



Quarterly Report | 2021 Q3 July - September 2021

Omaha Combined Sewer Overflow Control Program Implementation Phase





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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: Construction at the Saddle Creek Retention Treatment Basin (RTB) Project; basement construction (at left) for the new operations center, which will be located above the RTB. The underground basin has been completely backfilled and construction of the chemical storage and operations building has begun (at right).



A City of Omaha Public Works Initiative



Riverview Lift Station Replacement Project – looking down from the main floor of the Riverview Lift Station into the pump room.



sewer construction along 66th Street from south of Grant Street to Lake Street



Cole Creek CSO 203 Sewer Separation Project – sewer construction on 67th Street between Evans Street and Pratt Street



Missouri River Water Resource Recovery Facility – Transfer Lift Station Project – three new pumps are installed



Cole Creek CSO 204 – Phase 3 Combined Sewer Separation (Taylor to Ruggles between 56th and 61st) Project – new pavement at intersection of Sahler Street and 59th Circle

3RD QUARTER HIGHLIGHTS



- Fir 20 Pr
 - Final design is in progress for the **Cole Creek CSO 202 Phase 2 – 70th Avenue and Spencer Street Project** with 90% documents expected in Q4 2021.
 - Final design is complete for Hickory Street Sewer Separation Project, with bid advertisement anticipated in Q4 2021.
 - Preliminary design is in progress for the CSO 119 South Barrel Conversion and Sewer Separation Project with 30% documents expected in Q1 2022.
 - Final design is underway for the modified Forest Lawn Creek Inflow Removal and Outflow Storm Sewer Project. Bid advertisement is expected in Q1 2022.
 - Design is underway for the CSO 212 64th Avenue and William Street Project. The 30% documents are anticipated this fall.
 - Blake Street Lift Station Improvements Project construction bid advertisement is anticipated in Q4 2021 upon completion of right-of-way and property acquisition activities.
 - Monroe Street Lift Station Improvements Project bid opening and contract award was accomplished in Q3 2021. Contractor notice-to-proceed is expected in Q1 2022.
 - Nicholas Street Sewer Extension, Phase 3B Project construction is expected to commence in early Q4 2021.
- Surt-Izard Lift Station Improvements Project start-up activities will continue through Q4 2021. Flows were diverted to the South Interceptor Force Main North Segment, which was placed into operation in Q3 2021.
- Construction activities continue on the Cole Creek CSO 204 Area – Phase 3 Combined Sewer Separation (Taylor to Ruggles between 56th & 61st) Project, with substantial completion expected in Q4 2021.





CSO LTCP Update Approved with Efficiencies, New Path Forward

The 2021 Long Term Control Plan Update, submitted in March 2021, was approved by the Nebraska Department of Environment and Energy (NDEE) on August 11, 2021, with no revisions required.

Approximately every five years, the Long Term Control Plan is updated to ensure future water quality improvement projects are as efficient and cost effective as possible. The last update to the Long Term Control Plan occurred in 2014. In 2018, the Program Management Team began exploring possible plan modifications through an extensive optimization effort. This effort used stateof-the-art modeling tools and techniques to review the impacts of completed, current and future projects. More than 100,000 alternatives to capture additional wet weather volume and reduce combined sewer overflows were

New technologies, a comprehensive understanding of the system and advanced tools allowed the Program to evaluate the wide range of alternative projects as part of the optimization.



Meetings were held with NDEE on August 12, 2021 to discuss Program progress. The department toured Fontenelle Lagoon (above left), Missouri River Water Resource Recovery Facility (above right), Riverview Lift Station, and Saddle Creek Retention Treatment Basin.





2.4B 2014 LTCP Update Program Budget



\$376M Estimated Cost of Design & Construction Active Projects (through 2026 CSO Permit) Wet Weather Capture

85% of flows treated before discharge to local rivers & streams



evaluated with optimization software working with the Program's hydraulic model of the collection system. This effort resulted in the identification of updated projects that have been incorporated into the now-approved Long Term Control Plan Update.

The Long Term Control Plan Update (inset at left), in addition to outlining the 56 total specific projects, includes non-project commitments such as reducing inflows into combined sewers and evaluating real-time controls for stormwater facilities.

The CSO Program is moving forward with implementing the updated projects, which included alternatives to the deep tunnel system in previous versions of the Long Term Control Plan. New projects include a high-rate treatment facility in North Omaha, similar to the Saddle Creek Retention Treatment Basin project currently under construction, and an underground storage tank near Union Pacific's Missouri River Bridge. Active controls and a sewer to convey combined sewage from the North Downtown area to the new highrate treatment facility will be constructed in conjunction with these projects to maximize flows handled by the two facilities. Technology that was not previously available, including advanced sensors, will control the combined sewage inflows in real time, holding it in pipes or redirecting it to maximize the use of new and existing facilities.

New technologies, a comprehensive understanding of the system and advanced tools allowed the Program to evaluate the wide range of alternative projects as part of the optimization. An improved water quality model confirmed that the 85% wet weather volume capture should comply with water quality standards at a lower cost. In all, these efficiencies have allowed the estimated cost of

the CSO Program to be reduced from \$2.4 billion to approximately \$2.0 billion.

With approval of the 2021 Long Term Control Plan Update, the Efficiencies have allowed the estimated cost of the CSO Program to be reduced from \$2.4 billion to approximately \$2.0 billion.

Program will continue to implement the plan through 2037.



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.



CSO

Solutions

Economic Affordability

Goal 2:

Minimize cost impacts to ratepayers by completing CSO projects within or under budget.

Goal 3: **Community Acceptance**

Maintain continuous public dialogue, provide information and pursue opportunities for multiple benefits in CSO projects.

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.

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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.



Construction **Package Contracts**

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



* These numbers reflect the 2021 Long Term Control Plan Update

Projects Contracts







Contracts

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PROJECT DELIVERY SCHEDULE FOR ACTIVE PROJECTS*

Long Term Control Plan Projects	2020	2021	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							
Cole Creek CSO 203 Sewer Separation Project							
Forest Lawn Creek Inflow Removal and Outfall Storm Sewer							
CSO 212 – 64th Avenue William Street							
Nicholas Street Sewer Extension — Phase 3B							
CSO 119 South Barrel Conversion & Sewer Separation							
CSO 202 Phase 2 — 70th Avenue & Spencer Street							
CSO 204 Phase 4a & 4b							
Blake Street Lift Station Improvements Project							
System Reliability Projects**	2020	2021	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							
Design/ Bidding Construction Bidding	8	perationally omplete		*Active projects **Projects relate operational re	in design and/o d to the CSO Pro liability of the sy	r construction. gram that enhar stem.	nce the

SCHEDULE: The 2021 Long Term Control Plan (LTCP) Update was approved by the Nebraska Department of Environment and Energy (NDEE) in August 2021 (refer to the Spotlight article on pages 2–3 of this report). The Project Delivery Schedule for Active Projects (above) is consistent with the approved LTCP Update and reflects the 10-year extension for completion of the CSO Program.

GOAL 2: Economic Affordability

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

Construction Project Bidding Opportunity Awareness

The CSO Program continued activities to maximize the number of contractor bidding responses for CSO construction projects. Project construction costs are a significant portion of the CSO Program budget, so reducing these costs directly impacts the overall Program budget and the impact to ratepayers. When asked about workloads, area construction contractors report being very busy. Many contractors are already engaged in projects and face a constrained labor force. These factors could potentially drive-up project costs.

To increase the number of competitive contractor bids and responses, the Program Management Team continues to:

- Host contractor engagement events to review 60% design documents to solicit comments and increase project awareness
- Post 95% complete documents for contractor pre-advertisement review
- Release pre-bid advertisement listings of expected project bid items and quantities
- Coordinate large project bid periods with other metro agencies so that no two large projects are competing for contractor's bidding efforts

These efforts increase project knowledge within the contracting community to result in more competitive contractor construction bids.

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.

Spring Lake Park Self-Guided Tours Provide Educational Opportunities During World O! Water Event

World O! Water is an annual event for Omaha-area youth to learn about the important role water plays in our lives and community. The free, online event began in mid-September, promoting water education activities that can be accessed via its website, *worldowater.org*.

The CSO public outreach team toured Spring Lake Park with a Program engineer to learn more about how the park can be leveraged as a learning destination. Modeling this experience, the team developed a worksheet for families and educators to download to promote self-guided tours of the area. The worksheet leads participants through the revitalized park and helps adults engage children in conversation about stormwater management and green infrastructure.

The worksheet is available to download through the end of the year at *worldowater.org/activities* under "Explore Omaha Challenges."

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. Additional assistance was provided through the 2020 CARES Act.

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 2021,

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has been provided in assistance for a total of

^{\$}15,026,000

from inception (May 2011) through September 2021.







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



COMPANIES ENGAGED

During the past five years,* small and emerging small businesses (SEBs) received just over \$9M in construction contracts and subcontracts, representing over **nine percent** of the total construction work contracted through the City's CSO Program over the same period of time.

In addition, approximately \$21M in construction subcontracts went 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.

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

PROJECT OVERVIEW



KEY	CONSTRUCTION CONTRACTS	CONSTRUCTION MANAGER'S CURRENT ESTIMATE AT COMPLETION REFLECTS CSO FUNDING	
	Missouri River Water Resource Recovery Facility – Transfer Lift Station Pump Replacement (OPW 53408)	\$6,000,000 72% Complete	Construction was impacted by July 2021 flooding; efforts have restarted.
B	Burt-Izard Lift Station Improvements (OPW 52472)	 \$14,800,000 97% Complete 	Start-up activities will extend into Q4 2021.
C	Riverview Lift Station Replacement (OPW 52402)	\$25,846,000 65% Complete	 Site utility work is complete.
	Cole Creek CSO 204 Area – Phase 3 Combined Sewer Separation (Taylor to Ruggles Between 56th & 61st) (OPW 53206)	\$4,729,000 43% Complete	Construction substantial completion expected in Q4 2021.
E	Papillion Creek North (PCN) 210 Sewer Separation (OPW 53320)	\$7,150,000 15% Complete	 Sanitary service connections in process.
F	Cole Creek CSO 203 Sewer Separation Project (OPW 53059)	*7,305,000 *7,305,000 16% Complete	Utility work is anticipated to be complete in Q4 2021.
G	Saddle Creek Retention Treatment Basin (OPW 52049)	*94,000,000 (0) 69% Complete	Underground basin construction is complete.
H	Nicholas Street Sewer Extension – Phase 3B (OPW 53753)	\$21,806,000 © 0% Complete	 Construction expected to begin Q4 2021.
	Monroe Street Lift Station Improvements Project (OPW 53082)	\$24,391,000 (0) (0)	 Construction notice to proceed expected Q1 2022.



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.0mahaCS0.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	\$20–25 million			>		95% review documents are expected Q4 2021.				
53270	4	Blake Street Lift Station Improvements Project ²	\$1–5 million			-		Construction bid advertisement anticipated in Q4 2021.				
53869	1	CSO 202 Phase 2 – 70th Avenue and Spencer Street	\$8–10 million			-		90% documents expected Q4 2021.				
53899	4	Hickory Street Sewer Separation	<\$1 million			~		Bid advertisement expected in Q4 2021.				
53149	4	CSO 119 South Barrel Conversion & Sewer Separation	\$8–10 million		~			30% documents expected Q1 2022.				
53820	1	CSO 204 Phase 4a – 57th Street and Pratt Street; CSO 204 Phase 4b – 56th Street and Bedford Avenue	\$35–40 million		~			Concept deliverable expected Q1 2022.				
51685	3	CSO 212 – 64th Avenue and William Street	\$5–10 million		~			30% documents expected Q4 2021.				
1-Current Opinion of Probable Construction Cost, which reflect escalated construction bidding year values.												

Omaha Combined Sewer Overflow Control Program | Implementation Phase

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UPCOMING BID OPPORTUNITIES*



WEBSITE SUMMARY

Use of the Omaha CSO Program's public website is tracked and Q3 2021 summary information is provided below. This continues to show active public use of the website. The website is located here: *www.0mahaCSO.com*

Omaha CSO July 1 – September 30, 2021

Website Summary





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.0mahaCS0.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	2021	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	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
COLE CREEK (CC) BASIN												1					
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.





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