CSO!
Clean Solutions for Omaha

Quarterly Report | **2022 Q3**

July – September 2022

Omaha Combined Sewer Overflow Control Program

Implementation Phase

CSO!
Clean Solutions for Omaha

CONTENTS

PROGRAM MISSION

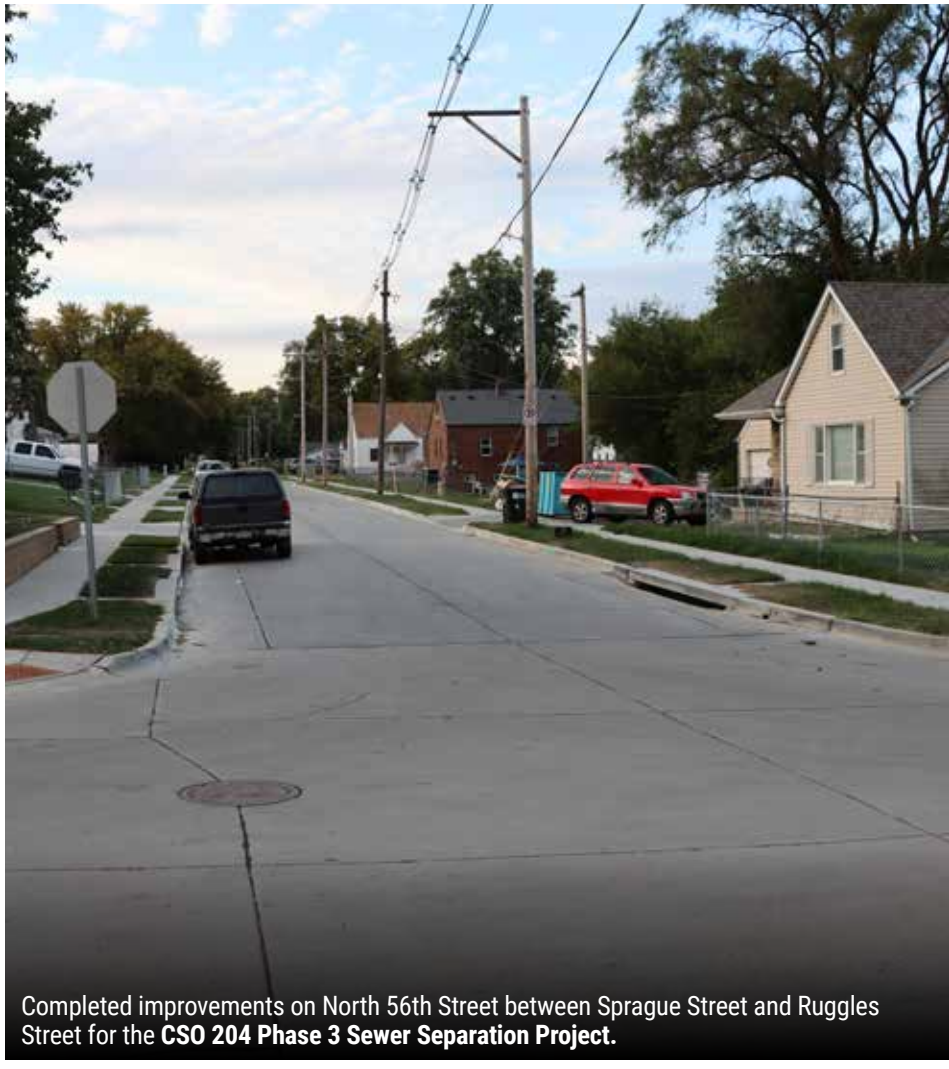
The Program Management Team's job is to save money for ratepayers and do what is best for the community as we meet the objectives and requirements of the Clean Water Act.

For additional information regarding the Omaha CSO Program, please visit ***www.OmahaCSO.com*** or call the CSO Program Information Line at 402-341-0235.

ON THE COVER: **Saddle Creek Retention Treatment Basin Project** construction is about 90% complete with a Substantial Completion expected Q2 2023.

A City of Omaha
Public Works Initiative

Construction activities continue on North 65th Street & Binney Street looking south, for the **Cole Creek 203 Sewer Separation Project.**



Completed improvements on North 56th Street between Sprague Street and Ruggles Street for the **CSO 204 Phase 3 Sewer Separation Project.**

Nicholas Street Sewer Extension, Phase 3B Project construction continues on 16th Street south of Burdette, looking south.

Papillion Creek North (PCN) 210 Sewer Separation Project construction continues on 65th Street and Lake Street, looking north.

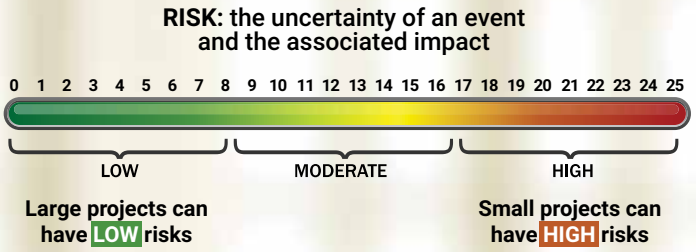
3RD QUARTER HIGHLIGHTS

- A **Cost of Service Study** has been completed; approval is anticipated in Q4, and information will be provided in the Q1 2023 report.
- **Forest Lawn Creek Inflow Removal and Outflow Storm Sewer Project** construction contract was awarded in Q2 2022.
- **Blake Street Lift Station Improvements Project** construction contract was approved as a change order to the existing **Riverview Lift Station** construction contract. Expected construction start is Q4 2022.
- Final design is complete for the **Hickory Street Sanitary Sewer Service Relocation**, with bid advertisement anticipated in Q4 2022.
- Final design is nearly complete for the **CSO 212 – 64th Avenue and William Street Project**; project construction bid advertisement is expected in Q4 2022 and construction notice-to-proceed in Q3 2023.
- Final design is in progress for the **Cole Creek CSO 202 Phase 2 – 70th Avenue and Spencer Street Project**; 90% design documents are complete. This project is now on-hold pending utility relocations.
- Thirty-percent design documents were received and are under review for the **CSO 119 South Barrel Conversion and Sewer Separation Project**. The City will determine how to proceed with the next phases of design.
- Preliminary design is in progress for **CSO 204 Phase 4a – 57th Street & Pratt Street** and **Phase 4b – 56th Street and Bedford Avenue Projects**, with the 30% design documents expected in early 2023.
- Conceptual design for the **East Cole Creek Interceptor Rehabilitation Project** is anticipated to begin Q4 2022.
- Electrical equipment delivery delays are impacting the completion of the **Missouri River Water Resource Recovery Facility – Transfer Lift Station Pump Replacement Project**. Bridge crane work is progressing. Substantial Completion is anticipated in Q4 2022.
- The **Burt-Izard Lift Station Improvements Project** construction is nearing final completion.
- **Riverview Lift Station Improvements Project** construction is about 94% complete, but delayed due to equipment deliveries.
- **Monroe Street Lift Station Improvements Project** construction is 20% complete, with a Substantial Completion expected Q1 2024. The by-pass pumping system commenced operation, allowing for removal and replacement of existing screens and other equipment.

Study & Design | Bid/ Construction | Completed | Future Project

CSO PERSPECTIVES: Managing Risk

All Projects Have Risk



All projects have elements of risk. As the City works to deliver the many projects that make up the CSO Program, managing risk is critical to success. The CSO Program proactively manages risk on a project-by-project basis by identifying, understanding, and mitigating risks that could impact budget and schedules.

RISKS

A project risk is defined as "an uncertain event that may or may not occur during a project" and can either positively or negatively impact project cost or schedule. For example, a sewer line may be proposed to be placed underneath existing railroad tracks. Risks could include potential delays due to the need for coordination and cooperation from the railroad or additional costs required for more complex construction methods. In this example, risk could be eliminated during the design phase by re-routing the sewer line away from existing railroad tracks.

PROGRAM RISK REGISTER

The CSO Program Risk Register was initially created in 2008 and is periodically reviewed and updated to include current risk information. This allows for informed decisions to be made across the CSO Program and creates consistency in risk management activities. Updated risk register information is then applied to new projects to track and manage decisions related to risk, benefiting from lessons learned on previous efforts.

PROJECT RISK REGISTERS

The project risk register is provided to design consultants at project kick-off and is reviewed and updated throughout design. Just as no two projects are the same, project risks vary and are tailored for each unique effort. Once risks are identified, they are scored and categorized based on probability (the likelihood of occurrence) and impacts to cost and schedule. Once identified, risks can be

Risk Factor Scores and Composite Risk Levels

Risk Factor Score	Very Low 1	Low 2	Medium 3	High 4	Very High 5
Probability Range	<10%	10–25%	25–75%	75–90%	>90%
Cost Range	<0.5%	0.5–1%	1–5%	5–10%	>10%
Time Range (months)	<0.5%	0.5–1%	1–10%	10–20%	>20%
Rating	<5		5–10	≥10	
Score = ((Cost + Time)/2) x Probability					

mitigated, transferred, avoided or accepted. Risks are also identified as either city-owned or contractor-owned. Eliminating risk is not always possible and there are instances where the contractor or City may need to accept a risk.

Design decisions are ultimately reflected in project plans and specifications. Once design is complete, the Risk Register is provided to the construction manager to monitor risk management activities during construction.

BENEFITS

Identifying risks early in project development allows for proactive decisions to be made about how to best address risk and potentially reduce costs. Tracking the potential for risk, as well as actual risks encountered on prior efforts, helps project teams improve future designs and reduce risk.

Since utility conflicts are often identified project risks, the City has recently assigned additional resources to review project design deliverables with a focus on utility conflicts and coordination. These items, identified in design, carry forward through construction. This review helps to identify potential utility conflicts and other risks that can be mitigated during design more easily than after a construction contractor has been engaged. Clearly defined utility risk items in project bid documents reduce contractor uncertainty and help to forecast expected construction bid pricing more accurately. Proactively defining and managing design risks benefits the CSO Program's bottom line.

Risk Mitigation Approach/Risk Ownership

Risk Mitigation Approach	Definition
Mitigate	Minimizes the probability and/or cost and schedule impact of the risk
Transfer	Shifts the risk to another party
Avoid	Eliminates the probability and/or cost and schedule impact of the risk
Accept	The risk is outside of the Project Team's influence or the risk is minimal, and a mitigation strategy will not be implemented

PROGRAM GOALS

Goal 1:
Regulatory Compliance
Meet specific regulatory requirements as identified by the Environmental Protection Agency and Nebraska Department of Environment and Energy.

- Complete implementation of CSO projects within identified schedule.
- Reduce pollutant discharges to the Missouri River and Papillion Creek.

Goal 3:
Community Acceptance
Maintain continuous public dialogue, provide information and pursue opportunities for multiple benefits in CSO projects.

Goal 2:
Economic Affordability
Minimize cost impacts to ratepayers by completing CSO projects within or under budget.

PROGRAM MISSION

The CSO Program's mission is to save money for ratepayers and do what is best for the community as we meet the objectives and requirements of the Clean Water Act.

Goal 1: Regulatory Compliance

Regulatory Compliance includes two items: 1) implement projects within the identified schedule and 2) reduce pollutant discharges to the Missouri River and Papillion Creek.

55 Long Term Control Plan Projects

Delivered through

80 Construction Package Contracts

Multiple packages provide more opportunities for local contractors and efficient delivery.

PROJECT STATUS:

** These numbers reflect the 2021 Long Term Control Plan Update*

Study & Design	Bid/ Construction/ Complete	Future
6 Projects	36 Projects	13* Projects
7 Contracts	60 Contracts	13* Contracts

PROJECT DELIVERY SCHEDULE FOR ACTIVE PROJECTS*

LONG TERM CONTROL PLAN PROJECTS	2022	2023	2024	2025	2026
Saddle Creek Retention Treatment Basin (SCRTB)					
Cole Creek CSO 204 Area – Phase 3 Combined Sewer Separation					
Papillion Creek North (PCN) 210 Sewer Separation (Change order is likely extending construction)					
Cole Creek CSO 203 Sewer Separation Project					
Nicholas Street Sewer Extension – Phase 3B					
Forest Lawn Creek Inflow Removal and Outfall Storm Sewer					
CSO 212 – 64th Avenue William Street					
CSO 119 South Barrel Conversion & Sewer Separation***					
CSO 202 Phase 2 – 70th Avenue & Spencer Street					
East Cole Creek Interceptor Rehabilitation					
CSO 204 Phase 4a – 57th Street & Pratt Street					
CSO 204 Phase 4b – 56th Street & Bedford Avenue (Construction in 2029)					
61st and Radial Storm Sewer (Construction in 2028)					
SYSTEM RELIABILITY PROJECTS**	**2022**	**2023**	**2024**	**2025**	**2026**
Missouri River Water Resource Recovery Facility (MRWRRF) - Transfer Lift Station Pump Replacement					
Burt-Izard Lift Station Improvements					
Riverview Lift Station Replacement					
Monroe Street Lift Station Improvements					
Blake Street Lift Station Improvements Project					

Design/Bidding

Construction (from construction notice-to-proceed through substantial or operationally complete)

*Active projects in design and/or construction.
**Projects related to the CSO Program that enhance the operational reliability of the system.
***Project likely delayed; schedule subject to change.

SCHEDULE:

The 2021 Long Term Control Plan (LTCP) Update was approved by the Nebraska Department of Environment and Energy (NDEE) in August 2021. The Project Delivery Schedule for Active Projects (above) is consistent with the approved LTCP Update and reflects the 10-year extension (included in an Amendment to the City's Consent Order with NDEE) for CSO Program completion. A new CSO permit has yet to be issued.

GOAL 2:
Economic Affordability

The CSO Program actively seeks opportunities to minimize impacts to ratepayers.

City Continues to Look for Program Savings

The City of Omaha is finalizing a Grant Agreement with the Nebraska Department of Environment and Energy (NDEE) for the CSO Program's **Monroe Street Lift Station Improvements Project**. This grant funding is from the Sewer Overflow and Stormwater Reuse Municipal Grant Program (OSG Program). Funding is provided through the EPA and is described as:

> *This new grant program will provide funding for critical stormwater infrastructure projects in communities including combined sewer overflows (CSO) and sanitary sewer overflows (SSO).*

The City of Omaha worked with NDEE officials and identified the Monroe Street Lift Station as a good project for this grant funding. NDEE has identified $749,700 in grant funding for this project. This grant can be utilized with other received loan funds, including a low-interest rate State Revolving Fund (SRF) loan.

This project cost savings directly reduces CSO Program costs and sewer rates, benefiting ratepayers.

RATEPAYER ASSISTANCE

When the Long Term Control Plan was approved, a ratepayer assistance plan was developed to help low income and fixed income households with the sewer rate increases necessary to fund the Program.

Ratepayers are eligible if they receive Low Income Heat and Energy Assistance Program (LIHEAP) from their utility. This has kept administrative costs to a minimum and provided the maximum benefit to those who need it.

For information about the sewer use fee assistance program call **402-444-3908.**
To apply for Nebraska LIHEAP, which qualifies you for sewer use fee assistance, call **402-595-1258**.

From January through September 2022, over **$4,878,000** has been provided in assistance; for a total of **$19,225,000**

GOAL 3:
Community Acceptance

The CSO Program supports ongoing dialogue with the public through timely project updates. Close coordination with impacted neighborhoods, businesses and small business contractors is also provided to highlight Program benefits and opportunities.

World O! Water

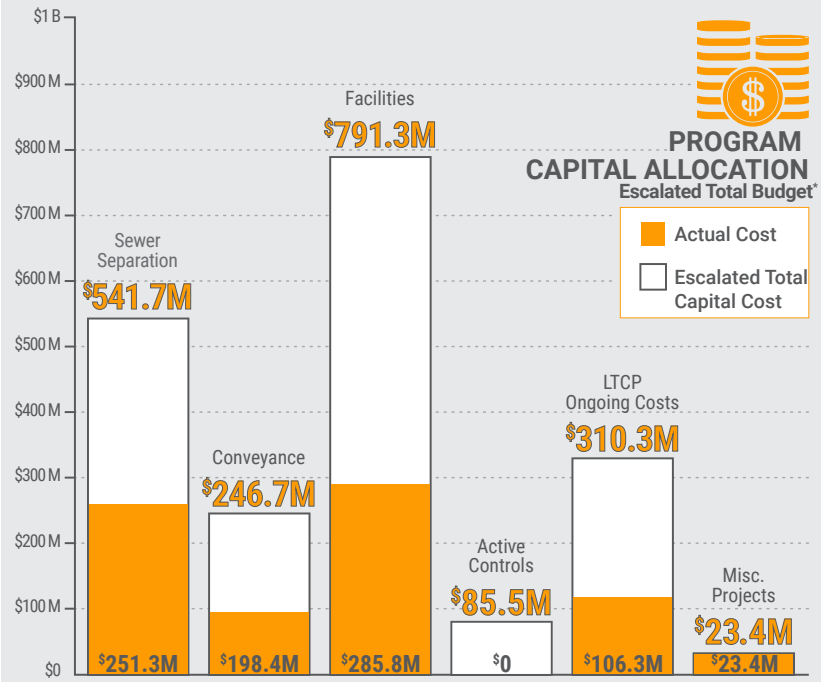
On September 10, 2022, CSO participated in Omaha Stormwater's World O! Water, an all-ages event that teaches the important role water plays in our lives and community.

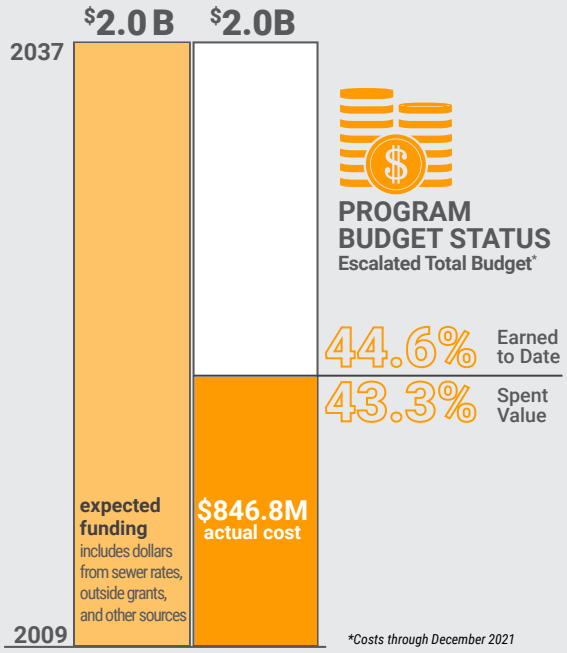
This year's event returned to an in-person format and took place outdoors. CSO representatives developed an outdoor-friendly activity that was interactive, fun and engaging. CSO corn hole allowed participants to toss a rubber frog into CSO-branded boards labeled "Spring Lake Park" and "Fontenelle Lagoon" — two of the Program's signature green infrastructure projects. When the participant successfully landed their frog into the lake/lagoon, they were awarded a five-minute CSO shower timer.

The event, which was heavily attended by the boys and girls scouting community, also served as an opportunity to distribute Clean Water Action worksheets and patches. The worksheet contains multiple levels-of-effort-based CSO activities. Once complete, scouts earn an embroidered CSO patch. After a rainy start, the successful event allowed CSO to distribute 65 shower timers and 125 patches.

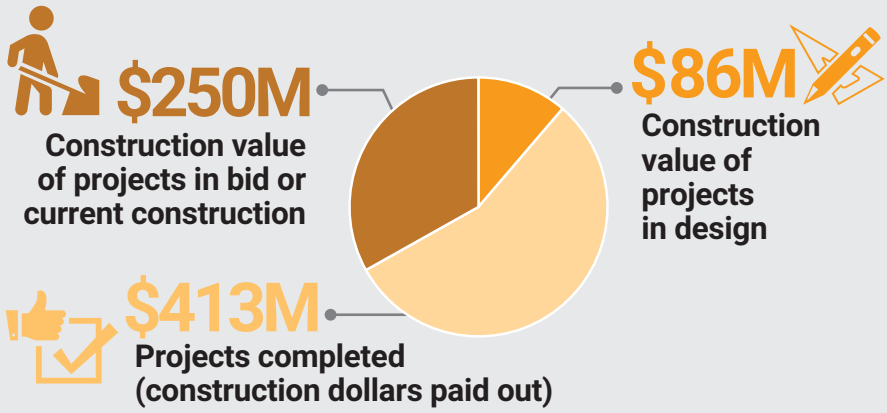
Budget Details

This schedule and costs align with the approved 2021 Long Term Control Plan (LTCP) Update that reflects the ten year time extension. The total Program budget for the project delivery schedule is noted as $2.0 billion in escalated dollars, which takes into account the estimated effect of inflation for dollars spent between now and Program completion in 2037. The values below reflect the updated total Program budget, as well as the expected funding from the latest rate ordinance.





Estimated CSO Program Construction Costs



Approximately $561M has been paid out for construction activities through September 2022.

COMPANIES ENGAGED

During the past five years,* small and emerging small businesses (SEBs) received just over $8M in construction contracts and subcontracts, representing over 7.5% of the total construction work contracted through the City's CSO Program over the same period of time.

In addition, approximately $13M in construction subcontracts were to minority and/or women owned businesses as a part of the Federal Disadvantaged Business Enterprise (DBE) program for projects that received federal funding during that same period of time.

*2017–2021

FIGURE 1

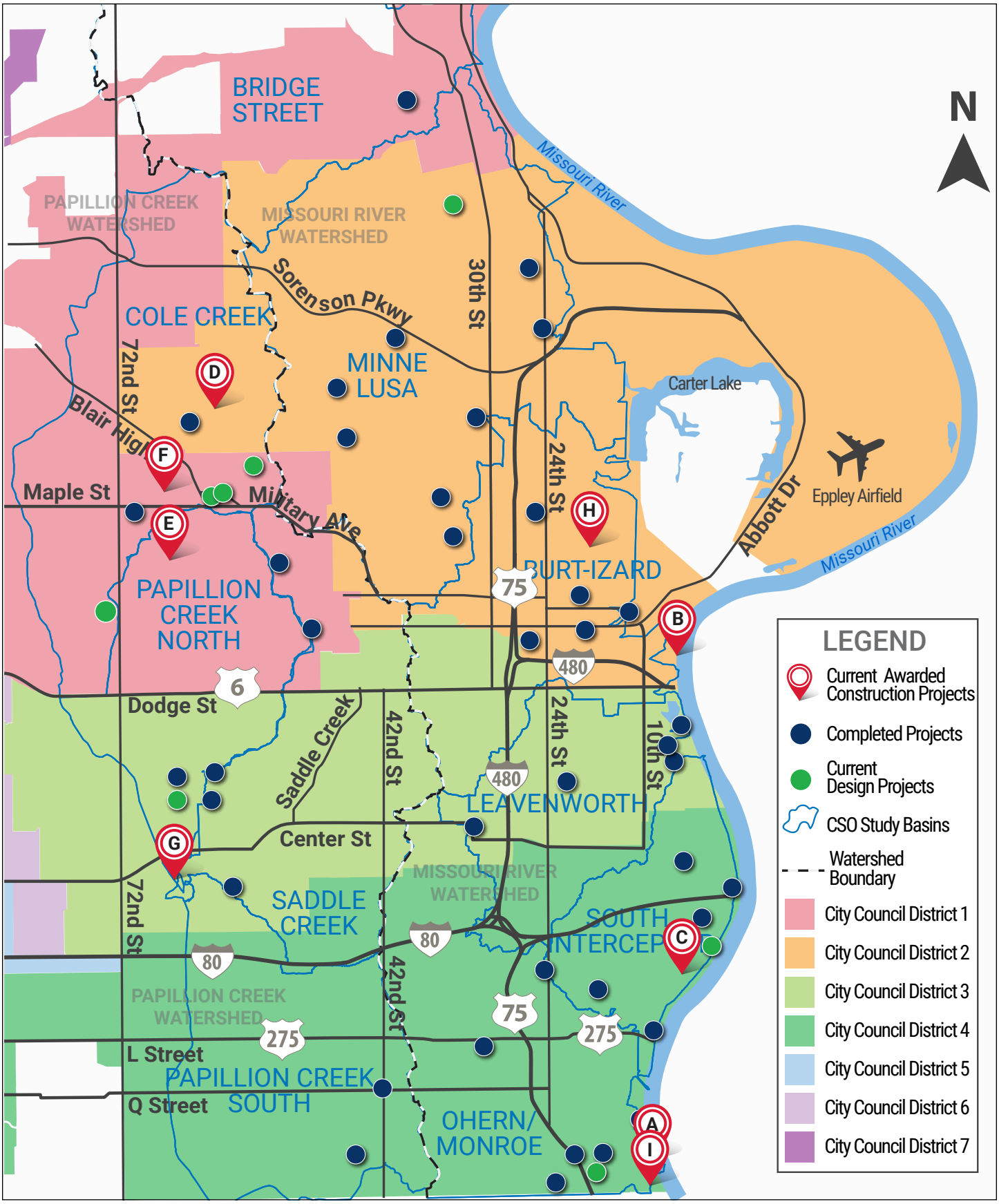


Figure 1 and the corresponding table to the right identify current and completed construction projects.

CURRENT CONSTRUCTION

	KEY	CONSTRUCTION CONTRACTS	CONSTRUCTION MANAGER'S CURRENT ESTIMATE AT COMPLETION REFLECTS CSO FUNDING*	
	A	Missouri River Water Resource Recovery Facility – Transfer Lift Station Pump Replacement (OPW 53408)	$6,583,000 93% Complete	Substantial completion anticipated Q4 2022.
	B	Burt-Izard Lift Station Improvements (OPW 52472)	$16,082,000 99% Complete	Working towards Final Completion.
	C	Riverview Lift Station Replacement (OPW 52402)	$25,798,000 94% Complete	Blake Street Lift Station work awarded as a change order.
	D	Cole Creek CSO 204 Area – Phase 3 Combined Sewer Separation (Taylor to Ruggles Between 56th & 61st) (OPW 53206)	$4,818,000 87% Complete	Substantial Completion achieved in Q2 2022.
	E	Papillion Creek North (PCN) 210 Sewer Separation (OPW 53320)	$7,326,000 89% Complete	Substantial Completion delayed due to unanticipated, additional project work.
	F	Cole Creek CSO 203 Sewer Separation Project (OPW 53059)	$7,358,000 65% Complete	Construction continues with Substantial Completion expected Q2 2023.
	G	Saddle Creek Retention Treatment Basin (OPW 52049)	$92,500,000 90% Complete	Substantial Completion expected Q3 2023.
	H	Nicholas Street Sewer Extension – Phase 3B (OPW 53753)	$21,737,000 23% Complete	Construction continues with Substantial Completion expected Q4 2024.
	I	Monroe Street Lift Station Improvements Project (OPW 53082)	$25,900,000 20% Complete	Bypass pumping has commenced to take the existing lift station off-line for modifications.

*Reflects CSO Funding, does not include other project funding sources.

ACTIVE DESIGN PROJECT STATUS

Active projects are defined as projects that are currently in request for proposal phase, study or design (preliminary or final), or planned for construction (advertised for bid but not yet under construction). Projects will continue to be divided into multiple design/construction contracts as appropriate to efficiently complete work. Active projects and their corresponding status are listed in the following table. More information about each of the projects can be found on the Program website (***www.OmahaCSO.com***).

ACTIVE DESIGN PROJECT STATUS OVERVIEW

Omaha Public Works Project Number (OPW)	City Council District	Project Name	Opinion of Probable Construction Cost[1]	Issued request for proposal or consultant Selection	Study and Preliminary Design	Final Design	Advertised for Bid or Awarded Contract	Comments
52470	2	Forest Lawn Creek Inflow Removal and Outfall Storm Sewer	$20–30 Million				✓	Bid award routed for Council approval. Anticipated notice-to-proceed Q1 2023.
53270	4	Blake Street Lift Station Improvements Project[2]	$3–5 Million				✓	Incorporated as a change order to the Riverview Lift Station Project.
53869	1	CSO 202 Phase 2 – 70th Avenue and Spencer Street	$10–15 Million			✓		Expected construction start spring 2024.
53899	4	Hickory Street Sanitary Sewer Service Relocation	<$1 Million			✓		Construction bid advertisement expected in Q4 2022.
53149	4	CSO 119 South Barrel Conversion & Sewer Separation	$10–15 Million		✓			30% design documents reviewed; City will determine how to proceed with the next phases of design.
53820	1	CSO 204 Phase 4a – 57th Street and Pratt Street CSO 204 Phase 4b – 56th Street and Bedford Avenue	$35–40 Million		✓			30% design deliverable expected in early 2023.
51685	3	CSO 212 – 64th Avenue and William Street	$5–10 Million			✓		Construction bid advertisement is expected in Q4 2022 with construction start in Q3 2023.
54293	1	East Cole Creek Interceptor Rehabilitation	$5–10 Million	✓				Conceptual Design to start in Q4 2022.
54374	1	61st and Radial Storm Sewer	$15–20 Million	✓				Consultant Design Team interviews were held in Q3 2022 and a team was selected. Contract negotiations are underway.

1–Current Opinion of Probable Construction Cost, which reflect escalated construction bidding year values.
2–Blake Street Lift Station was previously part of the Riverview Lift Station, but is being constructed as a separate construction package.

UPCOMING BID OPPORTUNITIES

Project	Hickory Street Sanitary Sewer Service Relocation	CSO 212 64th Avenue and William Street Sewer Separation
Project Type	Conveyance	Sewer Separation
Bid Advertisement (estimated)	Q1 2023	Q1 2023
Begin Construction (estimated)	Q2 2023	Q3 2023
Construction Estimate	< $1 Million	$5–10 Million

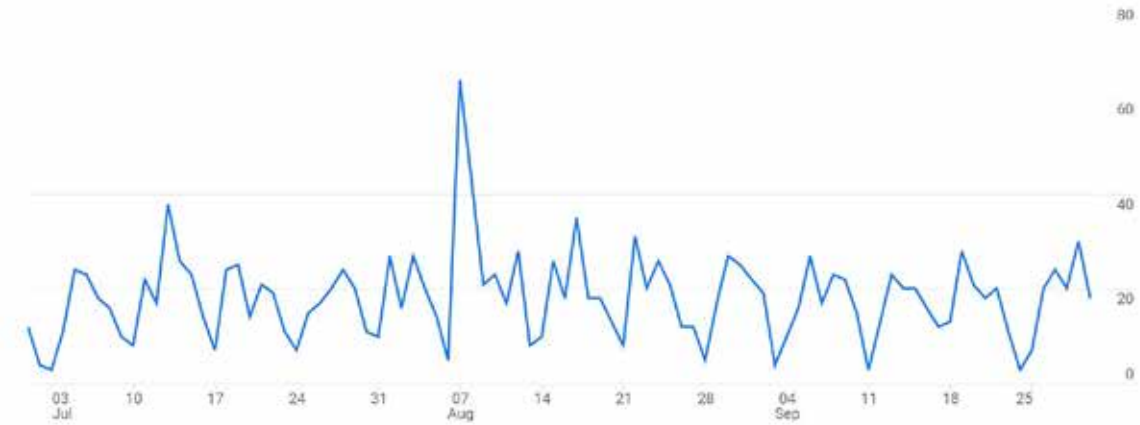
WEBSITE SUMMARY

Use of the Omaha CSO Program's public website is tracked and Q3 2022[1] summary information is provided below. This continues to show active public use of the website. The website is located here: ***www.OmahaCSO.com***

Omaha CSO July 1 – September 30, 2022

Website Summary

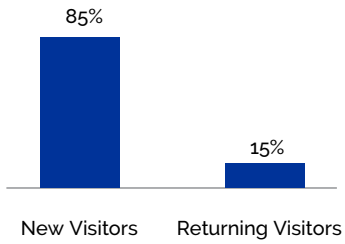
Users per Day



Totals

New Users	1,489
Web Page Views	3,525
Engaged Sessions*	900
Avg Visit Duration	1:03
Avg Pages/Visit	2.34

Visitors by Type



Engaged Sessions by Device

Desktop Mobile Tablet

Some Sessions do not have a set device.

**Sessions include all visits to the website by new and returning users that last longer than 10 seconds.*

[1]Website analytics are slightly incomplete for Q3 2022 due to a required tracking software update.

PROGRAM MANAGEMENT OVERVIEW AND ACTIVITIES

The responsibility of the Program Management Team (PMT) is to evaluate Program regulatory milestone progress and guide multiple projects toward compliance by providing a consistent framework for design and construction. PMT success is gauged by achieving Program goals and regulatory milestones at the lowest cost to ratepayers. PMT responsibilities include:

- Maintain and update tools and process development for Program and project delivery.
- Obtain and maintain regulatory and environmental compliance.
- Maintain and update public participation, including a public website ***(www.OmahaCSO.com)***.
- Facilitate stakeholder education and outreach.
- Identify construction enhancement opportunities that provide added community benefits.
- Promote green infrastructure and sustainability goals.
- Adapt the Long Term Control Plan (LTCP) to changing conditions.
- Seek opportunities to reduce costs.
- Schedule oversight and tracking.

Recurring Program Quarterly Activities

- Meet with Nebraska Department of Environment and Energy and Environmental Protection Agency Region VII to discuss LTCP implementation status and project details.
- Provide outreach to OPPD, M.U.D. and other utility companies to discuss the Program and project coordination, and minimize costs and disruptions to ratepayers.
- Work closely with City of Omaha Right-of-Way and General Services Division to coordinate property and easement acquisitions, bid advertisement, contracting processes and schedules.
- Inform key stakeholders, including United States Army Corps of Engineers, Nebraska Department of Transportation, UPRR, BNSF Railway and Nebraska Department of Natural Resources, regarding upcoming projects.
- Coordinate, oversee and monitor project progress to confirm projects are completed within scope, schedule and budget as much as possible.
- Proactively identify issues that could impact the on-time delivery of phased regulatory milestones.
- Perform inspections of construction sites to confirm compliance with all permits and approvals.
- Assist construction managers with understanding environmental requirements to confirm compliance.
- Review and coordinate permits.
- Develop and refine plans, protocols, procedures, standards, guidance documents and workflows.
- Track and coordinate schedule of metro area projects with Nebraska Department of Transportation, M.U.D., City of Omaha, Council Bluffs Interstate System Improvement Program, University of Nebraska Medical Center, Omaha Public Schools, University of Nebraska Omaha and the Omaha Airport Authority.
- Monitor construction costs and trends in the Omaha construction market.

LONG TERM CONTROL PLAN PROJECTS MILESTONE SCHEDULE

The Long Term Control Plan (LTCP) project schedules shown below are consistent with the 2021 LTCP Update approved by the Nebraska Department of Environment and Energy (NDEE) in August 2021. This schedule includes a revised list of projects with committed LTCP milestone completion dates.

Milestone Schedule of Long Term Control Plan Projects*

Missouri River Watershed Projects	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
MINNE LUSA (ML) BASIN																
Forest Lawn Creek Inflow Removal and Outfall Storm Sewer																
Minne Lusa Relief Sewer Diversion Modifications																
Grace St and North Interceptor DWF Diversion Rehabilitation																
CSO 105 Outfall Active Control																
BURT-IZARD (BI) BASIN																
Nicholas Street Sewer Extension – Phase 3B																
North Downtown Conveyance Sewer – 11th & Izard to 6th & Abbott																
11th & Izard Grit and Screening Facility																
11th & Izard Active Control																
Northeast Omaha RTB – 6th Street & Abbott Drive																
21st & Cuming Active Control																
OHERN-MONROE (OM) BASIN																
CSO 119 South Barrel Conversion and Sewer Separation																
SOUTH INTERCEPTOR (SI) BASIN																
Pierce Street Sewer Separation																
Jones Street to Leavenworth Diversion																
Hickory Street Sewer Separation																
LEAVENWORTH (LV) BASIN																
Leavenworth Basin Storage Tank (CSO 109)																
Papillion Creek Watershed Projects																
COLE CREEK (CC) BASIN																
CC CSO 204 Area – Phase 3 Combined Sewer Separation																
CC CSO 203 Sewer Separation																
East CC Interceptor Rehabilitation																
CSO 202 Phase 2 – 70th Avenue & Spencer Street																
61st and Radial Storm Sewer																
CSO 204 Phase 4a – 57th Street and Pratt Street																
CSO 204 Phase 4b – 56th Street and Bedford Avenue																
PAPILLION CREEK NORTH (PCN) BASIN																
PCN 210 Sewer Separation																
CSO 212 – 64th Avenue and William Street																
SADDLE CREEK BASIN																
Saddle Creek Retention Treatment Basin																

*Additional projects are being completed within the CSO Program, but are not included in the 2021 LTCP Update schedule. These projects include: Burt-Izard Lift Station Improvements; Riverview Lift Station Replacement; Monroe Street Lift Station Improvements; Missouri River Water Resource Recovery Facility – Transfer Lift Station Pump Replacement. Dates listed in this report may not directly correspond with LTCP dates reflected here. The City works with NDEE to adjust dates as necessary to remain in compliance.

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