2 – 70th Avenue and Spencer Street

December 31, 2028
61st & Radial Storm Sewer
Grace Street and North Interceptor DWF Diversion Rehabilitation
Minne Lusa Relief Sewer Diversion Modifications
CSO 119 South Barrel Conversion and Sewer Separation

The City, through progress meetings and correspondence, has communicated potential issues or changes to the project or overall schedules to NDEE.

A. Implementation Requirements

The requirements for implementation are set forth in the CSO Permit and the Consent Order. Details about each are presented in this section and the requirements are achieved through the summary tables and figures in this section and through the APPRs in Attachment C. As stated in the CSO Permit, the following definitions apply to compliance schedule dates. The italicized wording has been added to provide additional clarification to what is stated in the Permit:

- **Bid Year –** The year when the bidding process for a specific project is started. This will be noted in the tables as the "bidding" date and corresponds to the day the project was advertised for bid.
- **Begin Final Design –** The date when a Notice to Proceed is issued to a design consultant, or in the case of a design completed by City staff, the date when work is started. *In some projects, an amendment to the original contract for preliminary design will serve as the date the final design began.*
- **Commence Construction –** The date the Notice to Proceed is issued to the construction contractor.
- **Complete Construction –** The date when a sewer separation project is substantially complete or when substantial completion is issued to the construction contractor.
- **Operationally Complete –** The date when a Facility project is substantially complete, is ready for its intended use, and has been made ready to operate by the City.

Consent Order Directives

In addition to the CSO Permit requirements, the Consent Order has a specific requirement to submit an Annual Report that contains an overall status of LTCP implementation and project specific information. The Consent Order, in Paragraph 29, states that the Annual Report shall contain the following:

> *a. A statement identifying each component project timeframe in the period preceding the initial, or thereafter, the most recent previous report, calling for commencement, completion, implementation, or some other action to be taken, and whether and to what extent such action was taken by the City within the respective component project timeframe.*
>
> *b. A general description of the work performed pursuant to the LTCP and component project timeframe schedule for the period covered by the report and whether it conformed to the LTCP and timeframe schedule.*
>
> *c. A statement of any future planned or expected deviations from the LTCP and component project timeframe schedule and the reasons for such deviations.*

Requirements for showing the LTCP compliance status are also met through the summary tables and figures in this section. The Consent Order requirement for component projects is achieved through the submittal of the APPRs in Attachment C.

B. Projects Completed during the 2024 Reporting Year

Table 4-1 provides a summary of projects completed during this reporting year and lists the OPW (Omaha Public Works) Number, Project Name, project status during the reporting year, 2021 LTCP Milestone Compliance (date project achieved the milestone), and, where appropriate, notes that include the project details. A more detailed progress report is included in Attachment C – APPRs.

Table 4-1. Projects Completed during the 2024 Reporting Year

OPW Number	Project Name	Status	2021 LTCP Milestone Compliance	Notes
52049	Saddle Creek Retention Treatment Basin	Complete	12/31/2023 ACHIEVED	Operational Completion on 12/20/2023
52402	Riverview Lift Station Replacement	Complete	9/30/2037 ACHIEVED	System Reliability Project – Operational Completion on 12/7/2023
53082	The Monroe Street Lift Station Improvements	Complete	9/30/2037 ACHIEVED	Systems Reliability Project – Operational Completion on10/9/2024
53270	Blake St Lift Station	Complete	9/30/2037 ACHIEVED	System Reliability Project – Operational Completion on 12/7/2023

C. Current Projects

Table 4-2 provides an implementation summary of current projects during the reporting year. The table lists the OPW Number, Project Name, project status during the reporting year (Preliminary Design, Final Design, Under Construction, or Complete), LTCP Milestone date, Compliance Status (if it is on schedule or will not meet the LTCP Milestone date) and, where appropriate, notes brief project details. A more detailed progress report is included in Attachment C - APPRs.

Table 4-2. Active Projects

OPW Number	Project Name	Status	2021 LTCP Milestone	Compliance Status	Notes
51685	CSO 212 – 64th Avenue and William Street	Under Construction	06/30/2025	Will not meet milestone	Requesting modification of milestone date to 12/31/2025
52470	Forest Lawn Creek Inflow Removal and Outfall Storm Sewer	Under Construction	12/31/2026	On Schedule	

Compliance Schedule

OPW Number	Project Name	Status	2021 LTCP Milestone	Compliance Status	Notes
53753	Nicholas Street Sewer Extension – Phase 3B	Under Construction	06/30/2025	On Schedule	
53149	CSO 119 South Barrel Conversion and Sewer Separation	Preliminary Design	12/31/2028	On Schedule	
53820	CSO 204 Phase 4a – 57th Street and Pratt Street	Preliminary Design	06/30/2030	On Schedule	
53820	CSO 204 Phase 4b – 56th Street and Bedford Avenue	Preliminary Design	12/31/2032	On Schedule	This is combined with 4a at this time (OPW 53820)
53869	CSO 202, Phase 2 – 70th Avenue and Spencer Street	Under Construction	06/30/2027	On Schedule	
54293	East Cole Creek Interceptor Rehabilitation	Preliminary Design	06/30/2027	On Schedule	
54374	61st and Radial Storm Sewer	Preliminary Design	12/31/2028	Behind Schedule	Request for modification to compliance date will be made following preliminary design
54630	Grace St and North Interceptor DWF Diversion Rehabilitation	Preliminary Design	12/31/2028	On Schedule	
54630	North Downtown Conveyance Sewer - 11th and Izard to 6th and Abbott	Preliminary Design	6/30/2030	On Schedule	
54630	11th and Izard Grit and Screening Facility	Preliminary Design	6/30/2033	On Schedule	

OPW Number	Project Name	Status	2021 LTCP Milestone	Compliance Status	Notes
54630	11th and Izard Active Control	Preliminary Design	6/30/2033	On Schedule	
54630	Northeast Omaha RTB - 6th Street and Abbott Drive	Preliminary Design	6/30/2034	On Schedule	

D. Future Projects

Table 4-3 provides a summary of future projects. The table lists the Project Name, LTCP milestone dates from the 2021 LTCP Update and the year when preliminary design is anticipated to start and where appropriate, notes that include the project details.

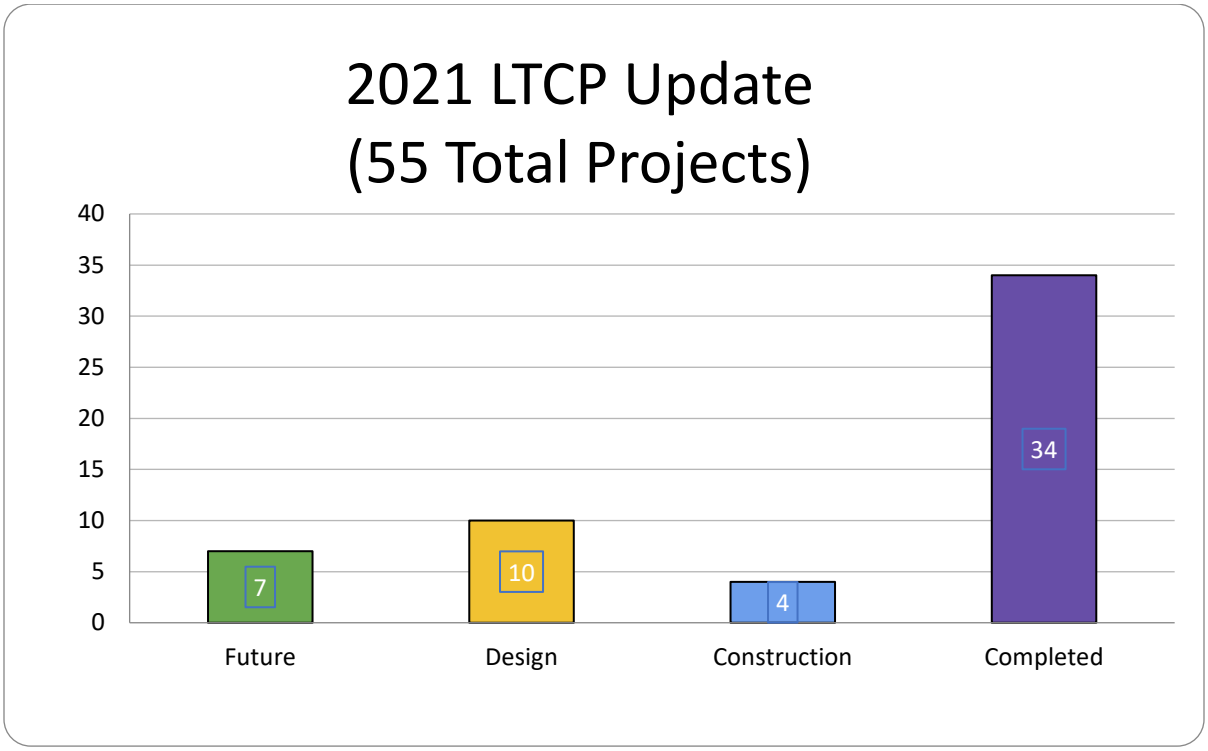
Table 4-3. Future Projects

Project Name	Start Preliminary Design	2021 LTCP Milestone	Notes
Minne Lusa Relief Sewer Diversion Modifications	2023	6/30/2028	Public Works finalized the PSA and is waiting for City Council approval to begin design
CSO 105 Outfall Active Control	2024	6/30/2029	Public Works finalized the PSA and is waiting for City Council approval to begin design
Jones Street to Leavenworth Diversion	2029	12/31/2035	May be re-evaluated following completion of 6th and Leavenworth Grit Facility Improvements reliability project
21st and Cuming Active Control	2029	6/30/2037	
Hickory Street Sewer Separation	2030	6/30/2037	May be re-evaluated following completion of 6th and Leavenworth Grit Facility Improvements reliability project
Pierce Street Sewer Separation	2030	6/30/2037	May be re-evaluated following completion of 6th and Leavenworth Grit Facility Improvements reliability project

Project Name	Start Preliminary Design	2021 LTCP Milestone	Notes
Leavenworth Basin Storage Tank (CSO 109)	2030	6/30/2037	

Figure 4-1 shows the overall status of projects in the 2021 LTCP Update (LTCPU).

Figure 4-1. Project Status for 2021 LTCP Update



As noted on Figure 4-1, there are 14 projects that are active in design or construction. Of these, 12 are on schedule to meet the LTCP Milestone; two are likely to miss the LTCP Milestone. The City has requested a modification to the milestone date for CSO 212 – 64th Avenue and William Street. The City will request a modification to the milestone date for 61st and Radial Storm Sewer once preliminary design is completed.

E. System Reliability Projects Not in the 2021 LTCPU

The City has added several system reliability projects to the program since the LTCP was updated in 2021. These projects have been added through grant opportunities or due to needs observed in the CSO system. These system reliability projects enhance the operational reliability of the system and/or

increase the capture volume of CSOs. Their compliance date has been listed as September 30, 2037 (to coincide with the end of the CSO program).

Table 4-4 provides a summary of projects that are active during this reporting year and lists the OPW Number, Project Name, project status during the reporting year, Milestone Compliance (this is the end of the CSO program), compliance status and, where appropriate, notes pertinent to the project. A more detailed progress report is included in Attachment C – APPRs.

Table 4-4. Active System Reliability Projects Not Included in the 2021 LTCPU

OPW Number	Project Name	Status	2021 LTCP Milestone	Compliance Status
54258	MRWRRF In-Plant Lift Station Upgrade	Construction	9/30/2037	On Schedule
54530	Old South Interceptor Force Main – Asset Evaluation and Plan for Future Reuse	Preliminary Design	9/30/2037	On Schedule
54677	Omaha CSO Program Green Infrastructure Improvements Project Study	Preliminary Design	9/30/2037	On Schedule

F. CSO Program Costs

The City uses various tools to track the costs of the LTCP projects because controlling costs ensures the program is as affordable as possible for the ratepayers while maintaining the LTCP compliance schedule. The estimated cost of the program has been escalated using the Capital Improvements Plan (CIP) tool developed by the CSO Program. The cost of the Program was not escalated to a single future year but rather each project was escalated to the year(s) they are expected to be delivered in. The City and PMT conducted an effort to re-baseline (in June of 2023) present and future program costs due to the significant influence of COVID 19 and supply chain issues that resulted in increased construction related expenditures.

The current estimated cost of the Program with contingencies is $2.125 billion through 2037. As noted previously, a new rate ordinance was approved in December of 2022 for years 2024 through 2028.

Through September of 2024, the City has paid $976 million to implement the LTCP and has encumbered another $42 million for a total of $1.02 billion. In the reporting year, the City initiated contracts for design of 7 additional projects.

Adjustments in schedules and costs of the individual projects within the Program are included as part of the APPRs in Attachment C.

V. CSO Outfall 102 and CSO Outfall 205R Monitoring Data

A summary of monitoring data from Outfall CSO 102 and the Saddle Creek HRTB discharge (Outfall CSO 205R).

A. Missouri River Water Resource Recovery Facility – Outfall 102

The CSO 102 disinfection/de-chlorination system was put into operation starting with the recreation season in 2020. The Interim Requirements for CSO Outfall 102, as defined in Table 3, Part II of the current Permit, were in effect for this permit year. The current permit states that requirements are in effect until January 1, 2023, after which effluent limits for *E. coli* and total residual chlorine limits will be in effect. On January 10, 2022, the City requested the date be changed to 2025. The conditions for approved bypass of combined sewer complied with these requirements. The request was approved through the current permit which applied the effective date of permit limits as January 1, 2025.

There were 20 total overflow events at CSO 102 from October 1, 2023, through September 30, 2024, with 9 of them occurring during the recreation season of May 1 to September 30. An event at CSO 102 is considered the total time between the start and stop of flows on consecutive days. Therefore, event parameters are reported as averages or totals over the days that the event took place. Results from these events are reported on quarterly discharge monitoring reports (DMRs) submitted to NDEE. Table 5-1 summarizes the data for CSO 102. *E. coli* values slightly decreased from the previous reporting year. The amount of flow treated through CSO 102 and duration have also decreased. The lower flows and duration of overflows is a function of drought conditions and smaller storms which resulted in an increase in full capture, non-discharge events.

The values reported in Table 5-1 are defined as follows:

- Flow rate: average flow rate of each event at the CSO 102 outfall in the reporting year
- Total flow: total volume of all events in the reporting year
- Duration of discharge: total of all events in the reporting year
- Total suspended solids (TSS) and biochemical oxygen demand: average concentration of each event in the reporting year
- Total Residual Chlorine (TRC): Allowable values calculated for each event based on Missouri River flow, MRWRRF effluent flow, and MRWRRF effluent TRC
- *E. coli*: geometric mean of all the events in the reporting year where *E. coli* monitoring is required
- pH: maximum and minimum values of all of the events in the reporting year

Table 5-1. CSO 102 Monitoring[a]

Parameter	Value		Units
Flow Rate	2.52		MGD
Total Flow	50.39		MG
Duration of Discharge	62.1		hours
TSS	151		mg/L
Biochemical Oxygen Demand	124		mg/L
TRC	0.007		mg/L
E. coli	15		Colonies/100 mL
pH	Min = 6.80	Max = 7.93	Standard Units

[a] Effluent limits do not apply to CSO 102 at this time.

Notes:

max = maximum
MG = million gallons
mg/L = milligram(s) per liter
min = minimum
mL = milliliter(s)

B. 64th and Dupont Retention Treatment Basin – Outfall 205R

The Saddle Creek High Rate Treatment Basin (SCHRTB) was operationally complete on December 20, 2023. Overall, the SCHRTB discharged treated effluent 23 times since operational completion with 17 discharge events occurring during disinfection season (May 1 - September 30). The facility treated 245.9 Million gallons with 125.9 Million gallons discharged and 120.0 Million gallons fully captured. Total discharge duration was 50.7 hours. The geometric mean of *E coli* was 26 colonies per 100 mL.

The SCHRTB first treated overflow event occurred on December 24, 2023. On that date, 4.67 Million gallons were treated, with 0.3 Million gallons discharged from the SCHRTB. The residual volume was retained (captured) and dewatered back to the Papillion Creek Interceptor for full treatment at the Papillion Creek Water Resource Recovery Facility.

There were no events in January, 2024 and no events in February, 2024. There were three (3) wet weather events in March, 2024, and five (5) wet weather events (4 full capture) in April, 2024.

May, 2024 included 9 wet weather events and the beginning of disinfection/de-chlorination of flows through the SCHRTB. Significant events included:

- The May 1, 2024 event did include some start up issues with sodium bisulfite feed for de-chlorination. The system operated properly but piping was full of water from non-disinfection season testing and the event on that day only allowed time for a single grab sample for total

residual chlorine analysis. This resulted in ineffective residual chlorine removal at the onset of the event. The issues were resolved and the seasonal chemical system O&M procedures were modified to eliminate this issue for the 2025 system startup.

- The May 21, 2024 event included flooding in the Papillion Creek system and an M.U.D. water main break which suspended the ability of the SCHRTB to treat flows for two hours. The non-potable water system is utilized as carrier water for the disinfection and de-chlorination chemicals. Once the break was isolated by M.U.D., the facility was once again able to disinfect flows through the basin. This event included treatment of 19.1 Million gallons and discharge from CSO 205R of 14.1 Million gallons over a 6.8 total hour event duration.

June, 2024 included six (6) wet weather days which resulted in four (4) treated discharge events and two complete capture events. July, 2024 had three (3) wet weather events including the largest event on July 2, 2024. The July 2, 2024 event included treatment of 32.9 Million gallons and treated discharge from CSO 205R of 27.5 Million gallons over a 6.8 total hour event duration. August, 2024 had nine (9) wet weather days which resulted in two (2) CSO 205R discharge events. September 2024 had two (2) wet weather days and no CSO 205R discharge events.

Table 5-2. CSO 205R Monitoring[a]

Parameter	Value		Units
Flow Rate	5.47		MGD
Total Flow	125.90		MG
Duration of Discharge	50.7		hours
TSS	205		mg/L
Biochemical Oxygen Demand	20		mg/L
TRC	0.098		mg/L
E. coli	26		Colonies/100 mL
pH	Min = 6.80	Max = 8.37	Standard Units

[a] Effluent limits do not apply to CSO 205R at this time.

Notes:

max = maximum
MG = million gallons
mg/L = milligram(s) per liter
min = minimum
mL = milliliter(s)

VI. Performance Report

Report the number of times each CSO outfall has an overflow and an evaluation as to whether the controls are achieving their design intent.

Provide documentation in the Annual Report that demonstrates that each CSO overflow occurrence was the result of a wet weather event.

Once in the term of the permit, provide the percent by volume of the combined sewage collected in the CSS during precipitation events on a system-wide annual average basis that is eliminated or captured for treatment.

A. CSO Occurrence Inspection

The City monitored all 24 permitted CSO points in the system in the reporting year. Sewer Maintenance Division performs CSO occurrence inspection at 20 CSO points and maintains records for 23 of the points. The 24th point, which is CSO 102, is monitored separately by the MRWRRF staff, as these flows receive primary treatment and disinfection. PCWRRF staff are responsible for recording the number of occurrences for overflows at CSO 201 and provide the information to Sewer Maintenance Division for filing. CSO 109 and CSO 205 are monitored by level sensors and under a quality assurance protocol and are also reported to Sewer Maintenance for filing.

For the 20 CSO points for which inspections are conducted, the City's standard procedure continued this year to visually inspect the designated CSO structures and tracking devices after rain or snow-melt events and record the inspection in the bypass tracking database. City personnel are dispatched within 24 hours of wet weather occurrences, including weekends and holidays, to meet current permit requirements. The inspections are performed and documented by the Sewer Maintenance Division. Routine maintenance checks at the lift stations and control gates also allow for a check of potential dry-weather CSO occurrences. Attachment D shows the counts of wet weather overflows for 23 CSO points. A more detailed tabular report on the wet weather confirmed CSOs can be found in the CSO Inspection Report in Attachment E. For information on CSO 102, which receives primary treatment and disinfection, refer to Section V.

- CSO 201 had three (3) overflows during the reporting period.
- No overflows occurred at CSO 208 while 3 occurred at CSO 103 during the reporting year. Sewer separation is complete for these basins, and they are in a post-construction monitoring phase. The overflows at 103 are attributed to a 10-year rain event that occurred in the basin on June 26th, 2024, a complete power failure on March 22, 2024 during wet weather, and mechanical pump failure on August 30th, 2024 during wet weather. It is anticipated that future upgrades to the Bridge Street Lift Station (outside of the CSO Program) will facilitate the closure of CSO 103.
- CSO 119 has five diversion structures to monitor for overflow: MHs 0551001, 0551020, 0551021, 0571049, and 0551030. The City is continuing to check these manholes to verify

overflows at CSO 119. The City will be installing a new flow meter in a new manhole that was constructed within the last year on the North Barrel just upstream of the North Barrel diversion structure as part of the Monroe Street Lift Station upgrade project.

- The Saddle Creek HRTB was brought into operation during this reporting year for CSO 205 (with a designated treatment facility effluent discharge of CSO 205R). A decrease in the number of overflows is being observed due to more wet weather flows being captured for treatment.
- Sewer separation is completed in the CSO 203 basin, and post construction monitoring has been implemented. Overflow records indicate the possibility of storm water backflowing into the separated sanitary system. The City is working on solutions to remedy the issue and gather better data to reflect the true configuration of the system.
- Dry-weather overflows are reported in Nine Minimum Controls (Section II) of this Annual Report.

The City continued its program with cameras and level sensors to monitor the occurrence of CSO overflows at 11 locations (Table B-4). The purpose of the technology is to assist the City in verifying overflow events, verifying maintenance needs, providing alerts to staff of flow depths and potential overflow events, and evaluating staffing efficiencies.

City staff continue to physically check the CSO tracking devices at these locations along with using the level sensors and cameras from the surveillance effort. Throughout the year, comparisons were made in the findings between the City's device check program and the technology.

B. Evaluation of Completed Controls

The CSO Permit requires annual reporting as to whether the controls are achieving their design intent. The City monitors the effectiveness of completed CSO controls as identified in the LTCP.

CSO 208 - No overflows were observed during the reporting period with rainfall frequency events reaching up to 25-year events in the basin. SSES work is planned for 2025 to collect data and analyze capacity for additional separation work or potential CSO closure.

CSO 112 - The diversion structure for Martha St CSO 112 was moved upstream as part of the Blake St. Lift Station project. Monitoring by block has moved to the manhole 207667. Since May 22nd, 2024 no overflows have been observed and post construction monitoring has been implemented.

CSO 203 - Separation was substantially completed on May 4, 2023. Per the 2027 Post Construction Monitoring Plan, flow meters were installed after sewer separation was complete. The flow meters were installed on August 30, 2023. Initial monitoring suggests stormwater is back flowing into the sanitary system during larger volume or more intense rain events, the City is working on a solution to the issue that will provide more conclusive data for capacity analysis.

CSO 205 – Saddle Creek HRTB was brought online during this reporting period. The number of overflows occurrences has decreased. The facility treated 245.9 Million gallons with 125.9 Million

gallons discharged and 120.0 Million gallons fully captured. Total discharge duration was 50.7 hours. The geometric mean of *E coli* was 26 colonies per 100 mL for disinfection season. Disinfection/de-chlorination start up issues did occur on the initial wet weather event in disinfection season. The resultant total residual chlorine grab sample exceeded proposed permit limits. This issue was corrected through modifications to start up procedures and all other events were within proposed requirements. The first season operating the facility has allowed operations staff members to adjust instrumentation, control points, sampling methodologies, and flow monitoring which have enhanced the overall effectiveness of the facility.

C. Wet Weather CSO Occurrences

The CSO Permit requires Annual Report documentation that each CSO overflow occurrence was the result of a wet weather event. If there is a CSO discharge that occurred during dry weather, it will be reported in Section II.E, Prohibition of CSOs during Dry Weather.

Attachment E is a compiled record of all Sewer Maintenance Division monitored CSO occurrences that were the result of wet weather events during the reporting period (CSO 102, CSO 201, and CSO 205R are monitored by WRRF Operations). The report identifies the CSO outfall inspected, the inspection date and time, the person who completed the inspection, the reason for the overflow, whether an overflow occurred, and whether it was still occurring during the inspection. Comments and the rainfall amount and date of precipitation are noted. The standard procedure states the following:

> *The City reviews available rain data during the year and compares data to inspection results of the inspections, including checking against Eppley Airport rain data as a starting reference point. On dates when only trace amounts are recorded by Eppley Airport, the available rain gauges in the CSS area are compared and corrections are made to the tracking database to more accurately represent rainfall totals.*

The rainfall during the report year at the Eppley Airport rain gauge was 29.23 inches. When compared with the long-term average annual rainfall of 30.5 inches at Eppley Airport, this is 1.27” short of an average year. Rainfall in the first half of 2024 continued the drought trend from 2023. However, an extreme rain event on May 21st plus a significant rain event on May 15th resulted in May ending with almost 7” above normal. The CSO locations in the Papillion Creek Watershed reflect a wet weather CSO frequency as high as 40 overflows, while the CSO locations along the Missouri River show a high frequency of 44 overflows. In the report period there were 47 rain events recorded at 0.1 inches or greater. The comparison of data meets the quality assurance standards set by the City in this program.

D. Percent by Volume Captured

The CSO Permit requires that once during each permit term, the City should provide the percent by volume of the combined sewage collected in the CSS during precipitation events on a system-wide annual average basis that has been eliminated or captured for treatment.

This requirement was met and reported in the 2019 Annual Report. The analysis used the representative year rainfall (to evaluate average conditions) with an InfoWorks model simulation of the sewer system

as of the end of 2019. This requirement will be met in a future annual report as required by the new permit.

VII. In-Stream Monitoring Data

A summary of in-stream monitoring data consistent with the objectives of the Post Construction Monitoring Plan dated March 2021 and subsequent modification including monitoring station identification, stream identification, the list of parameters along with the monitoring results.

The City's instream monitoring for this reporting year was performed by the City's Sewer Maintenance Division.

The City collected samples from instream monitoring sites CC-1, CC-2, LPC-3, BPC-3, PC-1, LPC-1, and BPC-4, which were analyzed through Midwest Laboratories, Inc. in accordance with the Post Construction Monitoring Plan (PCMP). Figure 7-1 is a map showing the locations of the City in-stream monitoring sites and Table 7-1 contains descriptions of each monitoring site the City administers.

Figure 7-1. City In-Stream Monitoring Sites

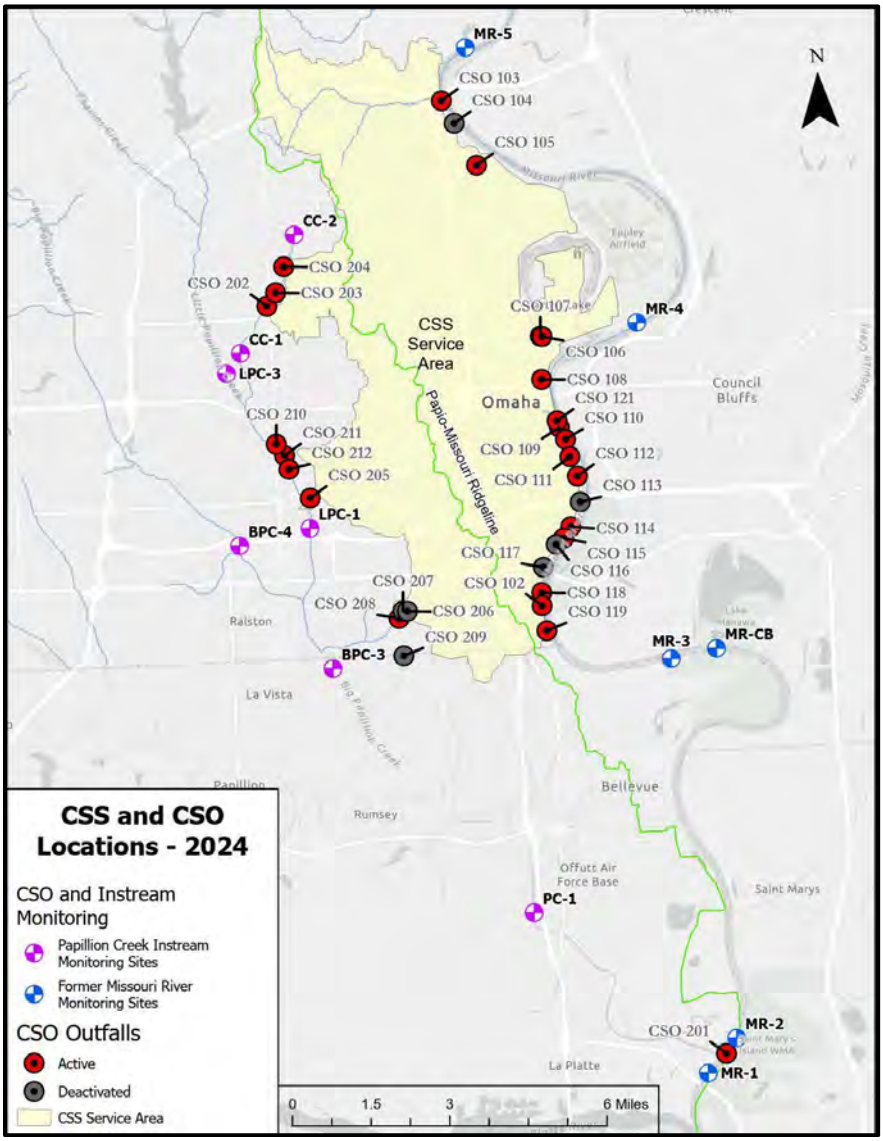


Table 7-1 City In-Stream Monitoring and Site Descriptions

Monitoring Station Identification	Stream	Location Description
PC-1	Papillion Creek	Downstream of the confluence with Big Papillion Creek
BPC-4	Big Papillion Creek	Upstream of the confluence with Little Papillion Creek
BPC-3	Big Papillion Creek	Downstream of the confluence with Little Papillion Creek
LPC-3	Little Papillion Creek	Upstream of the confluence with Cole Creek
LPC-1	Little Papillion Creek	Downstream of CSO discharges and upstream of confluence with Big Papillion Creek
CC-2	Cole Creek	Upstream of CSO discharge points
CC-1	Cole Creek	Downstream of CSO discharge points

The frequency of sampling is as follows:

… *The in-stream monitoring will be performed during the spring (March 1 to May 31), summer (June 1 to August 31) and fall (September 1 to November 30) seasons. The frequency of monitoring will be twice per season, one of which will be during wet weather.*

Attachment F summarizes the results for the wet weather and dry-weather sampling for the fall season of 2023 and the first two seasons (Spring and Summer) of the 2024 reporting year. The Fall season of 2023 is included in this year's report because this data was primarily collected during the 2024 reporting year. The City's 2024 Fall (September 1 to November 30) sampling results are not included in this year's report because these samples were collected after the end of the reporting year. The 2024 Fall sampling results will be included in next year's report. In general, water quality parameters worsen during wet weather compared to the dry-weather samples. For example, values for dissolved oxygen, total coliform, *E. coli*, biochemical oxygen demand (BOD), and total suspended solids (TSS) are all worsen during wet weather. However, the source of the increased levels could be the result of stormwater runoff and not solely CSOs. A year-over-year review would provide a better understanding of the impacts on the streams.

VIII. Infiltration and Inflow Reduction Program

The City must provide a summary of the yearly progress to meet the goals of the I/I Reduction Program. This shall be a summary of the five steps of the program along with a summary of green infrastructure progress.

A. Infiltration and Inflow (I/I) Reduction Program

The 2021 LTCP Update proposed that the City would develop a program targeted at I/I reduction. This program is intended to provide a framework for reducing I/I if such wet weather influence prevents the closure and deactivation of a CSO. City staff have also been assessing wet weather influence within the sanitary sewer system, and the I/I Reduction Program goal is to prioritize the entire combined and sanitary sewer system respective to level of service risks.

The 5 steps as outlined in LTCP are:

*1. **Analysis of existing information:** The first step of the evaluation will be to look at the information that is currently available in the basin; this could include a review of previously collected field data, existing flow data, system complaints, and other information available.*

*2. **Identification and quantification of inflow sources.** This involves the evaluation of the sewer system in a CSO basin using various methods, including but not limited to, hydraulic modeling, flow monitoring within the basin, performing condition assessments of the sewer system, field investigations such as smoke or dye testing, and closed-circuit television. Where inflow sources are not identified within the CSO project area, the evaluation will consider upstream areas within the CSO basin.*

*3. **Development of a prioritized list of inflow sources.** Based on data gathered on the sources of inflow for each basin, the City will develop a prioritized list of inflow sources, based on the significance of the inflow and the cost and impact of addressing the source of inflow.*

*4**. Implementation of remedy**. The City will develop an approach for remediating the inflow sources and a plan for implementation. The plan will be implemented based on the availability of City resources and subject to revision.*

*5. **Confirmation of remediation**. Upon completion of the implementation of the remedy, the system will be monitored to determine the amount of inflow reduced and if additional remediation is needed.*

The current strategy involves a prioritization of Sewersheds, referred to as Sewer Management Areas (SMA), based on existing condition information and wet weather issues. There are over 450 Sewer Management Areas that have been ranked by excessive Inflow and Infiltration through several years of flow monitoring and through tracking of wet-weather related backups and overflows.

For the reporting year these are the Inflow and Infiltration reduction activities that have taken place:

- Ongoing flow monitoring program, including rainfall analysis and wet weather peak analysis.

- Ongoing “simple manhole inspections” through mobile data applications city-wide; collects cover type, surcharging, and if I/I defects are present.
- Ongoing pipeline assessment program.
- Ongoing wet-weather issues tracking in GIS (SSOs, CSOs, Basement Backups, Manhole covers off, street and other flooding).
- SMA Basin Studies:
    - BP-4.6 Steps 1 and 2 completed. Sewer separation post-construction evaluation on system upstream of CSO 208. Due to no occurrences of wet-weather CSOs and no other impacts in the basin, this system study was placed as a lower-priority.
    - MR-1 Bridge Street Basin, CSO 103, Steps 1 and 2 completed in past years. No further I/I study work in Bridge Street Basin. Monitoring only for wet-weather CSOs.
    - BP-28.1 Steps 1, 2, 3 completed at the system though Knolls Golf Course. Step 4 underway.
    - BP-9.2 &3 Step 1 started for Mockingbird Aerial Sanitary System.
    - LP 22-23 Steps 1-4 completed, including CIPP lining and manhole rehabilitation.

The City is also actively replacing vented or perforated manhole covers on the wastewater collection system in capital improvement projects and installing frame seals for new sanitary manhole construction.

B. Green Infrastructure Progress

The City continues to evaluate the stormwater infiltration project installed at 20th and Pierce and the subsequent project that installed a Real Time Control (RTC) gate upstream of it. This RTC gate retains a volume of water during CSO events and releases it when the system is no longer overflowing to the river. The control strategy and costs for the 20th and Pierce RTC project have been used to guide OPW 54677 Omaha CSO Program Green Infrastructure Improvements Project Study; this study is evaluating stormwater storage options and an upstream RTC gate tied to the stormwater infiltration project at 35th and Vinton. In addition, the City continues to monitor and maintain its previously constructed green infrastructure projects.

IX. Other Information

Other information that may be included in the Annual Report to include "measures of success" such as reduction in the number of overflow events, reduction in the number of CSO outfalls, or other indicators or improvements of receiving water quality.

The summary in Section 5.5 of the 2021 LTCP Update indicates that the 85% capture/treatment of combined sewage will be met. The City updated its models for CSO capture treatment. The City is able to make the model be highly concentrated on an area, or it can be city-wide. The Update included a comparison of the volume of combined sewage discharged from the CSO system. Modelers were able to compare it to the projected 2037 volume that is anticipated to be discharged. For the Missouri River watershed, the 2002 estimate of the volume of combined wastewater discharged was 2877.8 million gallons (MG). The 2037 estimate after completion of the LTCP is 654.2 MG, with reduced frequency at all outfalls. For the Papillion Creek watershed, the 2002 estimate of the volume of combined wastewater discharged was 777.4 MG. The 2037 estimate after completion of the LTCP is 204.0-214.6 MG, with reduced frequency at all outfalls. Many CSOs will be closed, eliminating their associated discharge.

A. Reduction in the Number of Overflow Events

As LTCP projects are implemented, the number of overflow events will be reduced. The rate of reduction in the number of overflow events will vary based on the following factors:

- The type of control being established for a given CSO point through the implementation of the LTCP.
- The time when the control of a CSO point will be fully implemented as a part of the LTCP.

The unpredictability and varied nature of wet weather events impacts the magnitude, volume, and duration of the overflows at a given CSO point. CSOs 112, 203, 208, and 211 have shown a clear reduction in overflow events because of the completed sewer separation projects. CSO 208 recorded zero overflows this reporting period. The rain for this reporting period is above normal trending toward normal annual rainfall, with 3 high intensity storms with two storms equivalent to 25-year NOAA Atlas 14 events and one 200-year event. One of the overflows at 103 is attributed to a 1"/15 mins rain event (10-year frequency) that occurred in the basin on June 26th, 2024 while the other two were due to power failure during a storm event and a mechanical pump failure during a rain event that were both repaired within 24 hours. It is anticipated that future upgrades to the Bridge Street Lift Station (outside of the CSO Program) will facilitate the closure of CSO 103. The CSOs and basins will continue to be monitored. Monitoring the overflow occurrences as discussed in Section VI, Performance Report, will help the City evaluate the progress of, and understand the success of, the LTCP projects as they are being implemented. As

more projects come online, a system will be developed in cooperation with NDEE to report the compliance monitoring associated with the CSO Program.

B. Reduction in the Number of CSO Outfalls

Prior to the LTCP, the City worked to eliminate CSOs 116 and 206. During LTCP implementation, the City has worked to further eliminate the occurrence of CSOs at several permitted outfalls. As of 2024, five additional CSOs have been eliminated: CSO 104, CSO 113, CSO 117, CSO 207, and CSO 209. The City still maintains 24 active permitted CSO points. Sewer separation projects in the basins of CSOs 202, 203, 210, 211, and 212 are currently underway, with the goal of deactivating the outfalls after a period of post-construction monitoring.

C. Condition Assessment of Large Diameter Sewers

In 2022 Multi-sensor inspection of large diameter sewers within the City's combined sewer system was initiated. Work consists of multi-sensor (laser, sonar & CCTV) inspection of larger diameter sewers greater than 36-inch in diameter. The inspections were largely in the combined sewer system identified as high risk due to material, depth, location and age. The pipe materials in these combined sewer areas mostly consist of brick and reinforced concrete pipe.

Approximately 350,000 linear feet of larger diameter sewers were scoped and nearly 340,000 have been completed to date. Work started in the summer of 2022 and was substantially complete in the fall of 2024, however, there are some lines that are still pending processing and are expected to be completed soon. Once the work is complete, a field summary report will summarize the field findings that will help develop sewer rehabilitation and operational and maintenance needs.

D. Material Management

To provide CSO-project contractors with the necessary guidance and protocols to manage and dispose of soil and groundwater generated during the implementation of the LTCP, the City collaborated in the 2012 to 2013 timeframe with NDEE to develop an NDEE-approved Program related Materials Management Plan for Soil and Groundwater referenced in the Project Manual of the Construction Documents. This document was revised and approved by NDEE on November 25, 2021.

During this reporting period, 217.74 tons (167.91 tons of treated wood and 49.83 tons of soil) of non-hazardous, contaminated waste material associated with OPW 53753 - Nicholas Phase 3B was transported to Pheasant Point landfill for disposal. The City monitors and tracks contaminated waste materials and soils and uses this report to update the NDEE Waste Management Division.

E. CSO Program Evaluation and Inspection (August 1, 2024 – September 19, 2024)

The City of Omaha received a documentation request from the Nebraska Department of Environment and Energy (NDEE) on August 1, 2024 and a significant number of records were electronically sent by August 14, 2024. After review of those records, an inspection and tour of CSO program projects and sites was scheduled. Randol Wehrbein and Jason Windhorst (NDEE) toured the City of Omaha CSO system sites on September 3, September 5, and September 6, 2024 along with program personnel. Copies of the inspection report are available. The City received a letter dated September 19, 2024 which indicated compliance with NPDES permit requirements along with an inspection report.

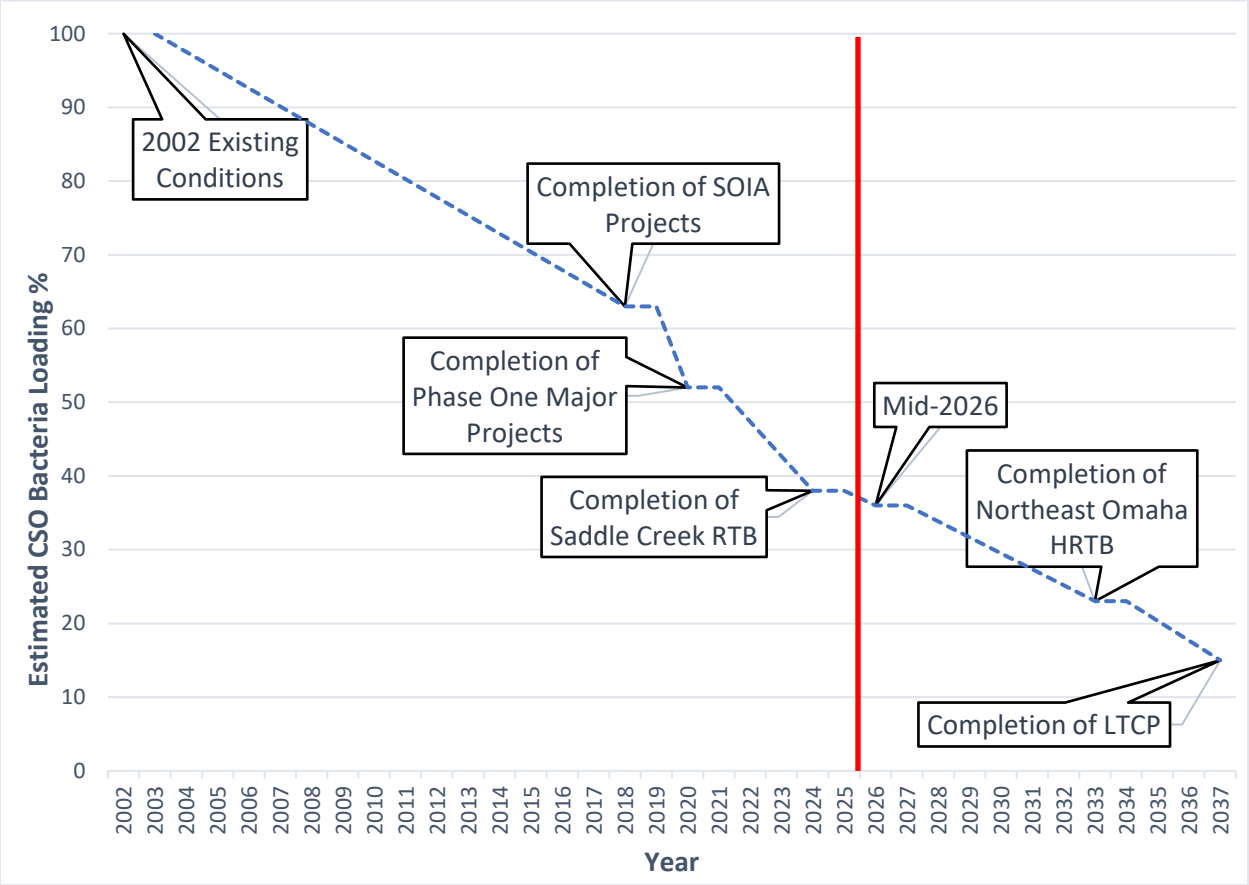
The evaluation summary identified in the inspection report included a note that LTCP Infiltration and Inflow is missing from the annual report. An Infiltration and Inflow section was included in the Other Information portion of the 2022-2023 annual report and will be a section of this year's annual report. The 2022-2023 annual report followed the requirements in the CSO permit which was in effect at the time of the annual reporting period. As such, there was not a requirement for that separately reported section. The 2023 – 2024 Annual report includes an Infiltration and Inflow section (VIII.A.) since it is a part of the permit effective January 1, 2024.

The evaluation summary also stated a deficiency of – There is no schedule for updating the CSO website and that the current annual report is not available on the CSO website. The CSO website is in transition to other City websites and will be a subset of the project websites maintained by the Public Works Department. CSO project information is updated on the website on an as needed basis by consultant and City project managers. No set schedule is applicable or required. As the transition to Public Works websites is completed, the City will consider posting the CSO Annual Report on the site.

F. Receiving Water Quality

Figure 9-1 shows the expected reduction in *E. coli* from CSOs resulting from the implementation of the LTCP, which was revised to reflect the 2021 LTCP Update. The *E. coli* load to the Missouri River was reduced significantly with the implementation of the South Omaha Industrial Area (SOIA) Lift Station, Force Main, and Gravity Sewer, as well as the MRWRRF improvements. The most recent major reduction occurred with the completion of the Saddle Creek HRTB project. This project became operationally complete with the Initiation of Operation on December 20, 2023.

Figure 9-1. Modeled E. coli Reduction over LTCP Implementation



Attachment A – City of Omaha Sewer System Operation and Maintenance Manual Cover Sheet (Current)

SEWER SYSTEM
OPERATION AND MAINTENANCE MANUAL

FOR

SEWER MAINTENANCE DIVISION CITY OF OMAHA, NEBRASKA

PREPARED BY
OLSSON ASSOCIATES

AND

BROWN AND CALDWELL

AUGUST 2006

Rev 1 12-22-2020
Rev 2 11-04-2022

OA PROJECT NO. 2006-0044

2120 South 72nd Street, Suite 1400 • Omaha, Nebraska • (402) 341-1116 • Fax (402) 341-5895

Attachment B – City Monitoring Sites

Table B-1. City and Consultant Rain Gauge

Facility ID	Meter Address	Location	Site Type	Sewer Area	Owner
OMA-RG01	6111 S. 99th Street	Johnny Goodman Golf Course, Hole 7	Active - Permanent	Sanitary	City of Omaha
OMA-RG02	3220 Ed Creighton Avenue	Hanscom Park Tennis Facility	Active - Permanent	Combined	City of Omaha
OMA-RG03	3190 N. 50th Avenue	Monroe Middle School	Active - Permanent	Combined	City of Omaha
OMA-RG04	6183 N. 49th Street	Wakonda Elementary School	Active - Permanent	Combined	City of Omaha
OMA-RG05	1313 N. 156th Street	Grace-Abbott Elementary School	Active - Permanent	Sanitary	City of Omaha
OMA-RG06	5304 S. 172nd Street	Russell Middle School	Active - Permanent	Sanitary	City of Omaha
OMA-RG07	7197 John J Pershing Dr	Minne Lusa Grit Station	Active - Permanent	Combined	City of Omaha
OMA-RG08	5425 S. 43rd Street	John Roth & Sons Inc.	Active - Permanent	Combined	City of Omaha
OMA-RG09	1983 Pierce Street	20th and Pierce Detention Basin	Active - Permanent	Combined	City of Omaha
OMA-RG10	19615 Old Lincoln Hwy	Elkhorn Decommissioned WWTP	Active - Permanent	Sanitary	City of Omaha
OMA-RG11	124 N. 20th Street	Central High School	Active - Permanent	Combined	City of Omaha
OMA-RG12	1110 S. 67th Street	UNO PKI Maintenance Building	Active - Permanent	Sanitary	City of Omaha
TREKKRG1	8505 Crown Point Ave	Student Transportation Building	Removed - Temporary	Sanitary	TREKK

Table B-2. Permanent Flow Monitoring Sites

Manhole	Location	Pipe Size (inches)	Longevity	Monitored Location and/or Monitoring Purpose	Owner
0556124	20th & Pierce Stormwater Detention Facility	72	Active - Permanent	20th & Pierce Stormwater Detention Facility	Omaha
0556152	20th & Pierce Stormwater Detention Facility	48	Active - Permanent	20th & Pierce Stormwater Detention Facility	Omaha
0556156	20th & Pierce Stormwater Detention Facility	72	Active - Permanent	20th & Pierce Stormwater Detention Facility	Omaha
0556160	20th & Pierce Stormwater Detention Facility	48	Active - Permanent	20th & Pierce Stormwater Detention Facility	Omaha
0556160	20th & Pierce Stormwater Detention Facility	72	Active - Permanent	20th & Pierce Stormwater Detention Facility	Omaha
0556165	20th & Pierce Stormwater Detention Facility	54	Active - Permanent	20th & Pierce Stormwater Detention Facility	Omaha
0720004	6303 Q Street	90	Active - Permanent	Big Papio Interceptor (east)	Omaha
0390004	10875 West Dodge Road	21	Active - Permanent	BP Interceptor	Omaha
0452002	12440 West Maple Road	36	Active - Permanent	BP Interceptor	Omaha
0737008	7319 N Plaza	72	Active - Permanent	BP Interceptor	Omaha
0786041	9503 Walnut Street	36	Active - Permanent	BP Interceptor	Omaha
0786049	9503 Walnut Street	54	Active - Permanent	BP Interceptor	Omaha
0839020	0839020 - 10800 Leavenworth St	54	Active - Permanent	BP Interceptor	Omaha
1038004	9111 N. 138th Street	18	Active - Permanent	BP Interceptor	Omaha
0420002	2222 Papillion Pw	24	Active - Permanent	BP Interceptor-E	Omaha
0426046	4714 N. 120th Street	24	Active - Permanent	BP Interceptor-E	Omaha
0225352	6900 Ames Avenue	30	Active - Permanent	CC Interceptor-E/CSS	Omaha
0240007	7610 Dodge Street	30	Active - Permanent	Cole Creek (east)	Omaha
0265114	7777 Cass Street	24	Active - Permanent	Cole Creek (west)	Omaha
0246042	7601 Corby Circle	24	Active - Permanent	Cole Creek Interceptor - East	Omaha
0246069	2808 N 75th Street	18	Active - Permanent	Cole Creek Interceptor - West	Omaha
0072370	Adams Park Dam	n/a	Active - Permanent	CSO Surveillance	Omaha

Manhole	Location	Pipe Size (inches)	Longevity	Monitored Location and/or Monitoring Purpose	Owner
0524658	CSO 114 - Grover Diversion (3700 Gibson Road)	48	Active - Permanent	CSO Surveillance	Omaha
4052005	4052005 - 110th & Olive	18	Active - Permanent	Hell Creek Interceptor	Omaha
4052060	10808 Olive Street	30	Active - Permanent	Hell Creek Interceptor	Omaha
0265099	8019 Cass Street	42	Active - Permanent	LP Interceptor	Omaha
0293022	1501 N. 85th Street	36	Active - Permanent	LP Interceptor	Omaha
0296023	2520 Keystone Drive	36	Active - Permanent	LP Interceptor	Omaha
0302016	8754 Browne Street	30	Active - Permanent	LP Interceptor	Omaha
0304022	6012 Wenninghoff Road	30	Active - Permanent	LP Interceptor	Omaha
0699028	0699028 - 6303 L St	66	Active - Permanent	LP Interceptor/CSS	Omaha
0726052	828 Rose Blumkin Drive	60	Active - Permanent	LP Interceptor/CSS	Omaha
1144001	656 N. 168th Street	27	Active - Permanent	North Branch West Papio	Omaha
4001001	15705 Harlan Lewis Rd (PCWWRF)	108	Active - Permanent	Papio Interceptor/CSS	Omaha
4016001	S 13th Street and Capehart Road	120	Active - Permanent	Papio Interceptor/CSS	Omaha
4027001	25th & Hwy 370	96	Active - Permanent	Papio Interceptor/CSS	Omaha
4062002	8970 S. 48th Street	90	Active - Permanent	Papio Interceptor/CSS	Omaha
4088131	17215 S. Creek Circle (Sarpy County)	24	Active - Permanent	Sarpy County	Omaha
4088252	17215 S. Creek Circle (Sarpy County)	30	Active - Permanent	Sarpy County	Omaha
4079029	12001 Cary Circle	30	Active - Permanent	SP Interceptor-N	Omaha
4088200	8001 S. 120th St	42	Active - Permanent	SP Interceptor-S	Omaha
0479011	12655 126th Ave & Kansas Ave	30	Active - Permanent	Standing Bear (tributary to Big Papio)	Omaha
0305016	6254 N. 89th Circle	24	Active - Permanent	Thomas Creek (tributary to Little Papio)	Omaha
0975053	2727 S. 156th Street	24	Active - Permanent	West Papio (east)	Omaha
1190015	17241 Seward Street	24	Active - Permanent	West Papio (east)	Omaha

Manhole	Location	Pipe Size (inches)	Longevity	Monitored Location and/or Monitoring Purpose	Owner
0993095	2637 S 158th Plz	36	Active - Permanent	WP Interceptor	Omaha
4051002	4051002 - 118th & Harry Andersen	60	Active - Permanent	WP Interceptor	Omaha
4052015	4052015 - 109th & Harry Andersen	72	Active - Permanent	WP Interceptor	Omaha
4052029	1107 E. 1st Street - Papillion	78	Active - Permanent	WP Interceptor	Omaha
4052051	11435 S. 36th Street	78	Active - Permanent	WP Interceptor	Omaha
0942004	4526 S. 140th Street	30	Active - Permanent	WP Interceptor-E	Omaha
1141001	16229 Harney Street	18	Active - Permanent	WP Interceptor-E	Omaha
0941005	4131 S. 143rd Circle	48	Active - Permanent	WP Interceptor-W	Omaha
1141017	323 S. 166th Street	30	Active - Permanent	WP Interceptor-W	Omaha
1188007	17007 Burt Street	36	Active - Permanent	WP Interceptor-W	Omaha
1311004	19111 West Center Rd	30	Active - Permanent	WP-10 and several nearby SMAs	Omaha
0978002	3992 S. 153rd Circle	30	Active - Permanent	Zorinsky Interceptor	Omaha
0517512	415 Leavenworth Street	120	Active - Permanent	MRWWRF	Omaha MRWWRF
0517514	Leavenworth Interceptor	54	Active - Permanent	MRWWRF	Omaha MRWWRF
0515351G	0515351G - SIFM	48	Active - Permanent	MRWWRF	Omaha MRWWRF
4026001	25th & Hwy 370	96	Relocated - Permanent	Papio Interceptor/CSS	Omaha

Table B-3. Temporary Monitoring Sites

Manhole	Location	Pipe Size (inches)	Longevity	Monitored Location and/or Monitoring Purpose	Owner
0223024	CSO 203 69th & Evans Sanitary	12	Active - Temporary	CC Interceptor-E/CSS	Omaha
0063067	9308 N. 28th Avenue	48	Active - Temporary	CSO	Omaha
0195023	CSO 210 - 6606 Blondo	10	Active - Temporary	CSO Surveillance	Omaha
0223026	CSO 203 69th & Evans Diversion/Storm	66	Active - Temporary	CSO Surveillance	Omaha
0510024	105 Dorcas Street	15	Active - Temporary	CSO Surveillance	Omaha
0510030	105 Dorcas Street	8	Active - Temporary	CSO Surveillance	Omaha
0003090	738 Abbott Drive	108	Active - Temporary	Nicholas PS SSES	Omaha
0012026	1473 Fowler Ave	8	Active - Temporary	PM optimization	Omaha
0130008	6407 N. 44th Street	8	Active - Temporary	PM optimization	Omaha
0205034	6217 Curtis Ave	8	Active - Temporary	PM optimization	Omaha
0265095	8031 Chicago Street	8	Active - Temporary	PM optimization	Omaha
0425019	4312 N. 108th Street	10	Active - Temporary	PM optimization	Omaha
0550025	15th & W Street	12	Active - Temporary	PM optimization	Omaha
0661026	4869 S. 50th Avenue	8	Active - Temporary	PM optimization	Omaha
0698003	4612 S. 63rd Street	8	Active - Temporary	PM optimization	Omaha
0854013	108th & V Street	8	Active - Temporary	PM optimization	Omaha
0862042	11935 Cryer Avenue	10	Active - Temporary	PM optimization	Omaha
1223004	17971 Oak PA BD1	12	Active - Temporary	Ridges LS SSES	Omaha
1266007	3203 S 184th Ave	30	Active - Temporary	Ridges LS SSES	Omaha
1355003	3115 S 192nd St	30	Active - Temporary	Ridges LS SSES	Omaha
1355008	19707 West Center Rd	30	Active - Temporary	Ridges LS SSES	Omaha
0755014	7800 I St	8	Removed - Temporary	76th & I LS SSES	Omaha

Manhole	Location	Pipe Size (inches)	Longevity	Monitored Location and/or Monitoring Purpose	Owner
3005006	2339 N. 5th Street	24	Removed - Temporary	Bulk Meter SSES	Omaha
1406003	19887 Farnam Street	10	Removed - Temporary	OPW 53696 SSES	Omaha
0003176	787 N. 10th St.	108	Active - Temporary	NDRTB SSES	TREKK
0005087	901 Grace Street	90	Active - Temporary	NDRTB SSES	TREKK
3004003	1506 Abbott Drive	96	Active - Temporary	NDRTB SSES	TREKK
0304021	5850 Wenninghoff Rd	30	Removed - Temporary	Thomas Creek	TREKK

Table B-4. CSO Surveillance Locations

Manhole	Location	Pipe Size (inches)	Longevity	Monitored Location and/or Monitoring Purpose	Owner
0002100	CSO 108 - Mike Fahey Diversion Structure - 455 N. 10th St	144	Removed - Temporary	CSO Surveillance	TREKK
0037034	CSO 105 - 7198 John J Pershing Dr	175	Removed - Temporary	CSO Surveillance	TREKK
0247075	CSO 202 - 72nd & Bedford	54	Removed - Temporary	CSO Surveillance	TREKK
0516013	CSO 121 - 655 Jones St	100	Removed - Temporary	CSO Surveillance	TREKK
0517510	CSO 109 - 606 Leavenworth St	120	Removed - Temporary	CSO Surveillance	TREKK
0551020	CSO 119 - Monroe South Barrel (17th & Monroe)	24	Removed - Temporary	CSO Surveillance	TREKK
0551021	CSO 119 - Monroe South Barrel (17th & Monroe)	8	Active - Temporary	CSO Surveillance	TREKK
3001001	CSO 108 - 625 Riverfront Dr	120	Removed - Temporary	CSO Surveillance	TREKK
3004003	CSO 106 - 1506 Abbott Dr	84	Active - Temporary	CSO Surveillance	TREKK
3004039	CSO 107 - Grace Street	87	Removed - Temporary	CSO Surveillance	TREKK
0692568F	CSO 205 - Saddle Creek RTB	120	Active - Temporary	CSO Surveillance	TREKK

Table B-5. Bulk Flow Monitoring Sites

Bulk Flow Monitoring Site	LAT	LONG	Purpose of Flow Monitoring
Bellevue 2	41.1374	-95.9316	Measure Effluent from Bellevue Area
Bellevue 25th St	41.1468	-95.9474	Measure Effluent from Bellevue Area
Bellevue Brown River*	41.1213	-95.8984	Measure Effluent from Bellevue Area
Bellevue Gilmore	41.191	-95.948	Measure Effluent from Bellevue Area
Bellevue Hwy 370 & 25th St	41.1382	-95.9459	Measure Effluent from Bellevue Area
Bellevue New South*	41.1255	-95.9005	Measure Effluent from Bellevue Area
Boystown Flume	41.2492	-96.124	Measure Effluent from Boystown Area
Carter Lake	41.2808	-95.918	Measure Effluent from Carter Lake Area
Gretna 1	41.17	-96.2164	Measure Effluent from Gretna Area
Gretna 2	41.1719	-96.212	Measure Effluent from Gretna Area
Gretna 3*	41.1413	-96.2055	Measure Effluent from Gretna Area
Offutt AFB	41.1115	-95.9243	Measure Effluent from Offutt AFB Area
Ralston 72nd & Main	41.1992	-96.0232	Measure Effluent from Ralston Area
Ralston 84th & Park Dr.	41.1985	-96.0438	Measure Effluent from Omaha Area
Ralston Siphon	41.2112	-96.0302	Measure Effluent from Ralston Area
South Sarpy WW Agency*	41.0839	-95.8902	Measure Effluent from Sarpy County - Platte Area
Tiburon	41.1649	-96.1877	Measure Effluent from Sarpy County - Tiburon SID Area

* = New Bulk Monitoring Site added during this reporting period

Attachment C – LTCP Annual Project Progress Reports (APPRs)

Saddle Creek Retention Treatment Basin OPW 52049

Project Description as stated in the 2021 LTCP:

The Saddle Creek RTB is the final project in the Saddle Creek Basin. The current project is a 160-MGD RTB with modifications so that it can disinfect flows up to 320 MGD. This involved designing the headworks and disinfection system to handle 320 MGD, with a 3.3-MG basin. In this hybrid concept, the maximum treatment rate that is assumed to provide treatment equivalent to primary treatment is 160 MGD. Flow rates greater than 160 MGD, up to 320 MGD, may be allowed to enter the facility for short periods of time for disinfection to benefit water quality. However, wet weather volume capture is calculated based on the 160-MGD treatment rate.

2021 LTCP Milestone: Complete Construction (Operational Complete) of this project by December 31, 2023.

Compliance Report

Table 1 shows the Project Delivery Schedule developed for the 2021 LTCP Update, as noted in the plan. It also shows the 2021 LTCP Milestone Date as the anticipated project compliance schedule date, which will be included in the permit.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date

Activity	Target Date or 2021 LTCP Milestone Date[a]	Actual
Began Preliminary Design	04/07/2011	04/07/2011
Began Final Design	08/03/2013	08/03/2013
Restarted Final Design	06/29/2017	06/29/2017
Bidding	08/05/2015	08/05/2015
Re-Bidding	010/10/2018	10/10/2018
Began Construction	04/30/2019	04/30/2019
Operationally Complete	**12/31/2023**	**12/20/2023**

[a] 2021 LTCP Milestone Date is in bold.

Based on the information presented, the project met the 2021 LTCP Milestone date.

Project Activities for the Current Period

The following is a brief synopsis of project activities and progress that have occurred prior to and during this reporting period:

- Project Substantial Completion achieved September 5, 2023.
- SCRTB Facility Operational Completion achieved December 20, 2023.

- SCRTB Facility has been receiving dry weather flows and smaller wet weather flows through its Diversion Flow Sewer and has been receiving larger wet weather flows through the retention treatment basin since Operational Completion was achieved. SCRTB Facility has been providing disinfection of wet weather flows through the RTB Facility since the beginning of Recreational Season starting May 1, 2024.
- Punchlist items have been addressed on an ongoing basis.
- Change requests have been issued for miscellaneous minor work additions at the City of Omaha's request to enhance operability and safety.

The Saddle Creek RTB achieved contractual substantial completion on September 5, 2023, and is anticipated to achieve final completion by January 31, 2025 due to additional work elements to refine the operation of the facility and allow for completion of final site restoration. The facility achieved Initiation of Operation on December 20, 2023 and is operationally complete as of that date in compliance with the LTCP milestone.

Anticipated Project Activity for Next Period

The following is a brief synopsis of project activities anticipated for the next Annual Report period (2024–2025):

Work over the next several months includes:

Completion of miscellaneous punchlist items including completion of miscellaneous change request work to enhance operability and safety. Completion of all construction activities is anticipated to occur by January 31, 2025.

Costs

2021 LTCP Update Budgeted Construction Cost (February 2021[1]): $100,718,227 with contingency.

Current Estimated Construction Cost: $94,444,209 (current contract value through Change Order No. 6 as of October 22, 2023). Change Order No. 7 will be executed prior to Final Completion to incorporate miscellaneous additions and credits and is currently expected to have a net zero impact on project budget.

Changes from the LTCP

Based on the 2021 LTCP Update there are no changes.

Other Items of Interest

None.

[1] Escalated cost to the anticipated year(s) of construction at a rate of 3.1%/year starting in 2021.

ANNUAL PROJECT PROGRESS REPORT-
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Riverview Lift Station Replacement

OPW No. 52402

Project Description as stated in the 2021 LTCP:

The Riverview Lift Station Replacement (OPW 52402) project includes the construction of a 42-inch combined sewer (referred to as the Gibson Road Sewer), two new diversion structures (the Grover Street diversion and Riverview Park diversion), and the new Riverview Lift Station. The Gibson Road Sewer will convey the Martha Street, Spring Street, and Grover Street sub-basins' flows from the new Grover Street diversion structure to the new Riverview diversion structure. The new Riverview diversion structure then conveys those flows in addition to the Riverview Park sub-basin flow to the new Riverview Lift Station.

Both the new Grover and Riverview diversion structures contain stoplog weirs that facilitate adjustment of the diversion elevation. The Grover diversion is constructed on the existing Grover Street combined sewer. The Riverview diversion is constructed on the existing Riverview Park combined sewer. Flow exceeding the lift station capacity will be diverted to CSOs 114 and 115 during storm events; CSO 114 is connected to the Grover diversion and CSO 115 is connected to the Riverview diversion. The old Riverview Lift Station will be removed from service after the new lift station is completed.

The Riverview Lift Station Replacement project began construction on March 20, 2020 and is expected to be completed in 2024. The Riverview Lift Station project is a system reliability project and therefore has no milestone date other than to be completed by the end of the LTCP on September 30, 2037.

2021 LTCP Milestone:

Complete Construction of this project by September 30, 2037.

Compliance Report

The 2009 LTCP, 2014 and 2021 LTCP includes "System Reliability Projects". The implementation schedule for these projects is "as necessary and when funding is available." The Riverview Lift Station is one of these projects, thus there is no milestone date for this project other than to be completed by the end of the LTCP on September 30, 2037.

There are no current permit dates in the 2021 LTCPU, nor will there be dates for these projects in the future CSO permit. Table 1 shows the project delivery schedule (Target Dates) for this project.

Table 1. Project Delivery Schedule

Activity	Actual **or 2021 LTCP Milestone Date**[a]
Begin Construction	3/20/2020
Operational Completion	12/7/2023
LTCP Milestone	**9/30/2037**

[a] 2021 LTCP Milestone Date is in bold

Based on the information presented, the project met the 2021 LTCP Milestone dates.

Project Activities for the Current Period

The following is a brief synopsis of project activities and progress that have taken place prior to and during this reporting period.

All exterior and interior work associated with the project is finished. The pump station has been tested and placed into service with substantial completion being issued on 2/29/2024. The pump station has been operational since that time. The project will be issued final completion when the remaining closeout items and final change orders items are finalized.

Anticipated Project Activity for Next Period

The following is a brief synopsis of project activities for the next Annual Report period (2024-2025).

The only project activities anticipated for the next annual report are associated with closeout.

Costs

2021 LTCP Update Budgeted Construction Costs (March 2021)[1]: $27,500,000 with contingency. (Anticipated Construction Years: 2020-2024)

Current Estimated Construction Cost: $25,528,786 with contingency. (Anticipated Construction Years: 2020-2024)

Changes from the LTCP

Based on the 2021 LTCP there are no changes.

Other Items of Interest

There are no other items to report.

[1] Escalated Cost to the anticipated year(s) of construction at a rate of 3.1%/year starting in 2021.

ANNUAL PROJECT PROGRESS REPORT-
OCTOBER 1, 2023 THROUGH SEPTEMBER 30, 2024

Monroe Street Lift Station Improvements

OPW No. 53082

Project Description as stated in the 2021 LTCP:

The Monroe Street Lift Station (OPW 53082) project includes the replacement of pumping equipment, updates to the facility to meet current code requirements, modifications to improve grit removal, and improvements at the diversion structure. The lift station was previously designed to receive the industrial flows from SOIA. These industrial flows have since been rerouted, and the lift station currently operates at a maximum wet weather flow of 40 MGD. This project will upgrade the pumping capacity to 65 MGD to the MRWRRF. The Monroe Street Lift Station is a system reliability project.

Compliance Report

The 2009 LTCP, 2014 and 2021 LTCP includes "System Reliability Projects". The implementation schedule for these projects "as necessary and when funding is available." The Monroe Street Lift Station Improvements Project is one of these, thus there is no milestone date for this project other than to be complete by the end of the LTCP on September 30, 2037.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date

Activity	Actual Date **or 2021 LTCP Milestone Date**
Begin Construction	1/3/2022
Operational Completion	10/9/2024
2021 LTCP Milestone Date	**9/30/2037**

[a] 2021 LTCP Milestone Date is in bold

Based on the information presented, the project met the 2021 LTCP Milestone dates.

Project Activities for the Current Period

The project is now substantially completion. In 2024, the following activities were completed:

- Repaving and paving additions completed
- Gates and hydroelectric actuators installed at DS 119
- Septage receiving tracking system installed
- Installed a new access platform on the monitoring manhole on CSO 119

Anticipated Project Activity for Next Period

This project was operationally completed in the winter of 2024.

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Costs

2021 LTCP Update Budgeted Construction Costs (March 2021)[1]: $25,300,077 with contingency. Construction spanned 2022-2024.

Current Estimated Construction Cost: Current Contract $27,259,936.77.

These costs are based on the bid and change orders accrued over the course of the project.

Changes from the LTCP

Based on the 2021 LTCP there are no changes.

Other Items of Interest

The cost of the project should decrease slightly when unused allowances are removed from the contract.

[1] Escalated Cost to the anticipated year(s) of construction at a rate of 3.1%/year starting in 2021.

ANNUAL PROJECT PROGRESS REPORT-
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Blake Street Lift Station Project

OPW No. 53270

Project Description as stated in the 2021 LTCP:

The Blake Street Lift Station project (OPW 53270) replaces the Martha Street to Riverview Phase 2 project, which planned to use a gravity sewer to convey the flow from the Martha Street Phase 1 sewer to the Grover Street Sewer and eventually to the new Riverview Lift Station. A portion of this gravity sewer would have needed to be tunneled under multiple railroad tracks during construction. This approach was found to add significant cost and risk to the project. After further evaluation, it was determined that construction of the Blake Street Lift Station would be more cost-effective.

The Blake Street Lift Station project will convey flows from the Martha Street Phase 1 Sewer Separation project to the Blake Street Lift Station by gravity, where the flow will then be pumped to the Grover Street Sewer. This flow will then be conveyed by gravity to the new Riverview Lift Station. The Blake Street Lift Station will have a peak wet weather capacity of 1.15 MGD, which is based on the 10-year design storm. The proposed lift station will include two pumps with the option to add a third pump in the future should the City want to increase the capacity.

Compliance Report

The 2009 LTCP, 2014 and 2021 LTCP includes “System Reliability Projects”. The implementation schedule for these projects is “as necessary and when funding is available.” The Blake Street Lift Station project is one of these, thus there is no milestone date for this project other than to be complete by the end of the LTCP on September 30, 2037.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date

Activity	Actual Date **or 2021 LTCP Milestone Date**[a]
Begin Construction	10/10/2022
Operational Completion	12/7/2023
LTCP Milestone	**9/30/2037**

[a] 2021 LTCP Milestone Date is in bold

Based on the information presented, the project is on track to meet the 2021 LTCP Milestone dates.

Project Activities for the Current Period

The following is a brief synopsis of project activities and progress that have taken place prior to and during this reporting period.

The project began construction is complete. Substantial completion was issued on January 4, 2024, the pump station has been tested and placed into service and has been fully operational since that time. The project will be issued final completion along with the

Riverview Lift Station when the remaining close out and final change order items are finalized.

Anticipated Project Activity for Next Period

The following is a brief synopsis of project activities for the next Annual Report period (2024-2025).

The only project activities anticipated for the next annual report are associated with closeout.

Costs

2021 LTCP Update Budgeted Construction Costs (March 2021)[1]: $3,402,439 with contingency. (Anticipated Construction Years: 2022-2024)

Current Estimated Construction Cost: $4,137,404 with contingency. (Anticipated Construction Years: 2022-2024)

Changes from the LTCP

Based on the 2021 LTCP there are no changes.

Other Items of Interest

There are no other items to report.

[1] Escalated Cost to the anticipated year(s) of construction at a rate of 3.1%/year starting in 2021.

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CSO 212 – 64th Avenue and William Street

OPW 51685

Project Description as stated in the 2021 LTCP:

As described in the 2014 LTCP, the CSO 212 Sewer Separation Project includes construction of a storm sewer to provide sewer separation to the 41-acre area. The goal of the project is to provide adequate separation for the deactivation of the CSO 211 and 212 outfalls. This project started construction and is anticipated to be complete in 2025.

Compliance Report

Table 1 shows the 2021 LTCP Milestone Date as the anticipated project compliance schedule date, which is included in the permit.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date

Activity	Actual or *Anticipated* Date[a]
Begin Construction	04/01/2024
Substantial Completion	*07/14/2025*
2021 LTCP Milestone Date	**06/30/2025**
Requested Extension Date	*12/31/2025*

[a] Anticipated dates are italicized. 2021 Milestone Date is in bold.

Based the contractor's construction schedule, the project is projected to extend beyond the 2021 LTCP Milestone Date. A permit modification was sent to NDEE requesting a 6-month extension of the Construction Completion date.

Project Activities for the Current Period

- Pre-construction public meeting held 03/21/2024.
- Notice to Proceed issued April 1, 2024.
- Storm sewer crossing at 64th Ave. between William St. and Poppleton Ave. complete.
- Miscellaneous lining and point repairs complete on sanitary sewer lines.
- Contractor placed concrete pavement on Pierce Street from 63rd Street to 64th Ave.
- Contactor constructed driveway approaches and sidewalks construction on Pierce Street from 63rd Street to 64th Ave.
- Work is 43% complete by value as of the end of September 2024.

Anticipated Project Activity for Next Period

- Installation of temporary pavement and sidewalk in preparation for winter shutdown of the project.

- Fine grade and lay sod on Pierce Street from 63rd Street to 64th Ave.
- Continue work through December if weather is suitable prior to winter shutdown. Install winter SWPPP measures to prevent spring runoff issues.
- Continuation of work in Spring 2025 and completion in early Summer 2025.

Costs

2021 LTCP Update Budgeted Construction Costs (February 2021[1]): $6,930,000 with contingency (anticipated construction years: 2023–2024)

Current Estimated Construction Cost: $3,769,144 based on the contract price. This includes the cost of sanitary sewer rehabilitation in the project area.

Changes from the LTCP

A 6-month extension of the Construction Completion date will be requested.

Other Items of Interest

No additional items to report.

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Forest Lawn Creek Inflow Removal and Outfall Storm Sewer

OPW 52470

Project Description as stated in the 2021 LTCP:

This project is located in the northerly portion of the Minne Lusa Basin and provides separation to an area bounded on the north by State Street, on the east by Pershing Drive and Omaha Public Power District's Power Park, on the south by Ernst Street, and on the west by North 36th Street. The conceptual plan for this project includes construction of both sanitary and storm sewers to allow for conversion of the existing combined sewer to either storm or sanitary sewer, as appropriate. Existing creek flows are eliminated from the combined system.

This project will result in reduced flows in the downstream combined sewer system, which reduces the size of downstream controls at CSO 105.

Compliance Report

Table 1 shows the 2021 LTCP Milestone Date as the anticipated project compliance schedule date, which is included in the permit.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date

Activity	Actual or *Anticipated* Date[a]
Begin Construction	02/27/2023
Substantial Completion	*07/11/2025*
2021 LTCP Milestone Date (modified)	**12/31/2026**

[a] Anticipated dates are italicized. 2021 Milestone Date is in bold.

Based on the information presented, the project will be able to meet the modified 2021 LTCP Milestone date.

Project Activities for the Current Period

- Constructed curb inlets on North Ridge Drive and Sheffield.
- Constructed pavement on 34th Street and King Street, on Sheffield from North Ridge Drive to 34th Street, and on 34th Street from Sheffield to King Street.
- Work is 67% complete by value as of the end of September 2024.

Anticipated Project Activity for Next Period

- Contractor is currently scheduling personnel with Rail Pros and UPRR for the shutdown of the UPRR tracks to allow startup of construction of the outfall structure modifications.

- Contractor will construct 10x7 RCB box culvert extension and modifications to the outfall structure on UPRR property.
- Contractor will grade and stabilize all disturbed areas on North Ridge Drive with sod or erosion control blanket prior to winter season.
- Substantial completion projected to be in Summer 2025.

Costs

2021 LTCP Update Budgeted Construction Costs (February 2021)[1]: $27,500,000 with contingency (anticipated construction years: 2022–2024).

Current Estimated Construction Cost: $34,771,636 is the construction contracted cost

Changes from the LTCP

The City requested a modification of the 2021 LTCP; this request was approved last year and included in the new permit.

Other Items of Interest

There are no other items to report.

[1] Escalated Cost to the anticipated year(s) of construction at a rate of 3.1%/year starting in 2021.

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CSO 119 South Barrel Conversion and Sewer Separation

OPW 53149

Project Description as stated in the 2021 LTCP Update:

As outlined in Section 2.2.2.18 CSO 119 – Monroe Street Lift Station of the 2021 LTCP Update, under the subtitle "CSO 119 South Barrel Conversion & Sewer Separation (Formerly South Barrel 5A & 5B Conversion) (Under Design)", the objective of this project is to convert the South Barrel into a storm sewer, with the exception of large storm events exceeding the representative year storm sizes. The project will entail the essential sewer separation, closure of hydraulic windows and diversion structures, and the construction of a controlled overflow structure between the North and South Barrels. This controlled overflow structure will function as a relief mechanism for the North Barrel and monitor overflows during significant storm events.

The project is currently under a newly contracted consultant for the final design and construction is expected to be completed in 2028.

Compliance Report

Table 1 shows the 2021 LTCP Milestone Date as the anticipated project compliance schedule date, which is included in the permit.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date

Activity	Actual or *Anticipated* Date[a]
Begin Construction	03/01/2026
Substantial Completion	*12/31/2028*
2021 LTCP Milestone Date (modified)	**12/31/2028**

[a] 2021 LTCP Milestone Date is in bold.
[b] Anticipated dates are italicized.

Based on the information presented, the project will be able to meet the modified 2021 LTCP Milestone date

Project Activities for the Current Period

- 9/24/2024 preliminary design meeting with Mandan Park Neighborhood Association
- Evaluation of existing preliminary design deliverables
- Additional field data collection

Anticipated Project Activity for Next Period

- Intermediate and Final Design

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Costs

2021 LTCP Budgeted Construction Costs: (February 2021[1]): $13,049,740 with contingency (anticipated construction 2023–2025).

Current Estimated Construction Cost: A revised estimate will be provided by the new consultant.

Changes from the LTCP

Other Items of Interest

There are no items to report at this time.

[1] Escalated cost to the anticipated year(s) of construction at a rate of 3.1%/year starting in 2021.

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Nicholas Street Sewer Extension – Phase 3B

OPW 53753

Project Description as stated in the 2021 LTCP Update

Nicholas Street Sewer Extension – Phase 3 is being completed in two construction phases: Phase 3A (OPW 52721) and Phase 3B (OPW 53753). The Nicholas Street Sewer Extension – Phase 3A project provides sewer separation for the area bounded on the north by Clark Street, on the south by Charles Street, on the east by 16th Street, and on the west by 18th Street. The sewer separation conveys stormwater to the large diameter storm sewers constructed downstream as part of the Nicholas Street Phase 1 and Phase 2 projects. The project began construction on March 30, 2020, and was completed on September 4, 2020.

The Nicholas Street Sewer Extension – Phase 3B project is bounded on the north by Pinkney Street, on the south by Charles Street, on the east by 16th Street, and on the west by Florence Boulevard. This project will remove stormwater from the combined sewer system and convey the stormwater to the downstream storm sewers located at 16th and Charles Street. As part of an evaluation for the Nicholas Street Sewer Extension – Phase 3 project, a more efficient sewer separation design was developed that accomplished the goals of the Nicholas Street Sewer Extension – Phase 3 project and the 18th & Seward project at a reduced overall cost. The separate 18th & Seward project is being removed from the list of projects in this 2021 LTCP Update because it is now redundant. The Nicholas Street Sewer Extension – Phase 3B project was bid in spring 2021; construction is began in fall 2021 and is expected to be complete in December 2024**.**

Compliance Report

Table 1 shows the 2021 LTCP Milestone Date as the anticipated project compliance schedule date, which is included in the permit.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date

Activity	Actual or *Anticipated* Date[a]
Begin Construction	07/06/2021
Substantial Completion	*12/15/2024*
2021 LTCP Milestone Date	**06/30/2025**

[a] Anticipated dates are italicized. 2021 Milestone Date is in bold.

Based on the information presented, the project is on track to the 2021 LTCP Milestone dates.

Project Activities for Current Period

- Contractor constructed concrete pavement at the 18th and Lake Street intersection. This is the last segment of pavement for the project.
- Concrete sidewalk formed and placed on the North side of Corby from 17th Street to 18th Street.
- Contractor grooved and placed primer for double yellow tape and white bike lane tape for pavement markings on 16th Street from Locust Pinkney.
- Work is 94% complete by value as of the end of September 2024.

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Anticipated Project Activity for Next Period

- Contractor to construct curb inlets on 18th and Willis Ave and 18th and Lake Street. Roloff construct driveway approaches on 18th Street from Lake to Willis Ave.
- Construct ADA ramps and sidewalk on 18th Street and Lake Street, Florence Blvd and Lake Street, and 18th and Willis Ave.
- Fine grade and lay sod on Lake Street from 16th Street to Florence Blvd.

Costs

2021 LTCP Update Budgeted Construction Costs (February 2021[1]): The LTCP cost for Nicholas Phase 3B is $23,341,340 with contingency. Anticipated years of construction: 2021–2024.

Current Estimated Construction Cost: The current estimated contract value for Nicholas Phase 3B is $22,356,572.

Changes from the LTCP

Based on the 2021 LTCP there are no changes.

[1] Escalated cost to the anticipated year(s) of construction at a rate of 3.1%/year starting in 2

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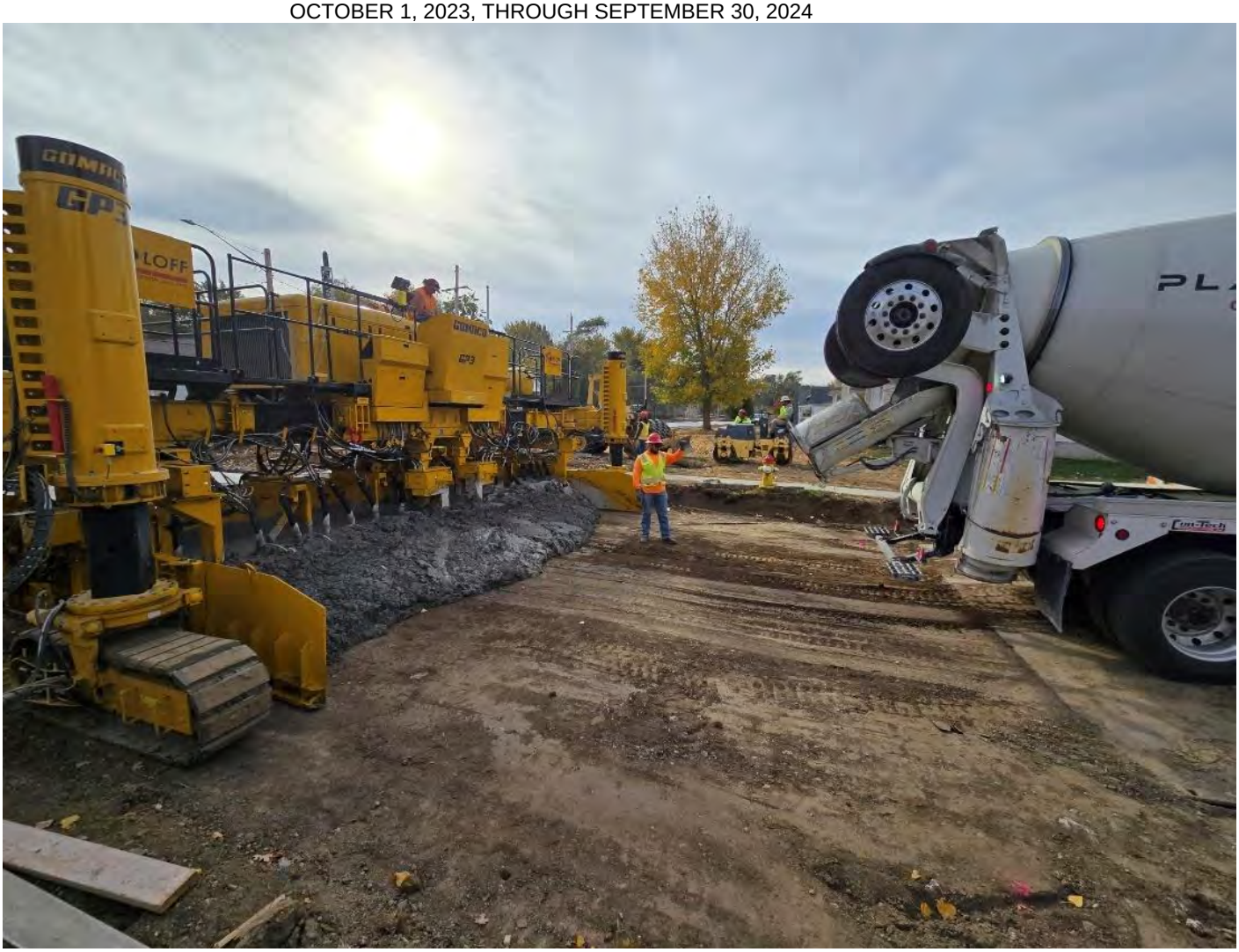

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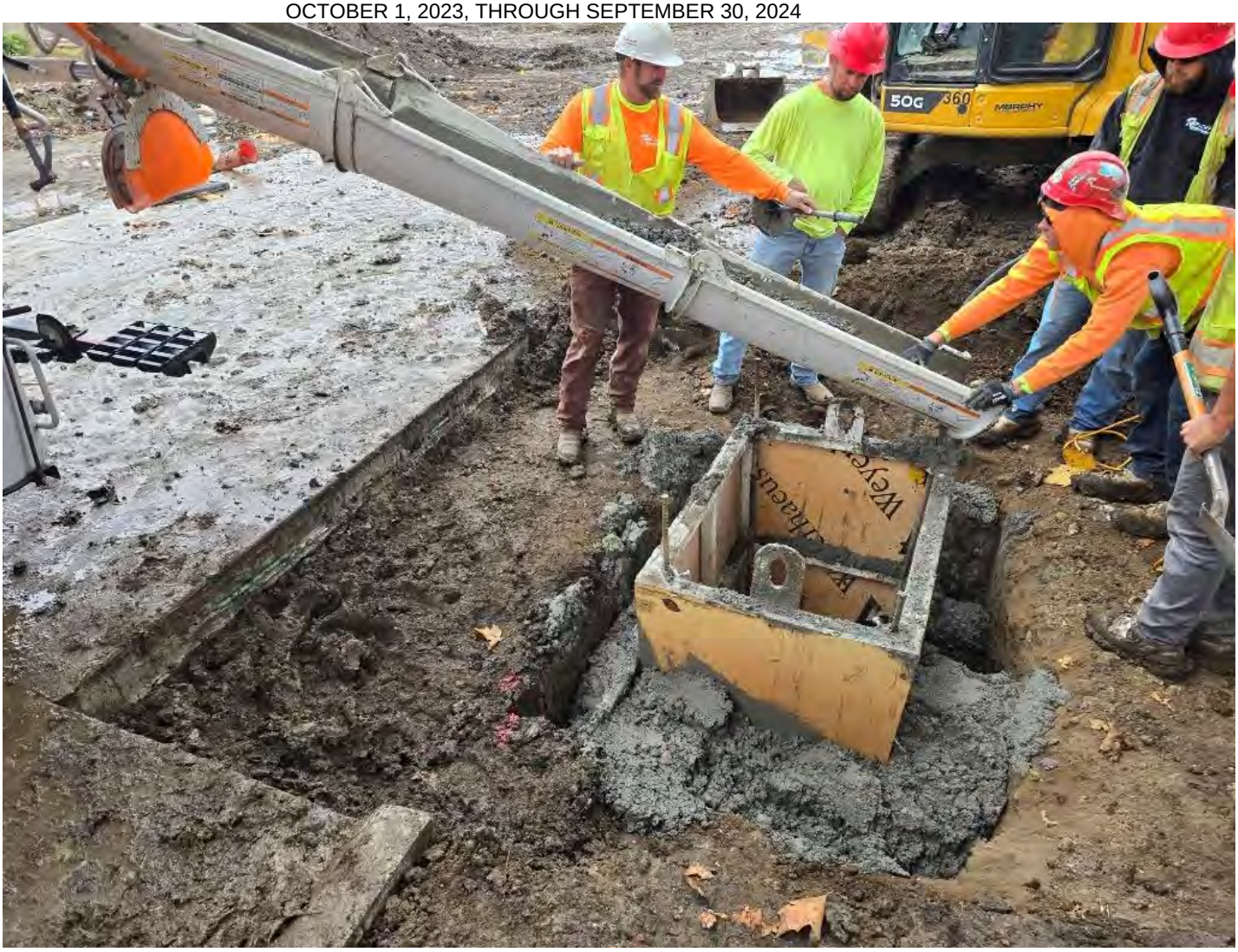

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CSO 204 Phase 4 – 57th Street and Pratt Street

OPW 53820

Note: ***Project is on schedule to meet the 2021 LTCP Milestone dates.***

Project Description as stated in the 2021 LTCP:

CSO 204 Phase 4 Sewer Separation includes the extension of a separate sanitary and storm sewer to complete the separation in the system and other sanitary and storm sewer improvements. This project is expected to include removal of the Taylor CSO Diversion located west of the intersection of North 60th Street and Taylor Street, which is one of two combined sewer overflow diversions in the CSO 204 area. This project will be constructed in **two phases** because of the amount of sewer separation needed (CSO 204 Phase 4a – 57th Street and Pratt Street and CSO 204 Phase 4b – 56th Street and Bedford Avenue). The preliminary design completed in March 2023 and final Design started in October 2023. It is anticipated that the first phase of construction (CSO 204 Phase 4a) will be completed in 2030 and the second (204 Phase 4b) in 2032.

2021 LTCP Milestone:

CSO 204 Phase 4a – 57th Street and Pratt Street: Complete construction of this project by June 30, 2030

CSO 204 Phase 4b – 56th Street and Bedford Avenue: Complete construction of this project by December 31, 2032

Compliance Report

Table 1 and Table 2 show the project delivery schedule (Target Dates) developed for the two CSO 204 Phase 4 projects in the 2021 LTCP Update, as noted in the plan. They also show the 2021 LTCP Milestone Dates as the anticipated project compliance schedule dates, which are included in the permit.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date for CSO 204 Phase 4a – 57th Street and Pratt Street

Activity	Actual or *Anticipated* Date[a]
Begin Construction	*11/01/2026*
Substantial Completion	*12/31/2029*
2021 LTCP Milestone Date	**06/30/2030**

[a] 2021 LTCP Milestone Date is in bold.
[b] Anticipated dates are italicized.

Table 2. Project Delivery Schedule and 2021 LTCP Milestone Date for CSO 204 Phase 4b – 56th Street and Bedford Avenue

Activity	Actual or *Anticipated* Date[a]
Begin Construction	*08/01/2029*
Substantial Completion	*12/31/2032*
2021 LTCP Milestone Date	**12/31/2032**

[a] 2021 LTCP Milestone Date is in bold.
[b] Anticipated dates are italicized.

Based on the provided design schedule, the **project is on track to meet the 2021 LTCP Milestone dates.**

Project Activities for the Current Period

The following is a brief synopsis of project activities and progress that have taken place prior to and during this reporting period.

- Intermediate and Final Design

Anticipated Project Activity for Next Period

- Final Design
- Advertisement for construction contract for CSO 204 Phase 4A

Costs

Design Estimate: CSO 204 Phase 4a – $19,200,000 without contingency (anticipated construction years: 2026–2029); CSO 204 Phase 4b – $29,890,000 without contingency (anticipated construction years: 2029–2032) based on the 30% design opinion of probable construction cost.

Current LTCP Estimated Construction Cost: $45,900,000 with contingency; CSO 204 Phase 4a (anticipated construction years: 2026–2029), $22,100,000 with contingency; CSO 204 Phase 4b (anticipated construction years: 2029–2031), $23,800,000 with contingency. Based on the 10% opinion of probable construction cost.

Changes from the LTCP

Based on the 2021 LTCP there are no changes.

Other Items of Interest

There are no other items to report.

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CSO 202 Phase 2 – 70th Avenue and Spencer Street

OPW 53869

Project Description as stated in the 2021 LTCP:

The CSO 202 Phase 2 (OPW 53869) project includes separation of the majority of the CSO 202 area. This project is currently under design with construction anticipated to start in 2023 and be completed in 2027. Monitoring will occur after the completion of the project to determine when the outfall can be deactivated.

Compliance Report

Table 1 shows the 2021 LTCP Milestone Date as the anticipated project compliance schedule date, which is included in the permit.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date

Activity	Actual or *Anticipated* Date[a]
Begin Construction	03/01/2024
Substantial Completion	*10/30/2026*
2021 LTCP Milestone Date (modified)	**06/30/2027**

[a] Anticipated dates are italicized. 2021 Milestone Date is in bold.

Based on the information presented, the project will be able to meet the modified 2021 LTCP Milestone date.

Project Activities for the Current Period

The following is a brief synopsis of project activities and progress that have occurred prior to and during this reporting period:

- A public pre-construction meeting was held 05/1/2024.
- Notice to Proceed issued 05/15/2024.
- Contractor made sanitary sewer point repairs on Bedford Ave West of 69th Street.
- Constructed pavement on Maple Street between 69th Street and 70th Street. Construct curb inlets on Maple Street west of 69th Street.
- Constructed sidewalk on Wirt Street from 72nd Street to 70th Ave.
- Work is 12% complete by value as of the end of September 2024

Anticipated Project Activity for Next Period

The following is a brief synopsis of project activities for the next Annual Report period (2023-2024

- Contractor to construct sidewalk and driveway approaches on Maple Street from 69th St to 70th Street.
- Construct pavement at end of return on 69th and Maple Street. Construct pavement on Bedford Ave West of 69th Street.
- Construct temporary pavement connection at 70th Ave and Wirt Street to allow for winter operations.
- Fine grade and lay sod on Maple Street from 68th Street to 70th Street.

Costs

2021 LTCP Budgeted Construction Costs (February 2021)[1]: $16,645,631 with contingency (anticipated construction years 2024–2026).

Current Estimated Construction Cost : $17,570,000 in 2024–2026 dollars
$13,298,337.16
(source: 90% design opinion of probable construction costs [OPCC])

Changes from the LTCP

The City requested a modification of the 2021 LTCP; this request was approved last year and included in the new permit.

Other Items of Interest

There are no other items to report.

[1] Escalated cost to the anticipated year(s) of construction at a rate of 3.1%/year starting in 2021.

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East Cole Creek Interceptor Rehabilitation

OPW 54293

Project Description as stated in the 2021 LTCP:

As outlined in Section 3.5.1 of the 2021 LTCP Update, third paragraph under CSO 204 – 63rd and Ames the primary objective of the OPW 54293 East Cole Creek Interceptor Rehabilitation Project is to improve the hydraulic capacity of the interceptor to reduce peak hydraulic grade lines (HGLs) caused by deteriorating conditions due to root intrusion and deteriorating pipe conditions. It is expected that reducing the peak HGLs will allow for the future deactivation of CSOs 202 and 203. In addition to rehabilitation of the East Cole creek Interceptor from Miami Street to Cass Street, the siphon and gravity sewer that connect the East and West Cole Creek Interceptors at Bedford Avenue to be reviewed and modified as necessary to improve hydraulics of the interceptor system.

Compliance Report

Table 1 shows the project delivery schedule (Target Dates) developed for the project in the 2021 LTCP Update, as noted in the plan. They also show the 2021 LTCP Milestone Date as the anticipated project compliance schedule date, which is included in the permit.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date for East Cole Creek Interceptor Rehabilitation

Activity	Actual or *Anticipated* Date[a]
Begin Construction	04/01/2026
Substantial Completion	*06/30/2027*
2021 LTCP Milestone Date (modified)	**06/30/2027**

[a] 2021 LTCP Milestone Date is in bold.
[b] Anticipated dates are italicized.

Based on the information presented, the project will be able to meet the modified 2021 LTCP Milestone date.

Project Activities for the Current Period

The following is a brief synopsis of project activities and progress that have taken place prior to and during this reporting period.

- Field work and CCTV studies of the interceptor and siphons identified an immediate repair was needed at the siphon on 72nd and Bedford. An emergency project was completed.

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Anticipated Project Activity for Next Period

- Final design and contract advertisement.

Costs

2021 LTCP Update Budgeted Construction Costs (February 2021[1]): $5,736,997 with contingency (anticipated construction years: 2024–2025)

Current Estimated Construction Cost: The Project Team has not yet developed an OPCC.

Changes from the LTCP

Based on the 2021 LTCP there are no changes.

Other Items of Interest

There are no other items to report.

[1] Escalated cost to the anticipated year(s) of construction at a rate of 3.1%/year starting in 2021.

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61st and Radial Storm Sewer Project

OPW 54374

2021 LTCP Project Description:

In accordance with section 3.5.1 of the 2021 LTCP Update, under CSO 204 – 63rd and Ames, the 61st and Radial Storm Sewer project has been included in the LTCP as a replacement for the canceled CSO 204 Phase 2 project. This change was due to the high construction cost estimates and an assessment of the risks associated with the construction of deep sewers, as well as challenges in acquiring easements in a confined residential area. A conceptual design, which was completed in July 2023, recommended the construction of new storm sewer along Pratt Street and N. 61st Street, extending from Northwest Radial Highway to Pratt Street. This project aims to separate approximately 101 acres of stormwater runoff from the combined sewer system.

Compliance Report

Table 1 shows the project delivery schedule (Target Dates) developed for the project in the 2021 LTCP Update, as noted in the plan. They also show the 2021 LTCP Milestone Date as the anticipated project compliance schedule date, which is included in the permit. A permit modification request is anticipated to reflect the revised project schedule.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date

Activity	Actual or *Anticipated* Date[a]
Begin Construction	*11/01/2026*
Substantial Completion	*06/30/2029*
2021 LTCP Milestone Date (modified)	**12/31/2028**

[a] 2021 LTCP Milestone Date is in bold.
[b] Anticipated dates are italicized.

Based on the information presented, the project will not be able to meet the modified 2021 LTCP Milestone date.

Project Activities for the Current Period

The following is a brief synopsis of project activities and progress that have taken place prior to and during this reporting period.

- Conceptual and intermediate design for the evaluation of selection of the best alternative.

Anticipated Project Activity for Next Period

The following is a brief synopsis of project activities for the next Annual Report period (2024-2025).

- Intermediate and Final Design

Costs

2021 LTCP Update Budgeted Construction Costs (February 2021[1]): $16,800,000 with contingency (anticipated construction years: 2022–2028)

Design Estimated Construction Cost: $17,609,000 with contingency (anticipated construction years: 2023–2029)

Changes from the LTCP

Based on the 2021 LTCP there are no changes.

Other Items of Interest

There are no other items to report.

[1] Escalated cost to the anticipated year(s) of construction at a rate of 3.1%/year starting in 2021.

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Northeast Omaha High Rate Treatment Basin and Associated Projects

OPW No. 54630

Project Description

This project includes the Northeast Omaha HRTB and four associated CSO Control projects. The project names and brief descriptions of each project are as follows.

- Northeast Omaha HRTB – 6th Street and Abbott Drive: A 185 MGD HRTB where combined sewage entering the HRTB will receive disinfection, solids settling, and de-chlorination before being discharged to the Missouri River. The NEO HRTB includes a diversion structure, grit and screening facility, wet well and 185 MGD pump station, and an outfall structure.
- 11th and Izard Active Control: The active control facility near the intersection of 11th and Izard Street will allow control of combined sewer flow by diverting it away from sewers that convey flow to the CSO 108 outfall and redirecting it toward the grit and screening facility and ultimately the NEO HRTB.
- 11th and Izard Grit and Screening Facility: The grit and screening facility near the intersection of 11th and Izard Street will receive flows from the 11th and Izard Active Control and will provide screening and grit removal prior to sending flow to the NEO HRTB.
- North Downtown Conveyance Sewer - 11th and Izard to 6th and Abbott: The North Downtown Conveyance Sewer will convey flow from the 11th and Izard Grit and Screening Facility to the NEO HRTB.
- Grace Street and North Interceptor Dry Weather Flow Diversion Rehabilitation: The diversions at both of these locations are several decades old and will need to be rehabilitated with automated gates to manage wet weather flows and convey them to the NEO RTB. This will reduce the flow directed to the Burt Izard Pump Station (BI), which will allow BI to pump more water from the Burt Izard Basin, thus reducing overall CSO volumes.

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Compliance Report

Tables 1 through 5 show the Project Delivery Schedule developed for the project definition report (PDR) for the Northeast Omaha HRTB and associated projects. It also shows the 2021 LTCP Milestone Date as the anticipated project compliance schedule date, which will be included in the permit.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date for the Northeast Omaha HRTB – 6th Street and Abbott Drive.

Activity	PDR Date or 2021 LTCP Milestone Date[a]	Actual or Anticipated Dates[b]
Design	1/1/2023	3/14/2024
Begin Construction	1/1/2028	*1/1/2029*
Substantial Completion	6/30/2034	*6/30/2034*
2021 LTCP Milestone Date	**6/30/2034**	**6/30/2034**

[a] 2021 LTCP Milestone Date is in bold
[b] Anticipated dates are italicized.

Table 2. Project Delivery Schedule and 2021 LTCP Milestone Date for North Downtown Conveyance Sewer.

Activity	PDR Date or 2021 LTCP Milestone Date[a]	Actual or Anticipated Dates[b]
Design	1/1/2023	3/14/2024
Begin Construction	1/1/2027	*1/1/2029*
Substantial Completion	6/30/2030	*6/30/2032*
2021 LTCP Milestone Date	**6/30/2030**	**6/30/2032**

[a] 2021 LTCP Milestone Date is in bold
[b] Anticipated dates are italicized.

Table 3. Project Delivery Schedule and 2021 LTCP Milestone Date for 11th and Izard Grit and Screening Facility.

Activity	PDR Date or 2021 LTCP Milestone Date[a]	Actual or Anticipated Dates[b]
Design	1/1/2023	3/14/2024
Begin Construction	1/1/2030	*1/1/2030*
Substantial Completion	6/30/2033	*6/30/2033*
2021 LTCP Milestone Date	**6/30/2033**	**6/30/2033**

[a] 2021 LTCP Milestone Date is in bold
[b] Anticipated dates are italicized.

Table 4. Project Delivery Schedule and 2021 LTCP Milestone Date for 11th and Izard Active Control.

Activity	PDR Date or 2021 LTCP Milestone Date[a]	Actual or Anticipated Dates[b]
Design	1/1/2023	3/14/2024
Begin Construction	1/1/2030	*1/1/2030*
Substantial Completion	6/30/2033	*6/30/2033*
2021 LTCP Milestone Date	**6/30/2033**	**6/30/2033**

[a] 2021 LTCP Milestone Date is in bold
[b] Anticipated dates are italicized.

Table 5. Project Delivery Schedule and 2021 LTCP Milestone Date for Grace Street and North Interceptor Dry Weather Flow Diversion Rehabilitation.

Activity	PDR Date or 2021 LTCP Milestone Date[a]	Actual or Anticipated Dates[b]
Design	1/1/2023	3/14/2024
Begin Construction	1/1/2027	*1/1/2028*
Substantial Completion	12/30/2028	*1/1/2029*
2021 LTCP Milestone Date	**12/30/2028**	**1/1/2029**

[a] 2021 LTCP Milestone Date is in bold
[b] Anticipated dates are italicized.

Project Activities for the Current Period

In 2023-2024, the following activities were completed:

- The selected consultant project team met with the City and develop a scope, fee, and schedule to perform conceptual and preliminary design. Negotiations with the consultant project team were completed in January 2024 and the contract was submitted for City approval.
- Design notice-to-proceed was provided on March 14, 2024.
- Engaged major property owners and key stakeholders to support land acquisition efforts.
- Met with utilities and obtained background information in the project area.
- Submitted Drilling and Invasive Program Plan to conduct field investigations in the critical zone of the Missouri River Levee for USACE authorization.
- Submitted Exploration Program Plan (geotechnical and environmental) for Union Pacific Railroad (UPRR) approval. Coordinated with EPA and Arcadis to review Materials Management Plan for the UPRR properties.
- Performed sampling and testing of combined sewer overflow discharges from CSOs 106, 107, and 108 to support the design development of the HRTB.
- Developed hydraulic model information for the collection system, Missouri River hydrology projections, and operations of the Missouri River levee system at the project site.
- Real Time Control Evaluation for the NEOHRTB system of projects commenced.
- Alignment evaluations for the North Downtown Conveyance Sewer and siting for the diversion structure, grit and screening facility, and HRTB commenced.
- Conceptual design for screening, grit removal, and process systems has begun.

Anticipated Project Activity for Next Period

The conceptual design of the project will extend into the 2nd quarter of 2025 and preliminary design of the facilities will begin. Property acquisition for the major parcels is expected to be completed in 2025. Analysis for project packaging and schedule refinement for construction will occur by the first quarter of 2026, which will include selection of the delivery method for each project.

Costs

2021 LTCP Update Budgeted Construction Costs (March 2021)[1]:

- Northeast Omaha HRTB – 6th Street and Abbott Drive: $161,173,000[2] with contingency.
- 11th and Izard Active Control - $6,008,000[2] with contingency.
- 11th and Izard Grit and Screening Facility - $19,738,000[2] with contingency.
- North Downtown Conveyance Sewer - 11th and Izard to 6th and Abbott - $13,896,000[2] with contingency.
- Grace Street and North Interceptor Dry Weather Flow Diversion Rehabilitation - $1,166,000[2] with contingency.

Current Estimated Construction Cost: The estimated construction costs matches what is currently in the LTCP.

Changes from the LTCP

Based on the 2021 LTCP Update there are no changes.

Other Items of Interest

There are no other items to report.

[1] Reported as 2021 dollars in spreadsheet for LTCP Update.
[2] Taken from the spread sheet: CIP_Tool_LTCPUpdate2021_20210201_revision_Feb16_v6_July2023Update_20230717

ANNUAL PROJECT PROGRESS REPORT-
OCTOBER 1, 2023 THROUGH SEPTEMBER 30, 2024

MRWRRF In-Plant Lift Station Upgrade

OPW No. 54258

Project Description:

The In-Plant Lift Station (OPW 54258) project includes the installation of new screening equipment and construction of a new screenings loadout garage. The lift station is designed to convey the combined sewer flows from "U" Street sewer and the Ohern Diversion Structure to the MRWRRF Municipal Headworks Building. The lift station currently operates at a maximum pumping capacity of 18 mgd. This project will protect the three In-Plant pumps from heavy debris, specifically during wet weather events. The In-Plant Lift Station Project is a system reliability project.

Compliance Report

The 2009 LTCP, 2014 and 2021 LTCP includes "System Reliability Projects". The implementation schedule for these projects "as necessary and when funding is available." The In-Plant Lift Station Project is one of these, thus there is no milestone date for this project other than to be complete by the end of the LTCP on September 30, 2037.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date

Activity	Actual Date **or 2021 LTCP Milestone Date**[a]
Begin Construction	6/24/2024
Substantial Completion	3/16/2026
2021 LTCP Milestone Date	**9/30/2037**

[a] 2021 LTCP Milestone Date is in bold
[b] Anticipated dates are italicized.

Based on the information presented, the project is on track for the 2021 LTCP Milestone dates.

Project Activities for the Current Period

The project is progressing towards contractor mobilization to the job site.

Anticipated Project Activity for Next Period

This project should begin major construction before the next reporting period. Outstanding items include: bypass pumping of the wet well for pile and screen installations, erection of the new loadout garage, replacement of the 12" sewer and a manhole connection north of the wet well.

ANNUAL PROJECT PROGRESS REPORT-
OCTOBER 1, 2023 THROUGH SEPTEMBER 30, 2024

Costs

Construction Costs (June 2024)[1]: $7,685,000 Construction spanned 2024-2026.

Changes from the LTCP

This project was not previously listed in the 2021 LTCP, but has been identified as a system reliability project by the CSO Program Management Team.

Other Items of Interest

There are no other items to report.

[1] Escalated Cost to the anticipated year(s) of construction at a rate of 3.1%/year starting in 2021.

ANNUAL PROJECT PROGRESS REPORT-
OCTOBER 1, 2023 THROUGH SEPTEMBER 30, 2024

Old South Interceptor Force Main – Asset Evaluation and Plan for Future Reuse

OPW No. 54530

Project Description:

The purpose of this project is to evaluate the old South Interceptor Force Main, gravity sewers, and facilities to evaluate opportunities to reuse or repurpose the force main and associated lift stations. The results of the evaluation will be a plan, design, and construction for reuse or abandonment of the force main, gravity sewers, and lift stations that meet the requirements of the regulatory agencies to allow for continued certification of the Missouri River levee system.

Compliance Report

Table 1 shows the Project Delivery Schedule. The 2009 LTCP, 2014 and 2021 LTCP includes "System Reliability Projects". The implementation schedule for these projects "as necessary and when funding is available." The Old South Interceptor Forcemain is one of these, thus there is no milestone date for this project other than to be complete by the end of the LTCP on September 30, 2037.

The schedule below is preliminary and will be refined after the City selects the preferred alternative for reuse or abandonment of the force main and facilities and a determination of funding available is completed.

Table 1. Project Delivery Schedule for the South Interceptor Force Main – Asset Evaluation and Plan for Future Reuse

Activity	Actual or Anticipated Dates[b]
Begin Design	4/10/2024
Begin Construction	*1/1/2028*
Substantial Completion	*1/1/2030*
2021 LTCP Milestone Date	**9/30/2037**

[a] The project is not specifically identified in the 2021 LTCP schedule
[b] Anticipated dates are italicized.

Project Activities for the Current Period

The following activities were completed in the current reporting period.

- Received draft scope and fees from consultant
- Finalized contracting and issued notice to proceed
- Held project kick-off meeting

- Identified alternatives for consideration for reuse of the force main and lift stations and held Workshop #1 to screen the alternatives.
- Developing investigation plan for the old South Interceptor Force Main to help refine and evaluate alternatives.
- Identifying improvements to the old South Interceptor Force Main to support inspections to meet United States Army Corps of Engineers requirements along the Missouri River floodwall and earthen levee.

Anticipated Project Activity for Next Period

This project will complete field work and investigations to identify the preferred alternative for reuse or abandonment of the old South Interceptor Force Main. The field work will include evaluations of the condition of the old South Interceptor Force Main and associated lift stations, identification of utilities, stakeholder engagement, and regulatory engagement with the USACE.

Subsequent work after the next period will include preliminary design, final design, and construction of the project.

Costs

2021 LTCP Update Budgeted Construction Costs (March 2021)[1]: $6,220,000 with contingency.

Current Estimated Construction Cost: The estimated construction costs will be updated at the conclusion of preliminary design.

Changes from the LTCP

The project is not described in the LTCP.

Other Items of Interest

There are no other items to report.

[1] Reported as 2021 dollars in spreadsheet for LTCP Update.
[2] Taken from the spread sheet: CIP_Tool_LTCPUpdate2021_20210201_revision_Feb16_v6_Aug2022.

ANNUAL PROJECT PROGRESS REPORT-
OCTOBER 1, 2023 THROUGH SEPTEMBER 30, 2024

Omaha CSO Program Green Infrastructure Improvements Project Study

OPW No. 54677

The City's goals for this study is to look at way of enhancing existing green infrastructure projects to improve stormwater management and reduce combined sewer overflows, learning from this study' elements to facilitate implementation of similar enhancements and controls in other parts of the sewer system, and moving toward an integrated control system that maximizes use of the existing sewer infrastructure. The City is looking into several potential projects to determine which best meets the City's goals.

Compliance Report

The 2009 LTCP, 2014 and 2021 LTCP includes “System Reliability Projects”. The implementation schedule for these projects “as necessary and when funding is available.” The Omaha CSO Program Green Infrastructure Improvements Project Study is one of these, thus there is no milestone date for this project other than to be complete by the end of the LTCP on September 30, 2037.

Table 1. Project Delivery Schedule and 2021 LTCP Milestone Date

Activity	Actual Date **or 2021 LTCP Milestone Date**[a]
2021 LTCP Milestone Date	**9/30/2037**

[a] 2021 LTCP Milestone Date is in bold

Based on the information presented, the project is on target to meet the 2021 LTCP Milestone dates.

Project Activities for the Current Period

In 2024, the following activities were completed:

- Analyzed potential CSO capture at several locations using several different storage options and real time control methods. The alternative analyses were focused on the Vinton underground stormwater infiltration gallery and Hanscom Park Lagoon.
- Consider land acquisition strategies for alternative locations. Vinton was selected due to its
- Developed high level costs for the highest performing alternatives.

Anticipated Project Activity for Next Period

This project will likely finalize the alternative and advance that option to bid in 2025 or 2026.

ANNUAL PROJECT PROGRESS REPORT-
OCTOBER 1, 2023 THROUGH SEPTEMBER 30, 2024

Costs

2021 LTCP Update Budgeted Construction Costs: This project was not included in the LTCP.

Current Estimated Construction Costs[1]: $1,080,000

Other Items of Interest

Initial alternative construction costs came in $300,000 to $800,000 higher than the grant value.

[1] This is the value of the NDEE Overflow Stormwater Grant ($900,000 with $180,000 City match).

Attachment D – CSO Occurrence Summary Report

CSO Inspection Form Summary Report

Reporting: 10/01/2023 - 09/30/2024

CSO Number	Number of Overflows
CSO 103 - Bridge St	3
CSO 105 - Minne Lusa	39
CSO 106 - North Interceptor	36
CSO 107 - Grace St	35
CSO 108 - Burt-Izard Diversion Structure	39
CSO 109 - Leavenworth St	43
CSO 110 - Pierce St	40
CSO 111 - Hickory St	28
CSO 112 - Martha St	8
CSO 114 - Grover Street Diversion Structure	28
CSO 115 - Riverview Diversion Structure	36
CSO 118 - Ohern	38
CSO 119 - Monroe Street	44
CSO 121 - 7th & Jones Diversion Structure	33
CSO 201 - PCWRRF	3*
CSO 202 - 72nd & Bedford Diversion Structure	27
CSO 203 - 69th & Evans St	11
CSO 204 - 63rd & Ames Ave	40
CSO 205 - 64th & Dupont St	24
CSO 211 - 66th & Pacific St	4
CSO 212 - 64th & Woolworth Ave	29

Total Wet Weather Overflows: 588

NOTE: *CSO 201 - PCWRRF is monitored, operated, and maintained by the PCWRRF staff. Records for its use are kept in Operator Logs separate from the CSO Inspection Summary Report provided in Attachment E.

Attachment E – CSO Inspection Report

CSO Inspections

10/01/2023-09/30/2024

CSO 103 - Bridge St

Number of Wet Weather Overflows: 3

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
3/22/2024	1040	Chris Birdsall	Rain	3/22/2024	0.13	RG 7	Yes	No	
6/26/2024	1015	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	10 year spacial event.
8/30/2024	0920	Chris Birdsall	Rain	8/29/2024	0.4	RG 8	Yes	No	

CSO 105 - Minne Lusa

Number of Wet Weather Overflows: 39

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	0840	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	Waterspout confirmed
10/13/2023	0700	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
11/21/2023	1205	Terence Mata	Rain	11/20/2023	0.3	RG 2	Yes	No	
12/26/2023	0710	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event. Confirmed through waterspout.
3/22/2024	1050	Chris Birdsall	Rain	3/22/2024	0.13	RG 7	Yes	No	
3/25/2024	1110	Chris Birdsall	Rain	3/24/2024	0.77	RG 4	Yes	No	
3/26/2024	1000	Grant Wickham	Rain	3/25/2024	0.29	RG 9	Yes	Yes	
4/17/2024	1050	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	
4/18/2024	1140	Grant Wickham	Rain	4/18/2024	0.2	RG 12	Yes	No	
4/26/2024	1105	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0600	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	

CSO 105 - Minne Lusa

Number of Wet Weather Overflows: 39

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
4/29/2024	1010	Grant Wickham	Rain	4/28/2024	0.33	RG 1	Yes	No	
5/01/2024	1125	Rob Adams	Rain	4/30/2024	0.28	RG 10	Yes	No	
5/02/2024	1200	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	
5/05/2024	0820	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	RI
5/07/2024	1035	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	RI
5/14/2024	1050	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	RI, 2 day rain event
5/16/2024	1120	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	RI
5/20/2024	0955	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	RI
5/20/2024	1015	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	RI
5/22/2024	1040	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	Yes	RI, 2 day rain event
5/24/2024	1015	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	Yes	RI

CSO 105 - Minne Lusa

Number of Wet Weather Overflows: 39

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
6/01/2024	0915	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	RI, 2 day rain event
6/03/2024	1200	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	RI
6/08/2024	0940	Rob Adams	Rain	6/07/2024	0.12	RG 1	Yes	No	RI
6/13/2024	0955	Chris Birdsall	Rain	6/12/2024	0.7	Eppley Airfield	Yes	No	RI
6/16/2024	0800	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	RI
6/17/2024	1220	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	RI
6/19/2024	0835	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	RI
6/26/2024	1025	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	RI
7/03/2024	0810	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	RI, 2 day rain event
7/05/2024	0930	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	RI
7/07/2024	0710	Chris Birdsall	Rain	7/06/2024	0.09	RG 9	Yes	No	RI

CSO 105 - Minne Lusa

Number of Wet Weather Overflows: 39

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
7/21/2024	0735	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	RI, 2 day rain event
8/12/2024	1005	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	
8/14/2024	0955	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	No	
8/15/2024	0955	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	
8/21/2024	1035	Terence Mata	Rain	8/20/2024	0.1	RG 3	Yes	No	
8/30/2024	0930	Chris Birdsall	Rain	8/29/2024	0.4	RG 8	Yes	No	

CSO 106 - North Interceptor

Number of Wet Weather Overflows: 36

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	1230	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	
10/13/2023	1135	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
12/26/2023	0705	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event. Confirmed through waterspout.
3/22/2024	0815	Chris Birdsall	Rain	3/22/2024	0.13	RG 7	Yes	No	
3/25/2024	1125	Chris Birdsall	Rain	3/24/2024	0.77	RG 4	Yes	No	
3/26/2024	1040	Grant Wickham	Rain	3/25/2024	0.29	RG 9	Yes	No	
4/17/2024	0700	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	
4/26/2024	0800	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0600	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	
4/29/2024	0745	Rob Adams	Rain	4/28/2024	0.33	RG 1	Yes	No	
5/02/2024	1215	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	

CSO 106 - North Interceptor

Number of Wet Weather Overflows: 36

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
5/05/2024	0845	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	RI
5/07/2024	0845	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	RI
5/14/2024	1130	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	RI, 2 day rain event
5/16/2024	0730	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	RI
5/20/2024	1050	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	RI
5/22/2024	1105	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	RI, 2 day rain event
5/24/2024	0850	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	No	RI
6/01/2024	0930	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	RI, 2 day rain event
6/03/2024	1220	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	RI
6/08/2024	0600	Rob Adams	Rain	6/07/2024	0.12	RG 1	Yes	No	RI
6/13/2024	0800	Chris Birdsall	Rain	6/12/2024	0.7	Eppley Airfield	Yes	No	RI

CSO 106 - North Interceptor

Number of Wet Weather Overflows: 36

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
6/16/2024	0825	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	RI
6/17/2024	1245	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	RI
6/19/2024	0705	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	RI
6/26/2024	0815	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	RI
6/26/2024	1100	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	RI
7/03/2024	0810	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	RI, 2 day rain event
7/05/2024	0930	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	RI
7/07/2024	0710	Chris Birdsall	Rain	7/06/2024	0.09	RG 9	Yes	No	RI
7/21/2024	0755	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	RI, 2 day rain event
8/01/2024	1050	Rob Adams	Rain	7/31/2024	1.4	RG 3	Yes	No	
8/12/2024	1025	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	

CSO 106 - North Interceptor

Number of Wet Weather Overflows: 36

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
8/14/2024	1010	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	Yes	Overflow ended at 1300
8/15/2024	1005	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	
8/30/2024	0950	Chris Birdsall	Rain	8/29/2024	0.4	RG 8	Yes	No	

CSO 107 - Grace St

Number of Wet Weather Overflows: 35

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	1025	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	Waterspout confirmed
10/13/2023	1130	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
12/26/2023	0700	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event. Confirmed through waterspout.
3/15/2024	1210	Rob Adams	Rain	3/14/2024	0.65	Eppley Airfield	Yes	No	
3/25/2024	1115	Chris Birdsall	Rain	3/24/2024	0.77	RG 4	Yes	No	
4/17/2024	1115	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	
4/18/2024	1150	Grant Wickham	Rain	4/18/2024	0.2	RG 12	Yes	No	
4/26/2024	1120	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0810	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	
4/29/2024	1025	Grant Wickham	Rain	4/28/2024	0.33	RG 1	Yes	No	
5/02/2024	1210	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	

CSO 107 - Grace St

Number of Wet Weather Overflows: 35

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
5/05/2024	0835	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	RI
5/07/2024	1045	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	RI
5/14/2024	1125	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	RI, 2 day rain event
5/16/2024	1140	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	RI
5/20/2024	1040	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	RI
5/22/2024	1100	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	RI, 2 day rain event
5/24/2024	1025	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	No	RI
6/01/2024	0925	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	RI, 2 day rain event
6/03/2024	1215	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	RI
6/08/2024	0600	Rob Adams	Rain	6/07/2024	0.12	RG 1	Yes	No	RI
6/13/2024	1010	Chris Birdsall	Rain	6/12/2024	0.7	Eppley Airfield	Yes	No	RI

CSO 107 - Grace St

Number of Wet Weather Overflows: 35

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
6/16/2024	0820	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	RI
6/17/2024	1240	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	RI
6/19/2024	0855	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	RI
6/26/2024	1050	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	RI
7/03/2024	0810	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	RI, 2 day rain event
7/05/2024	0930	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	RI
7/07/2024	0710	Chris Birdsall	Rain	7/06/2024	0.09	RG 9	Yes	No	RI
7/21/2024	0750	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	RI, 2 day rain event
8/01/2024	1045	Rob Adams	Rain	7/31/2024	1.4	RG 3	Yes	No	Device stuck
8/12/2024	1020	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	
8/14/2024	1005	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	No	

CSO 107 - Grace St

Number of Wet Weather Overflows: 35

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
8/15/2024	1000	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	
8/30/2024	0950	Chris Birdsall	Rain	8/29/2024	0.4	RG 8	Yes	No	

CSO 108 - Burt-Izard Diversion

Number of Wet Weather Overflows: 39

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	0840	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	Waterspout confirmed
10/13/2023	1145	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
10/26/2023	0930	Chris Birdsall	Rain	10/26/2023	0.23	RG 5	Yes	No	Confirmed with waterspout.
12/26/2023	0705	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event. Confirmed through waterspout.
3/08/2024	1000	Chris Birdsall	Rain	3/08/2024	0.33	Eppley Airfield	Yes	No	
3/15/2024	0800	Rob Adams	Rain	3/14/2024	0.65	Eppley Airfield	Yes	No	
3/22/2024	0815	Chris Birdsall	Rain	3/22/2024	0.13	RG 7	Yes	No	
3/25/2024	0800	Chris Birdsall	Rain	3/24/2024	0.29	RG 7	Yes	No	
3/25/2024	0720	Chris Birdsall	Rain	3/24/2024	0.77	RG 4	Yes	No	
3/26/2024	0800	Grant Wickham	Rain	3/25/2024	0.29	RG 9	Yes	No	
4/17/2024	0700	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	

CSO 108 - Burt-Izard Diversion

Number of Wet Weather Overflows: 39

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
4/26/2024	1130	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0600	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	
4/29/2024	0745	Rob Adams	Rain	4/28/2024	0.33	RG 1	Yes	No	
5/02/2024	1230	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	
5/05/2024	0855	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	RI
5/07/2024	0845	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	RI
5/14/2024	1140	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	RI, 2 day rain event
5/16/2024	0730	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	RI
5/20/2024	1045	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	RI
5/22/2024	1115	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	RI, 2 day rain event
5/24/2024	0850	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	No	RI

CSO 108 - Burt-Izard Diversion

Number of Wet Weather Overflows: 39

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
6/01/2024	0940	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	RI, 2 day rain event
6/03/2024	1225	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	RI
6/08/2024	0915	Rob Adams	Rain	6/07/2024	0.12	RG 1	Yes	No	RI
6/13/2024	1025	Chris Birdsall	Rain	6/12/2024	0.7	Eppley Airfield	Yes	No	RI
6/16/2024	0835	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	RI
6/17/2024	1300	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	RI
6/19/2024	0705	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	RI
6/26/2024	1105	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	RI
7/03/2024	0810	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	RI, 2 day rain event
7/05/2024	0930	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	RI
7/07/2024	0710	Chris Birdsall	Rain	7/06/2024	0.09	RG 9	Yes	No	RI

CSO 108 - Burt-Izard Diversion

Number of Wet Weather Overflows: 39

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
7/21/2024	0800	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	RI, 2 day rain event
8/01/2024	1100	Rob Adams	Rain	7/31/2024	1.4	RG 3	Yes	No	
8/12/2024	1030	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	
8/14/2024	1020	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	No	
8/15/2024	1015	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	
8/30/2024	1000	Chris Birdsall	Rain	8/29/2024	0.4	RG 8	Yes	No	

CSO 109 - Leavenworth St

Number of Wet Weather Overflows: 43

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	0840	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	SCADA email received
10/13/2023	0700	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	SCADA email received
10/26/2023	0735	Chris Birdsall	Rain	10/26/2023	0.23	RG 5	Yes	No	SCADA email received
11/21/2023	0740	Terence Mata	Rain	11/20/2023	0.3	RG 2	Yes	No	SCADA email received
12/17/2023	0600	Chris Birdsall	Rain	12/16/2023	0.08	RG 10	Yes	No	Two day rain event. Confirmed through Waterspout.
12/26/2023	0710	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event. SCADA email received.
3/08/2024	1000	Chris Birdsall	Rain	3/08/2024	0.33	Eppley Airfield	Yes	No	Confirmed through waterspout.
3/15/2024	0800	Rob Adams	Rain	3/14/2024	0.65	Eppley Airfield	Yes	Yes	SATA email received
3/22/2024	0815	Chris Birdsall	Rain	3/22/2024	0.13	RG 7	Yes	No	SCADA email received
3/25/2024	0720	Chris Birdsall	Rain	3/24/2024	0.77	RG 4	Yes	No	SCADA email received
3/26/2024	0800	Chris Birdsall	Rain	3/25/2024	0.29	RG 9	Yes	No	SCADA email received

CSO 109 - Leavenworth St

Number of Wet Weather Overflows: 43

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
4/17/2024	0700	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	SCADA email received
4/18/2024	1015	Chris Birdsall	Rain	4/18/2024	0.2	RG 12	Yes	No	SCADA email received
4/26/2024	0800	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	SCADA email received
4/27/2024	0600	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	SCADA email received
4/29/2024	0745	Rob Adams	Rain	4/28/2024	0.33	RG 1	Yes	No	SCADA email received
5/01/2024	0800	Rob Adams	Rain	4/30/2024	0.28	RG 10	Yes	No	Scada email received
5/02/2024	1000	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	Online
5/05/2024	0600	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	RI
5/07/2024	0845	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	RI
5/14/2024	0800	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	RI, 2 day rain event
5/16/2024	0730	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	RI

CSO 109 - Leavenworth St

Number of Wet Weather Overflows: 43

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
5/20/2024	0820	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	RI
5/22/2024	1125	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	RI, 2 day rain event
5/24/2024	0850	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	No	RI
6/01/2024	0630	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	RI, 2 day rain event
6/03/2024	0745	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	RI
6/08/2024	0600	Rob Adams	Rain	6/07/2024	0.12	RG 1	Yes	No	RI
6/13/2024	1040	Chris Birdsall	Rain	6/12/2024	0.7	Eppley Airfield	Yes	No	RI
6/16/2024	0600	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	RI
6/17/2024	0845	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	RI
6/19/2024	0705	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	RI
6/26/2024	0815	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	RI

CSO 109 - Leavenworth St

Number of Wet Weather Overflows: 43

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
7/03/2024	0810	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	RI, 2 day rain event
7/05/2024	0930	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	RI
7/07/2024	0700	Chris Birdsall	Rain	7/06/2024	0.09	RG 9	Yes	No	RI
7/21/2024	0600	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	RI, 2 day rain event
8/01/2024	0810	Terence Mata	Rain	7/31/2024	1.4	RG 3	Yes	No	SCADA email received
8/12/2024	0835	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	SCADA email received
8/14/2024	0730	Chris Birdsall	Rain	8/14/2024	2.58	RG 8	Yes	No	Scada email received.
8/15/2024	0730	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	SCADA email received
8/30/2024	0730	Chris Birdsall	Rain	8/29/2024	0.4	RG 8	Yes	No	SCADA email received
9/23/2024	0725	Chris Birdsall	Rain	9/22/2024	0.21	RG 12	Yes	No	SCADA email received

CSO 110 - Pierce St

Number of Wet Weather Overflows: 40

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	1045	Chris Birdsall	Rain	10/04/2023	1.48	RG 10	Yes	No	
10/13/2023	1200	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
10/26/2023	0920	Chris Birdsall	Rain	10/26/2023	0.23	RG 5	Yes	No	
12/26/2023	1115	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event.
3/15/2024	1250	Rob Adams	Rain	3/14/2024	0.65	Eppley Airfield	Yes	No	
3/25/2024	1145	Chris Birdsall	Rain	3/24/2024	0.77	RG 4	Yes	No	
3/26/2024	1100	Grant Wickham	Rain	3/25/2024	0.29	RG 9	Yes	Yes	
4/17/2024	1135	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	
4/18/2024	1210	Grant Wickham	Rain	4/18/2024	0.2	RG 12	Yes	No	
4/26/2024	1235	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0840	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	

CSO 110 - Pierce St

Number of Wet Weather Overflows: 40

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
4/29/2024	1050	Grant Wickham	Rain	4/28/2024	0.33	RG 1	Yes	No	
5/01/2024	1200	Rob Adams	Rain	4/30/2024	0.28	RG 10	Yes	No	
5/02/2024	1240	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	
5/05/2024	0930	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	RI
5/07/2024	1110	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	RI
5/14/2024	1205	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	RI, 2 day rain event
5/16/2024	1210	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	RI
5/20/2024	1115	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	RI
5/22/2024	1130	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	Yes	RI, 2 day rain event
5/24/2024	1310	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	No	RI
6/01/2024	0955	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	RI, 2 day rain event

CSO 110 - Pierce St

Number of Wet Weather Overflows: 40

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
6/03/2024	1240	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	RI
6/08/2024	0855	Rob Adams	Rain	6/07/2024	0.12	RG 1	Yes	No	RI
6/13/2024	1130	Chris Birdsall	Rain	6/12/2024	0.7	Eppley Airfield	Yes	No	RI
6/16/2024	0845	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	RI
6/17/2024	1315	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	RI
6/19/2024	0920	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	RI
6/26/2024	1115	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	RI
7/03/2024	0810	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	RI, 2 day rain event
7/05/2024	0930	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	RI
7/07/2024	0710	Chris Birdsall	Rain	7/06/2024	0.09	RG 9	Yes	No	RI
7/21/2024	0825	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	RI, 2 day rain event

CSO 110 - Pierce St

Number of Wet Weather Overflows: 40

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
8/01/2024	1305	Rob Adams	Rain	7/31/2024	1.4	RG 3	Yes	No	
8/12/2024	1040	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	
8/14/2024	1035	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	No	
8/15/2024	1030	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	
8/21/2024	1115	Terence Mata	Rain	8/20/2024	0.1	RG 3	Yes	No	
8/30/2024	1010	Chris Birdsall	Rain	8/29/2024	0.4	RG 8	Yes	No	
9/23/2024	1040	Chris Birdsall	Rain	9/22/2024	0.21	RG 12	Yes	No	

CSO 111 - Hickory St

Number of Wet Weather Overflows: 28

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/13/2023	1205	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
12/26/2023	1120	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event.
4/26/2024	1240	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0845	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	
4/29/2024	1105	Rob Adams	Rain	4/29/2024	0.33	RG 1	Yes	No	
5/02/2024	1245	Grant Wickham	Rain	5/02/2024	0.52	RG 10	Yes	No	
5/05/2024	0945	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	RI
5/07/2024	1140	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	RI
5/14/2024	1230	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	RI, 2 day rain event
5/16/2024	1220	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	RI
5/20/2024	1120	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	RI

CSO 111 - Hickory St

Number of Wet Weather Overflows: 28

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
5/22/2024	1235	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	RI, 2 day rain event
5/24/2024	1305	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	No	RI
6/01/2024	1000	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	RI, 2 day rain event
6/03/2024	1245	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	RI
6/08/2024	0830	Rob Adams	Rain	6/07/2024	0.12	RG 1	Yes	No	RI
6/13/2024	1140	Chris Birdsall	Rain	6/12/2024	0.7	Eppley Airfield	Yes	No	RI
6/16/2024	0855	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	RI
6/17/2024	1325	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	RI
6/19/2024	0925	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	RI
7/03/2024	0810	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	RI, 2 day rain event
7/05/2024	0930	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	RI

CSO 111 - Hickory St

Number of Wet Weather Overflows: 28

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
7/07/2024	0710	Chris Birdsall	Rain	7/06/2024	0.09	RG 9	Yes	No	RI
7/21/2024	0940	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	RI, 2 day rain event
8/01/2024	1310	Terence Mata	Rain	7/31/2024	1.4	RG 3	Yes	No	
8/12/2024	1045	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	
8/14/2024	1040	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	Yes	Overflow ended at 1315
8/15/2024	1035	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	

CSO 112 - Martha St

Number of Wet Weather Overflows: 8

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	1100	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	
10/13/2023	1210	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
10/26/2023	0910	Chris Birdsall	Rain	10/26/2023	0.23	RG 5	Yes	No	
12/26/2023	1125	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event.
3/22/2024	0815	Chris Birdsall	Rain	3/22/2024	0.13	RG 7	Yes	No	
4/17/2024	0700	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	
4/26/2024	0800	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
5/22/2024	1240	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	RI, 2 day rain event

CSO 114 - Grover Street

Number of Wet Weather Overflows: 28

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/13/2023	1215	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
4/26/2024	1250	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0855	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	
4/29/2024	1110	Grant Wickham	Rain	4/28/2024	0.33	RG 1	Yes	No	
5/05/2024	0950	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	RI
5/07/2024	0845	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	RI
5/14/2024	1235	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	RI, 2 day rain event
5/16/2024	1225	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	RI
5/20/2024	1130	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	RI
5/22/2024	1245	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	RI, 2 day rain event
5/24/2024	1300	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	No	RI

CSO 114 - Grover Street

Number of Wet Weather Overflows: 28

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
6/01/2024	1015	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	RI, 2 day rain event
6/03/2024	1250	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	RI
6/08/2024	0825	Rob Adams	Rain	6/07/2024	0.12	RG 1	Yes	No	RI
6/13/2024	1145	Chris Birdsall	Rain	6/12/2024	0.7	Eppley Airfield	Yes	No	RI
6/16/2024	0900	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	RI
6/17/2024	1330	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	RI
6/19/2024	0930	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	RI
6/26/2024	1130	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	RI
7/03/2024	0810	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	RI, 2 day rain event
7/05/2024	0930	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	RI
7/07/2024	0710	Chris Birdsall	Rain	7/06/2024	0.09	RG 9	Yes	No	RI

CSO 114 - Grover Street

Number of Wet Weather Overflows: 28

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
7/21/2024	0935	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	RI, 2 day rain event
8/01/2024	1320	Rob Adams	Rain	7/31/2024	1.4	RG 3	Yes	No	
8/12/2024	1050	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	
8/14/2024	1045	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	No	
8/15/2024	1040	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	
8/30/2024	1020	Chris Birdsall	Rain	8/29/2024	0.4	RG 8	Yes	No	

CSO 115 - Riverview Diversion

Number of Wet Weather Overflows: 36

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	1110	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	
10/13/2023	1220	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
10/26/2023	0900	Chris Birdsall	Rain	10/26/2023	0.23	RG 5	Yes	No	
12/26/2023	1135	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event
3/15/2024	1350	Rob Adams	Rain	3/14/2024	0.65	Eppley Airfield	Yes	No	
3/26/2024	1115	Grant Wickham	Rain	3/25/2024	0.29	RG 9	Yes	No	
4/17/2024	1155	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	
4/26/2024	1255	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0900	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	
4/29/2024	0745	Rob Adams	Rain	4/28/2024	0.33	RG 1	Yes	No	
5/01/2024	1220	Rob Adams	Rain	4/30/2024	0.28	RG 10	Yes	No	

CSO 115 - Riverview Diversion

Number of Wet Weather Overflows: 36

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
5/02/2024	1300	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	
5/05/2024	0955	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	RI
5/07/2024	0845	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	RI
5/14/2024	1240	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	RI, 2 day rain event
5/16/2024	1230	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	RI
5/20/2024	1135	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	RI
5/22/2024	1250	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	RI, 2 day rain event
5/24/2024	1255	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	No	RI
6/01/2024	1020	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	RI, 2 day rain event
6/03/2024	1255	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	RI
6/08/2024	0820	Rob Adams	Rain	6/07/2024	0.12	RG 1	Yes	No	RI

CSO 115 - Riverview Diversion

Number of Wet Weather Overflows: 36

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
6/13/2024	1150	Chris Birdsall	Rain	6/12/2024	0.7	Eppley Airfield	Yes	No	RI
6/16/2024	0905	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	RI
6/17/2024	1345	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	RI
6/19/2024	0935	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	RI
6/26/2024	1135	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	RI
7/03/2024	0810	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	RI, 2 day rain event
7/05/2024	0930	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	RI
7/07/2024	0710	Chris Birdsall	Rain	7/06/2024	0.09	RG 9	Yes	No	RI
7/21/2024	0930	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	RI, 2 day rain event
8/01/2024	1325	Rob Adams	Rain	7/31/2024	1.4	RG 3	Yes	No	
8/12/2024	1055	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	

CSO 115 - Riverview Diversion

Number of Wet Weather Overflows: 36

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
8/14/2024	1050	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	No	
8/15/2024	1045	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	
9/23/2024	1055	Chris Birdsall	Rain	9/22/2024	0.21	RG 12	Yes	No	

CSO 118 - Ohern

Number of Wet Weather Overflows: 38

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	1115	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	
10/13/2023	1225	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
10/26/2023	0845	Chris Birdsall	Rain	10/26/2023	0.23	RG 5	Yes	No	
12/26/2023	1140	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event
3/15/2024	1355	Rob Adams	Rain	3/14/2024	0.65	Eppley Airfield	Yes	No	
3/22/2024	1355	Chris Birdsall	Rain	3/22/2024	0.13	RG 7	Yes	No	
3/25/2024	1215	Chris Birdsall	Rain	3/24/2024	0.77	RG 4	Yes	No	
3/26/2024	1125	Grant Wickham	Rain	3/25/2024	0.29	RG 9	Yes	No	
4/17/2024	1200	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	
4/26/2024	1300	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0910	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	

CSO 118 - Ohern

Number of Wet Weather Overflows: 38

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
4/29/2024	1120	Grant Wickham	Rain	4/28/2024	0.33	RG 1	Yes	No	
5/01/2024	1230	Rob Adams	Rain	4/30/2024	0.28	RG 10	Yes	No	
5/02/2024	1310	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	
5/05/2024	1015	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	
5/07/2024	1155	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	
5/14/2024	1255	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	2 day event
5/16/2024	1235	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	
5/20/2024	1140	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	
5/22/2024	1255	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	2 day rain event
5/24/2024	1250	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	No	
6/01/2024	1030	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	2 day rain event

CSO 118 - Ohern

Number of Wet Weather Overflows: 38

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
6/03/2024	1315	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	
6/13/2024	1205	Chris Birdsall	Rain	6/12/2024	0.7	Eppley Airfield	Yes	No	
6/16/2024	1005	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	
6/17/2024	1345	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	
6/19/2024	0945	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	
6/26/2024	1150	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	RI
7/03/2024	0810	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	RI, 2 day rain event
7/05/2024	0930	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	RI
7/07/2024	0710	Chris Birdsall	Rain	7/06/2024	0.09	RG 9	Yes	No	RI
7/21/2024	0920	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	2 day rain event
8/01/2024	1335	Rob Adams	Rain	7/31/2024	1.4	RG 3	Yes	No	

CSO 118 - Ohern

Number of Wet Weather Overflows: 38

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
8/12/2024	1100	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	
8/14/2024	1055	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	No	
8/15/2024	1055	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	
8/30/2024	1045	Chris Birdsall	Rain	8/29/2024	0.4	RG 8	Yes	No	
9/23/2024	1105	Chris Birdsall	Rain	9/22/2024	0.21	RG 12	Yes	No	

CSO 119 - Monroe Street

Number of Wet Weather Overflows: 44

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	1125	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	
10/13/2023	1235	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
10/26/2023	0835	Chris Birdsall	Rain	10/26/2023	0.23	RG 5	Yes	No	
11/21/2023	0730	Terence Mata	Rain	11/20/2023	0.3	RG 2	Yes	No	
12/17/2023	0905	Chris Birdsall	Rain	12/16/2023	0.08	RG 10	Yes	No	
12/26/2023	1155	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event.
1/17/2024	1430	Chris Birdsall	Snow Melt				Yes	No	
3/08/2024	1405	Grant Wickham	Rain	3/08/2024	0.33	Eppley Airfield	Yes	No	
3/15/2024	1405	Rob Adams	Rain	3/14/2024	0.65	Eppley Airfield	Yes	No	
3/22/2024	1405	Chris Birdsall	Rain	3/22/2024	0.13	RG 7	Yes	No	
3/25/2024	1230	Chris Birdsall	Rain	3/24/2024	0.77	RG 4	Yes	No	

CSO 119 - Monroe Street

Number of Wet Weather Overflows: 44

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
3/26/2024	0800	Grant Wickham	Rain	3/25/2024	0.29	RG 9	Yes	No	
4/17/2024	1220	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	
4/18/2024	1240	Grant Wickham	Rain	4/18/2024	0.2	RG 12	Yes	No	
4/26/2024	1315	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0930	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	
4/29/2024	1140	Grant Wickham	Rain	4/28/2024	0.33	RG 1	Yes	No	
5/01/2024	1245	Rob Adams	Rain	4/30/2024	0.28	RG 10	Yes	No	
5/02/2024	1320	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	
5/05/2024	1040	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	
5/07/2024	1210	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	
5/14/2024	1330	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	2 day event

CSO 119 - Monroe Street

Number of Wet Weather Overflows: 44

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
5/16/2024	1245	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	
5/20/2024	1150	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	
5/22/2024	1310	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	2 day rain event
6/01/2024	1135	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	2 day rain event, had to call in jet, made entry to clear grit.
6/03/2024	1330	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	
6/08/2024	0745	Rob Adams	Rain	6/07/2024	0.12	RG 1	Yes	No	
6/13/2024	1220	Chris Birdsall	Rain	6/12/2024	0.7	Eppley Airfield	Yes	No	
6/16/2024	1020	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	
6/17/2024	1405	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	
6/19/2024	1000	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	
6/26/2024	1210	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	Yes	

CSO 119 - Monroe Street

Number of Wet Weather Overflows: 44

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
7/03/2024	1105	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	2 day rain event
7/05/2024	1500	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	
7/07/2024	0840	Chris Birdsall	Rain	7/06/2024	0.09	RG 9	Yes	No	
7/21/2024	1040	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	2 day rain event
8/01/2024	1345	Rob Adams	Rain	7/31/2024	1.4	RG 3	Yes	No	
8/08/2024	1035	Chris Birdsall	Rain	8/08/2024	0.1	RG 8	Yes	No	
8/12/2024	1120	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	
8/14/2024	1100	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	No	
8/15/2024	1110	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	
8/30/2024	1105	Chris Birdsall	Rain	8/29/2024	0.4	RG 8	Yes	No	
9/23/2024	1125	Chris Birdsall	Rain	9/22/2024	0.21	RG 12	Yes	No	

CSO 121 - 7th & Jones

Number of Wet Weather Overflows: 33

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	1040	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	
10/13/2023	1155	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
10/26/2023	0925	Chris Birdsall	Rain	10/26/2023	0.23	RG 5	Yes	No	
12/26/2023	0705	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event. Confirmed through waterspout.
3/15/2024	1245	Rob Adams	Rain	3/14/2024	0.65	Eppley Airfield	Yes	No	
3/25/2024	1140	Chris Birdsall	Rain	3/24/2024	0.77	RG 4	Yes	No	
3/26/2024	1055	Grant Wickham	Rain	3/25/2024	0.29	RG 9	Yes	No	
4/17/2024	1130	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	
4/26/2024	1230	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0835	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	
4/29/2024	1045	Grant Wickham	Rain	4/28/2024	0.33	RG 1	Yes	No	

CSO 121 - 7th & Jones

Number of Wet Weather Overflows: 33

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
5/02/2024	1235	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	
5/05/2024	0920	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	
5/07/2024	1105	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	
5/14/2024	1155	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	2 day event
5/16/2024	1155	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	
5/22/2024	1120	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	2 day rain event
5/24/2024	1040	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	No	
6/01/2024	0945	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	2 day rain event
6/03/2024	1230	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	
6/13/2024	1035	Chris Birdsall	Rain	6/12/2024	0.7	Eppley Airfield	Yes	No	
6/16/2024	0840	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	

CSO 121 - 7th & Jones

Number of Wet Weather Overflows: 33

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
6/17/2024	1310	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	
6/19/2024	0915	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	
6/26/2024	1110	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	RI
7/03/2024	0810	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	RI, 2 day rain event
7/05/2024	0930	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	RI
7/07/2024	0710	Chris Birdsall	Rain	7/06/2024	0.09	RG 9	Yes	No	RI
7/21/2024	0820	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	RI, 2 day rain event
8/01/2024	1300	Rob Adams	Rain	7/31/2024	1.4	RG 3	Yes	No	
8/12/2024	1035	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	
8/14/2024	1030	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	No	
8/15/2024	1025	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	

CSO 202 - 72nd & Bedford

Number of Wet Weather Overflows: 27

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	0935	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	Waterspout confirmed
10/13/2023	0820	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
12/26/2023	0700	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event.
3/15/2024	1030	Rob Adams	Rain	3/14/2024	0.65	Eppley Airfield	Yes	No	
3/25/2024	0720	Chris Birdsall	Rain	3/24/2024	0.77	RG 4	Yes	No	
3/26/2024	0800	Chris Birdsall	Rain	3/25/2024	0.29	RG 9	Yes	No	
4/17/2024	1025	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	
4/26/2024	1020	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0725	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	
5/01/2024	1045	Rob Adams	Rain	4/30/2024	0.28	RG 10	Yes	No	
5/02/2024	1105	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	

CSO 202 - 72nd & Bedford

Number of Wet Weather Overflows: 27

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
5/05/2024	0725	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	
5/07/2024	0955	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	
5/14/2024	1000	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	2 day event
5/16/2024	1100	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	
5/22/2024	0940	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	RI, 2 day rain event
6/01/2024	0745	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	2 day rain event
6/03/2024	1045	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	
6/16/2024	0720	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	
6/19/2024	0805	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	
6/26/2024	0920	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	
7/03/2024	0900	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	2 day rain event

CSO 202 - 72nd & Bedford

Number of Wet Weather Overflows: 27

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
7/21/2024	0655	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	2 day rain event
8/01/2024	0930	Rob Adams	Rain	7/31/2024	1.4	RG 3	Yes	No	
8/12/2024	0925	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	
8/14/2024	0930	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	No	
8/15/2024	0925	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	

CSO 203 - 69th & Evans St

Number of Wet Weather Overflows: 11

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
12/26/2023	0930	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event
4/26/2024	0800	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0730	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	
4/29/2024	0945	Grant Wickham	Rain	4/28/2024	0.33	RG 1	Yes	No	
5/05/2024	0735	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	
5/16/2024	1105	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	
5/22/2024	0945	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	2 day rain event
6/01/2024	0755	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	2 day rain event
6/26/2024	0925	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	
7/03/2024	0905	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	2 day rain event
8/01/2024	0945	Rob Adams	Rain	7/31/2024	1.4	RG 3	Yes	No	Device stuck in gate

CSO 204 - 63rd & Ames Ave

Number of Wet Weather Overflows: 40

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	0950	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	
10/13/2023	0840	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
10/26/2023	1005	Chris Birdsall	Rain	10/26/2023	0.23	RG 5	Yes	No	
11/21/2023	0915	Terence Mata	Rain	11/20/2023	0.3	RG 2	Yes	No	
12/17/2023	0720	Chris Birdsall	Rain	12/16/2023	0.08	RG 10	Yes	No	
12/26/2023	0955	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event
3/15/2024	1050	Rob Adams	Rain	3/14/2024	0.65	Eppley Airfield	Yes	No	
3/22/2024	1020	Chris Birdsall	Rain	3/22/2024	0.13	RG 7	Yes	No	
3/25/2024	1045	Chris Birdsall	Rain	3/24/2024	0.77	RG 4	Yes	No	
3/26/2024	0940	Grant Wickham	Rain	3/25/2024	0.29	RG 9	Yes	No	
4/17/2024	1035	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	

CSO 204 - 63rd & Ames Ave

Number of Wet Weather Overflows: 40

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
4/18/2024	1120	Grant Wickham	Rain	4/18/2024	0.2	RG 12	Yes	No	
4/26/2024	1045	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0745	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	
4/29/2024	0955	Grant Wickham	Rain	4/28/2024	0.33	RG 1	Yes	No	
5/01/2024	1110	Rob Adams	Rain	4/30/2024	0.28	RG 10	Yes	No	
5/02/2024	1130	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	
5/05/2024	0755	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	
5/07/2024	1010	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	
5/14/2024	1030	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	2 day event
5/16/2024	1115	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	
5/20/2024	0945	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	

CSO 204 - 63rd & Ames Ave

Number of Wet Weather Overflows: 40

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
5/22/2024	1000	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	2 day rain event
5/24/2024	0945	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	No	
6/01/2024	0850	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	2 day rain event
6/03/2024	1100	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	
6/08/2024	1005	Rob Adams	Rain	6/07/2024	0.12	RG 1	Yes	No	
6/13/2024	0930	Chris Birdsall	Rain	6/12/2024	0.7	Eppley Airfield	Yes	No	
6/16/2024	0740	Terence Mata	Rain	6/15/2024	0.55	RG 12	Yes	No	
6/17/2024	1150	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	
6/19/2024	0815	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	
6/26/2024	0935	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	
7/03/2024	0910	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	2 day rain event

CSO 204 - 63rd & Ames Ave

Number of Wet Weather Overflows: 40

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
7/05/2024	1145	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	
7/21/2024	0720	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	2 day rain event
8/12/2024	0940	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	
8/14/2024	0940	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	No	
8/15/2024	0935	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	
8/21/2024	1005	Terence Mata	Rain	8/20/2024	0.1	RG 3	Yes	No	
8/30/2024	0840	Chris Birdsall	Rain	8/29/2024	0.4	RG 8	Yes	No	

CSO 205 - 64th & Dupont St

Number of Wet Weather Overflows: 24

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	0910	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	Waterspout confirmed
10/13/2023	0800	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
12/26/2023	0710	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event. Confirmed through waterspout.
4/26/2024	0800	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0600	Terence Mata	Rain	4/26/2024	1.14	RG 4	Yes	No	
5/02/2024	1030	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	
5/05/2024	0655	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	
5/07/2024	0925	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	
5/14/2024	0915	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	2 day event
5/16/2024	0730	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	
5/22/2024	0900	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	RI, 2 day rain event

CSO 205 - 64th & Dupont St

Number of Wet Weather Overflows: 24

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
5/24/2024	0900	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	No	
6/01/2024	0715	Rob Adams	Rain	5/30/2024	0.94	RG 8	Yes	No	2 day rain event
6/03/2024	1010	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	
6/08/2024	1110	Rob Adams	Rain	6/07/2024	0.12	RG 1	Yes	No	Device missing
6/17/2024	1035	Terence Mata	Rain	6/17/2024	0.1	RG 4	Yes	No	
6/19/2024	0705	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	
6/26/2024	0850	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	
7/03/2024	0830	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	2 day rain event
7/21/2024	0635	Chris Birdsall	Rain	7/19/2024	1.08	RG 4	Yes	No	2 day rain event
8/01/2024	0900	Rob Adams	Rain	7/31/2024	1.4	RG 3	Yes	No	
8/12/2024	0905	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	

CSO 205 - 64th & Dupont St

Number of Wet Weather Overflows: 24

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
8/14/2024	0900	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	No	
8/15/2024	0855	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	

CSO 211 - 66th & Pacific St

Number of Wet Weather Overflows: 4

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
5/16/2024	1040	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	
5/22/2024	0915	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	2 day rain event
7/05/2024	1100	Terence Mata	Rain	7/04/2024	0.23	RG 9	Yes	No	
8/12/2024	0915	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	

CSO 212 - 64th & Woolworth

Number of Wet Weather Overflows: 29

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
10/04/2023	0915	Chris Birdsall	Rain	10/03/2023	1.48	RG 10	Yes	No	
10/13/2023	0805	Rob Adams	Rain	10/12/2023	1.05	RG 10	Yes	No	
10/26/2023	1045	Chris Birdsall	Rain	10/26/2023	0.23	RG 5	Yes	No	
12/26/2023	0855	Rob Adams	Rain	12/24/2023	0.87	RG 4	Yes	No	Two day rain event
3/15/2024	1000	Rob Adams	Rain	3/14/2024	0.65	Eppley Airfield	Yes	No	TV contractor televising line. Need to check if they reset device
3/22/2024	0940	Chris Birdsall	Rain	3/22/2024	0.13	RG 7	Yes	No	
3/25/2024	0945	Chris Birdsall	Rain	3/24/2024	0.77	RG 4	Yes	No	
4/17/2024	0930	Chris Birdsall	Rain	4/16/2024	0.39	RG 11	Yes	No	
4/26/2024	0955	Chris Birdsall	Rain	4/26/2024	0.53	RG 2	Yes	No	
4/27/2024	0700	Rob Adams	Rain	4/26/2024	1.14	RG 4	Yes	No	
4/29/2024	0915	Grant Wickham	Rain	4/28/2024	0.33	RG 1	Yes	No	

CSO 212 - 64th & Woolworth

Number of Wet Weather Overflows: 29

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
5/02/2024	1040	Rob Adams	Rain	5/02/2024	0.52	RG 10	Yes	No	
5/05/2024	0705	Rob Adams	Rain	5/04/2024	0.96	RG 3	Yes	No	
5/07/2024	0930	Chris Birdsall	Rain	5/06/2024	0.58	RG 1	Yes	No	
5/14/2024	0920	Rob Adams	Rain	5/12/2024	0.98	Eppley Airfield	Yes	No	Mh buried by construction, 2 day event
5/16/2024	1035	Chris Birdsall	Rain	5/15/2024	1.15	RG 1	Yes	No	Mh buried by construction
5/20/2024	0900	Chris Birdsall	Rain	5/19/2024	0.22	RG 1	Yes	No	Road construction preventing access
5/22/2024	0910	Grant Wickham	Rain	5/20/2024	7.72	RG 3	Yes	No	2 day rain event
5/24/2024	0910	Chris Birdsall	Rain	5/24/2024	0.63	RG 4	Yes	No	Construction covered with mud and gravel
6/03/2024	1020	Chris Birdsall	Rain	6/02/2024	0.95	RG 7	Yes	No	
6/19/2024	0750	Chris Birdsall	Rain	6/18/2024	0.42	RG 4	Yes	No	
6/26/2024	0900	Chris Birdsall	Rain	6/25/2024	1.18	RG 3	Yes	No	

CSO 212 - 64th & Woolworth

Number of Wet Weather Overflows: 29

Inspection Date	Inspection Time	Inspection Crew	Inspection Reason	Precipitation Date	Precipitation Amount	Rain Gauge	Overflow Occurred	Overflowing at Inspection	Inspection Comments
7/03/2024	0835	Grant Wickham	Rain	7/01/2024	3.73	Eppley Airfield	Yes	No	2 day rain event
8/01/2024	0910	Rob Adams	Rain	7/31/2024	1.4	RG 3	Yes	No	
8/12/2024	0910	Terence Mata	Rain	8/12/2024	2.04	RG 12	Yes	No	
8/14/2024	0905	Grant Wickham	Rain	8/14/2024	2.58	RG 8	Yes	No	
8/15/2024	0900	Chris Birdsall	Rain	8/14/2024	0.96	RG 8	Yes	No	
8/30/2024	0800	Chris Birdsall	Rain	8/29/2024	0.4	RG 8	Yes	No	
9/23/2024	0905	Chris Birdsall	Rain	9/22/2024	0.21	RG 12	Yes	No	

Report Totals

Total Wet Weather Overflows: 585

Date Exported: 10/7/2024 10:11 AM

Attachment F – In-Stream Monitoring Results

2023 SEASON 3 - DRY - SEPTEMBER 1ST TO NOVEMBER 30TH							
PARAMETER/SITE	CC - 2	LPC - 3	CC - 1	BPC - 3	LPC-1	BPC-4	PC-1
DATE	9/29/2023	9/29/2023	9/29/2023	9/29/2023	9/29/2023	9/29/2023	9/29/2023
TIME	10:15	11:00	10:45	12:35	12:00	11:35	13:15
FIELD TEMP, C°	22.8	22.1	22.3	24.8	23.8	22.2	25.9
FIELD CONDUCTIVITY (mMHO/cm)	885	766	615	826	943	763	780
FIELD pH	7.59	7.66	8.19	7.51	7.44	7.61	7.40
FIELD DO (%)	56%	60%	65%	84%	91%	76%	94%
FIELD DO (mg/L)	4.85	5.22	5.65	6.95	7.65	6.59	7.62
BOD (mg/L)	1.6	1.6	4.2	1.8	2	1.6	<
TSS (mg/L)	<	10	8	10	5	30	14
Total Coliforms (MPN/100ml)	15530.0	15530.0	15600.0	13100.0	17330.0	10900.0	12030.0
E. coli (Cfu/100ml)	327.0	571.0	1565.0	311.0	292.0	393.0	211.0
Solids or Foam Present?	NO	NO	YES	NO	NO	NO	NO
2023 SEASON 3 - WET - SEPTEMBER 1ST TO NOVEMBER 30TH							
PARAMETER/SITE	CC - 2	LPC - 3	CC - 1	BPC - 3	LPC-1	BPC-4	PC-1
DATE	11/20/2023	11/20/2023	11/20/2023	11/20/2023	11/20/2023	11/20/2023	11/20/2023
TIME	9:25	10:10	9:55	11:55	11:25	10:40	12:25
FIELD TEMP, C°	10.1	8.8	8.6	8.3	8.6	8.7	8.4
FIELD CONDUCTIVITY (mMHO/cm)	738	765	732	804	725	7	732
FIELD pH	7.82	7.66	7.45	7.56	8.46	8.15	8.16
FIELD DO (%)	72%	85%	71%	93%	89%	84%	93%
FIELD DO (mg/L)	8.10	9.92	8.23	10.91	10.33	9.76	10.87
BOD (mg/L)	33.7	44.1	41.2	18.9	19.5	19.8	14.3
TSS (mg/L)	14	32	14	36	24	46	52
Total Coliforms (MPN/100ml)	285100.0	83900.0	93400.0	113700.0	80100.0	90800.0	77010.0
E. coli (Cfu/100ml)	88800.0	18700.0	30900.0	28800.0	24100.0	20100.0	15530.0
Solids or Foam Present?	YES	YES	YES	NO	YES	YES	YES

[a] Monitoring sites defined in Table 7-1.

[b] Lab dilution mix not high enough to accurately report parameter value.

Notes:

< = parameter value is less than the detection limit.

°C = degree(s) Celsius

BOD = biochemical oxygen demand

cfu = colony forming units

DO = dissolved oxygen

mMHO/cm = millimho per centimeter

MPN/100 mL = most probable number per 100 milliliters

2024 SEASON 1 - DRY - MARCH 1ST TO MAY 31ST							
PARAMETER/SITE	CC - 2	LPC - 3	CC - 1	BPC - 3	LPC-1	BPC-4	PC-1
DATE	4/12/2024	4/12/2024	4/12/2024	4/12/2024	4/12/2024	4/12/2024	4/12/2024
TIME	10:25	11:20	11:00	12:45	12:25	12:00	13:15
FIELD TEMP, C°	12.5	12.3	12.5	15.1	13.8	12.8	14.1
FIELD CONDUCTIVITY (mMHO/cm)	1930	864	1402	857	988	830	869
FIELD pH	8.26	8.40	8.15	8.71	8.40	8.28	8.51
FIELD DO (%)	92%	86%	83%	142%	108%	80%	97%
FIELD DO (mg/L)	9.78	9.16	8.88	14.28	11.18	8.44	9.98
BOD (mg/L)	4.4	2.4	4.2	3.7	2.5	3.9	4.1
TSS (mg/L)	13	26	7	10	8	24	11
Total Coliforms (MPN/100ml)	435.2	365.4	1046.0	178.9	648.8	488.4	214.3
E. coli (Cfu/100ml)	10.8	38.4	44.8	15.8	50.4	26.5	5.2
Solids or Foam Present?	NO	NO	NO	NO	NO	NO	NO
2024 SEASON 1 - WET - MARCH 1ST TO MAY 31							
PARAMETER/SITE	CC - 2	LPC - 3	CC - 1	BPC - 3	LPC-1	BPC-4	PC-1
DATE	3/14/2024	3/14/2024	3/14/2024	3/14/2024	3/14/2024	3/14/2024	3/14/2024
TIME	10:00	10:55	10:35	12:35	12:10	11:35	13:15
FIELD TEMP, C°	10.1	10.6	10.3	10.4	10.4	16.6	11.4
FIELD CONDUCTIVITY (mMHO/cm)	1675	1012	915	825	713	788	1013
FIELD pH	8.30	8.28	7.95	12.38	10.17	8.19	8.17
FIELD DO (%)	83%	75%	101%	90%	96%	96%	98%
FIELD DO (mg/L)	9.36	8.30	11.32	10.02	10.70	9.34	10.71
BOD (mg/L)	18.9	19.8	20	18.6	18.9	17.6	15.5
TSS (mg/L)	268	476	384	867	448	708	412
Total Coliforms (MPN/100ml)	24200.0	32300.0	27900.0	75400.0	172200.0	24600.0	7701.0
E. coli (Cfu/100ml)	7270.0	8164.0	5794.0	158.0	43900.0	5172.0	816.0
Solids or Foam Present?	YES	YES	YES	YES	YES	YES	YES

[a] Monitoring sites defined in Table 7-1.

[b] Lab dilution mix not high enough to accurately report parameter value.

Notes:

< = parameter value is less than the detection limit.

°C = degree(s) Celsius

BOD = biochemical oxygen demand

cfu = colony forming units

DO = dissolved oxygen

mMHO/cm = millimho per centimeter

MPN/100 mL = most probable number per 100 milliliters

2024 SEASON 2 - DRY - JUNE 1ST TO AUGUST 31ST							
PARAMETER/SITE	CC - 2	LPC - 3	CC - 1	BPC - 3	LPC-1	BPC-4	PC-1
DATE	8/27/2024	8/27/2024	8/27/2024	8/27/2024	8/27/2024	8/27/2024	8/27/2024
TIME	8:50	9:55	9:30	11:10	10:50	10:25	11:50
FIELD TEMP, C°	24.4	27.3	26.2	28.1	26.9	27.1	29.0
FIELD CONDUCTIVITY (mMHO/cm)	1124	723	946	803	855	782	735
FIELD pH	7.99	8.16	8.19	8.49	8.20	8.42	8.40
FIELD DO (%)	79%	80%	73%	105%	97%	93%	96%
FIELD DO (mg/L)	6.60	6.30	5.92	8.19	7.70	7.40	7.39
BOD (mg/L)	1.5	2.2	2.2	2.4	2.5	1.5	2.4
TSS (mg/L)	5	37	13	22	15	27	16
Total Coliforms (MPN/100ml)	83900.0	14140.0	63700.0	13000.0	24200.0	17330.0	2755.0
E. coli (Cfu/100ml)	1553.0	1733.0	613.1	648.8	920.8	435.2	248.1
Solids or Foam Present?	NO	NO	NO	NO	NO	NO	NO
2024 SEASON 2 - WET - JUNE 1ST TO AUGUST 31ST							
PARAMETER/SITE	CC - 2	LPC - 3	CC - 1	BPC - 3	LPC-1	BPC-4	PC-1
DATE	8/12/2024	8/12/2024	8/12/2024	8/12/2024	8/12/2024	8/12/2024	8/12/2024
TIME	9:45	10:50	10:15	1:00	12:30	11:30	1:30
FIELD TEMP, C°	19.6	19.7	19.2	20.9	21.1	20.4	21.3
FIELD CONDUCTIVITY (mMHO/cm)	302	283	179	206	174	234	227
FIELD pH	8.22	7.79	8.08	7.89	7.88	7.82	7.97
FIELD DO (%)	69%	68%	69%	74%	76%	70%	77%
FIELD DO (mg/L)	6.30	6.24	6.35	6.61	6.73	6.33	6.85
BOD (mg/L)	5.2	8	6.5	6.1	6.8	6.4	6.1
TSS (mg/L)	16	296	50	180	120	218	792
Total Coliforms (MPN/100ml)	579400.0	>2419600	>2419600	1733000.0	>2419600	1986000.0	>241960
E. coli (Cfu/100ml)	6488.0	44300.0	19860.0	17330.0	18300.0	19860.0	19860.0
Solids or Foam Present?	NO	YES	NO	NO	NO	NO	NO

[a] Monitoring sites defined in Table 7-1.

[b] Lab dilution mix not high enough to accurately report parameter value.

Notes:

< = parameter value is less than the detection limit.

°C = degree(s) Celsius

BOD = biochemical oxygen demand

cfu = colony forming units

DO = dissolved oxygen

mMHO/cm = millimho per centimeter

MPN/100 mL = most probable number per 100 milliliters