



Quarterly Report | **2021 Q1**
January–March 2021

Omaha Combined Sewer Overflow Control Program
Implementation Phase



CSO!

Clean Solutions for Omaha

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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.

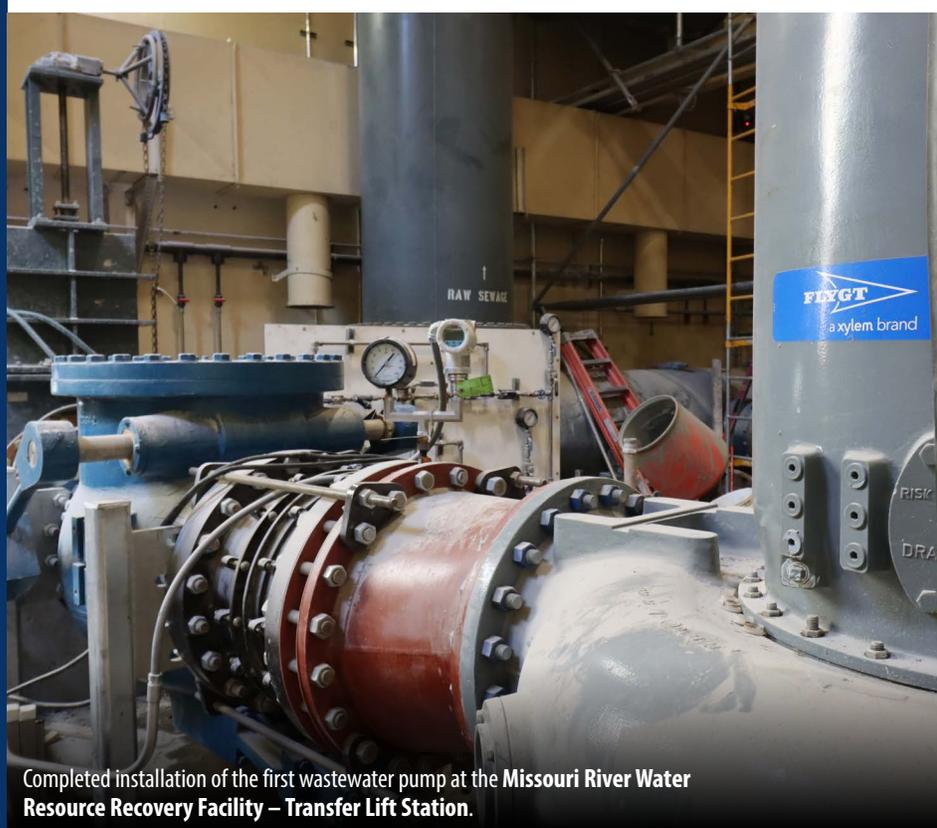
ON THE COVER: CSO Program projects help achieve the overall Program goal of improving water quality in the Missouri River (left) and other local streams (photo courtesy of Matt Moser, United States Geological Survey). Basin roof slab construction continues at the **Saddle Creek Retention Treatment Basin Project** (right).



A City of Omaha
Public Works Initiative



Pumps, piping and valves are installed at the **Burt-Izard Lift Station Replacement Project**. Motors are expected to be delivered in April 2021.



Completed installation of the first wastewater pump at the **Missouri River Water Resource Recovery Facility – Transfer Lift Station**.



Clay pipe temporarily staged along Taylor Street for the **Cole Creek CSO 204 Area – Phase 3 Sewer Separation Project** sewer work.



Exterior view of current construction at the **Riverview Lift Station Replacement Project**.

1ST QUARTER HIGHLIGHTS



- ✂ **Monroe Street Lift Station Improvements Project** final design is nearing completion, with construction bid advertisement anticipated in Q2 2021.
- ✂ Final design is in progress for **Cole Creek CSO 202 Phase 2 – 70th Avenue and Spencer Street**, with 60% plans anticipated in Q2 2021.
- ✂ Final design is in progress for **Hickory Street Sanitary Sewer Relocation**, with bid advertisement anticipated in Q3 2021.
- ✂ Preliminary Design is underway for the **South Barrel Conversion and Sewer Separation Project**.
- ✂ City contracted design revisions are in progress for the **Forest Lawn Creek Inflow and Outflow Storm Sewer Project**.
- 👷 **Nicholas Street Sewer Separation, Phase 3B Project** construction bid opening was this quarter and the construction contract was awarded to Roloff Construction. Construction is expected to start in Q3 2021.
- 👷 **Blake Street Lift Station Improvements Project** construction bid advertisement is anticipated in Q2 2021 upon completion of right-of-way activities.
- 👷 **Cole Creek CSO 203 Sewer Separation Project** Roloff Construction is anticipated to start work in June 2021.
- 👷 **Papillion Creek North CSO 210 Sewer Separation Project** construction bid awarded to Roloff Construction, with work anticipated to start in June 2021.

✂ Study & Design
 📄 Completed

👷 Bid/Construction
 ⚙️ Future Project

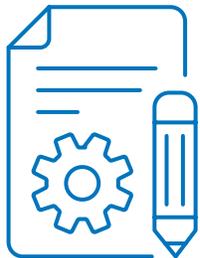


Long Term Control Plan Updates

Lead to Improved Efficiency for Omaha's CSO Program

Approximately every five years, the Long Term Control Plan (LTCP) is updated to make sure future water quality improvement projects are as efficient and cost effective as possible.

The last update to the Long Term Control Plan (LTCP) occurred in 2014. In 2018, the Program Management Team began exploring possible plan modifications through an extensive optimization effort. This effort used state-of-the-art modeling tools and techniques to review completed, current and future projects. This effort resulted in the identification of various alternatives that have been incorporated into the LTCP Update, due in March 2021.

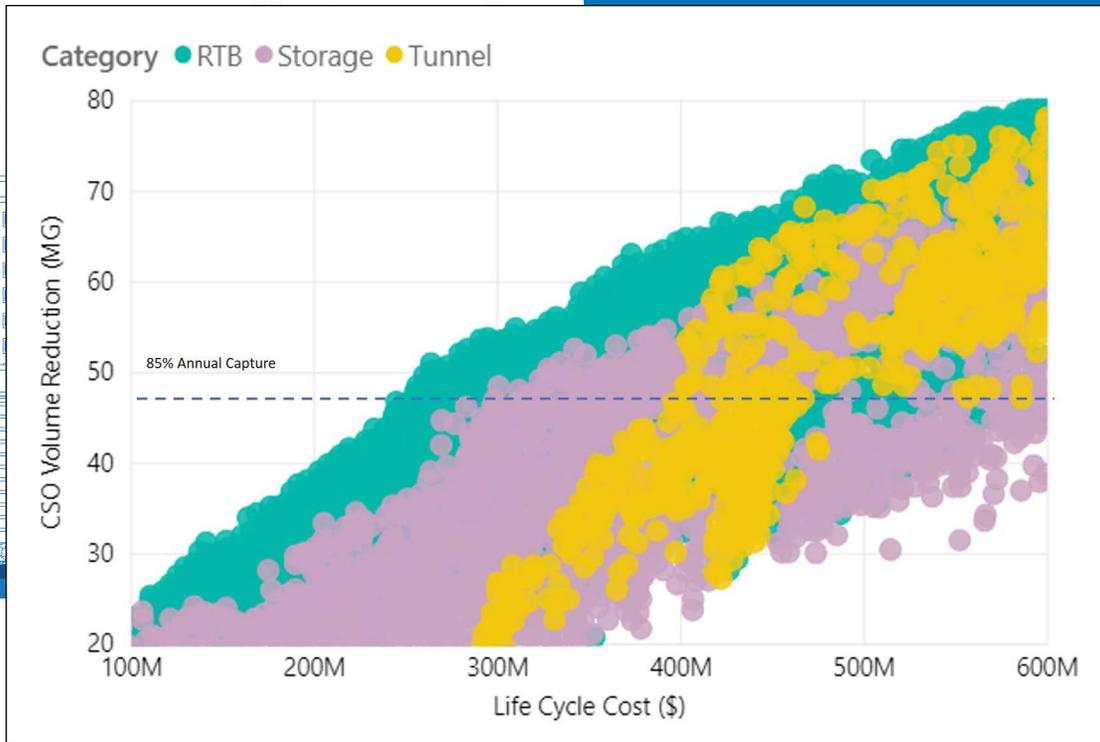


More than 100,000 alternatives to capture wet weather volume and

reduce combined sewer overflows were evaluated with optimization software and the Program's model of the collection system. Leveraging the team's knowledge of prior, proven CSO projects, alternatives were narrowed down to three beneficial options and new or updated technologies for more detailed evaluation. The selected preferred alternative would replace a planned deep tunnel system with high-rate wet weather treatment and storage facilities that could be achieved at a lower projected cost.

Other planned CSO projects were examined through the LTCP Update effort to determine if projects could be removed, built upon, redesigned or further evaluated to meet the Program's goal of capturing 85% of wet weather volume.

In March, the City submitted the 2021 LTCP Update to the Nebraska Department of Environment and Energy for review. Approval is anticipated in

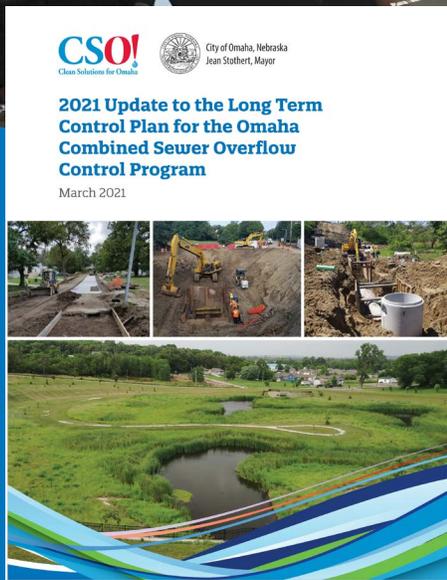


Trade-off curves were used to capture and visualize general trends between cost and CSO volume across all alternatives. The figure (left) shows a trade-off curve summarizing output data produced during the optimization process. Each point represents an alternative, and colors are based on the predominant control technology in each alternative. The selected preferred alternative would replace a planned deep tunnel system with high-rate wet weather treatment and storage facilities (retention treatment basins) that could be achieved at a lower projected cost.

summer or fall of 2021. Looking ahead to the 2026 LTCP update, the plan will be confirmed or refined based on performance of the Saddle Creek Retention Treatment Basin Project, currently under construction.

Additionally, the City's Public Works Department is finalizing a Master Plan to improve its two water resource recovery facilities over the next 20 years. Upgrades are needed to continue to serve the growing metro area and meet the regulatory requirements regarding discharges to the Missouri River.

A Cost of Service Study will soon begin to define how to best distribute costs to operate and maintain wastewater collection and treatment systems across the customer base. With cost savings realized through CSO Program efforts to date and sound financial practices established by the City's Finance Department, future sewer rate increases are anticipated to be less than what was previously forecast.



In March, the City submitted the 2021 LTCP Update (at left) to the Nebraska Department of Environment and Energy for review. As part of the update, engineers and other consultants studied more than 100,000 high-level alternatives (above) through an extensive optimization effort.



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 2: **Economic Affordability**

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.



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.



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

PROJECT STATUS:

**These numbers reflect 39 Long Term Control Plan projects that were removed, combined or pooled as part of Program adaptive management.*

Study & Design

9 Projects

10 Contracts

Bid/Construction/Complete

33 Projects

56 Contracts

Future

17* Projects

18* Contracts

MAJOR PROJECTS

Phase	Description of Phase	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
1	Missouri River Water Resource Recovery Facility Improvements (MRWRRF)	✓	✓									✗																		
1	South Interceptor Force Main (SIFM)	✓	✓									✗																		
2	Saddle Creek Retention Treatment Basin (SCRTB)		✓	✓																										
4	Deep Tunnel System/Missouri River Retention Treatment Basin, and others																													

 Notice to Proceed to Consultant for Final Design
  Notice to Proceed to Constructor
  Operationally Complete

-- | This Quarter

SEWER SEPARATION PROJECTS

Project Phase	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Phase 1		✗																											
Phase 2			✗																										
Phase 3				✗																									
Phase 4																													
Phase 5																													
Phase 6																													
Phase 7																													

 Commence Bidding
  All Construction Projects Complete

Construction of the **SCRTB Project** is over 50% complete; final completion is expected mid-2023.

Construction began Q1 2021 for **Cole Creek CSO 204 Area – Phase 3 Sewer Separation (Taylor to Ruggles Between 56th & 61st Street) Project**.

Primary design is underway for the **South Barrel Conversion and Sewer Separation Project**.

SCHEDULE: Long Term Control Plan (LTCP) project schedules are consistent with the LTCP Update, CSO Permit and associated modifications, and formal submittals to Nebraska Department of Environment and Energy (NDEE). In March 2019, the City submitted a request to modify milestone dates within the CSO Permit and LTCP as follows:

- **Phase 4 Major Projects start final design** from Dec. 31, 2019 to Dec. 31, 2023
- **Phase 6 Sewer Separation commence bidding** from June 30, 2020 to Dec. 31, 2021
- **LTCP Update for NDEE** from Oct. 1, 2019 to March 31, 2021

The 2021 LTCP Update submittal included a revised list of projects with new schedule milestones. An initial project delivery schedule included the recent 10-year extension for completion of the CSO Program that was developed and further modified as part of the LTCP Update. Milestones are included in the 2021 LTCP Update and will be included in the CSO Permit.



Goal 2: Economic Affordability

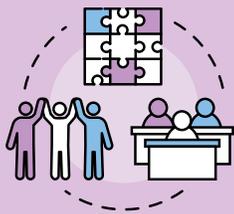
The CSO Program actively seeks opportunities to minimize impacts to ratepayers.



Efforts to Inform and Engage Local Contracting Community Continues

An informed contracting community creates a competitive bidding climate, potentially reducing Program costs. CSO Program efforts continue to provide project updates through presentations and communication outreach. Efforts this quarter included:

- A virtual presentation to the Metro Community College Construction Advisory Committee, including approximately 30 local contractors. This presentation contained Program updates and upcoming construction opportunities. Additionally, coordinated Program and City efforts regarding contractor workforce development were discussed. This presentation was well received and future presentations are anticipated.
- Project communications for the **Nicholas Street Sewer Extension – Phase 3B Project** construction bid opportunity included updating Omaha CSO Contractor’s Corner project information (quantities and virtual project overview) as well as several emails and mailings. Throughout the pre-bid advertisement period, two email blasts were sent to general contractor and small business mailing lists, as well as one hard-copy postcard mailing. This effort occurred over several



weeks prior to the bid advertisement and reached over 200 contractor recipients.

Similar efforts will continue to be completed for upcoming construction bid opportunities.

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.



Recent Outreach Promotes Next Phase of Nicholas Street Sewer Extension Project

One-on-one conversations and direct stakeholder outreach have been in full swing for the **Nicholas Street Sewer Extension – Phase 3B Project** final design. The project team has been

working closely with impacted commercial stakeholders through socially-distanced meetings and video conferences. Area residents were notified



of the project’s next phase through direct mail, email outreach and a project update video on the Program website. Contractor bid opening occurred in March 2021.

To learn more about the Nicholas Street Sewer Extension, Phase 3B Project, visit www.OmahaCSO.com/projects/nicholas-ph3.

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 (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 assistance or to apply for Nebraska LIHEAP, call 402-595-1258.



From January through March 2021, over **\$460,000**

has been provided in assistance; for a total of **\$14,807,000**

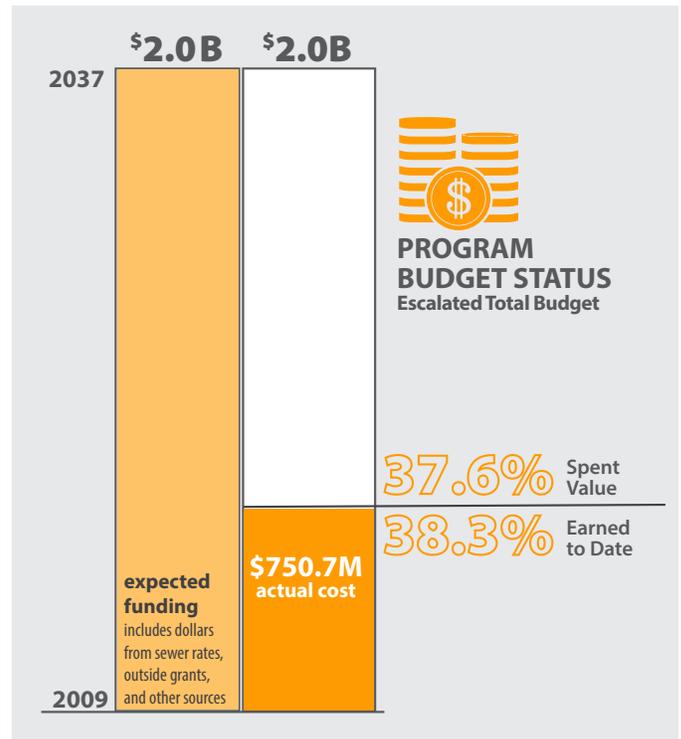
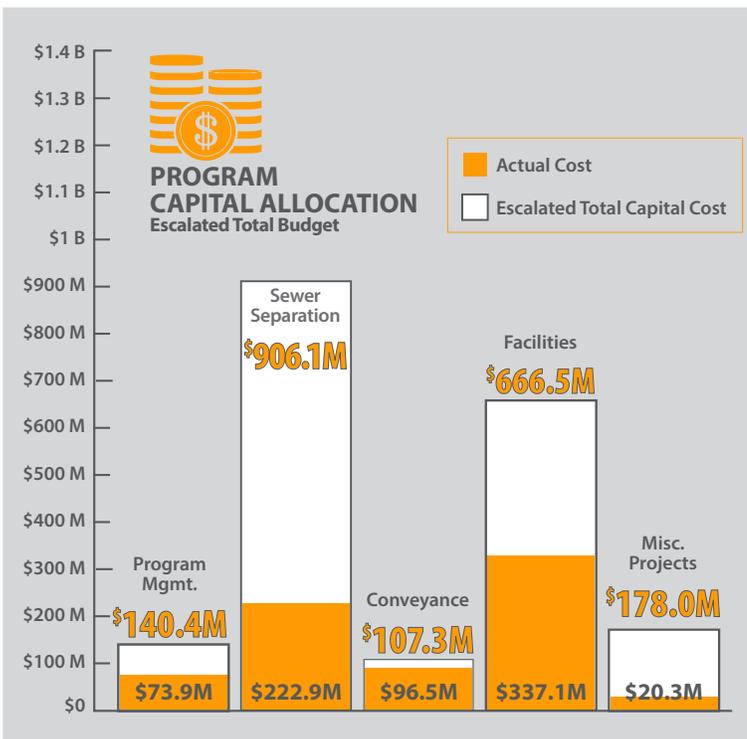
from inception (May 2011) through March 2021.



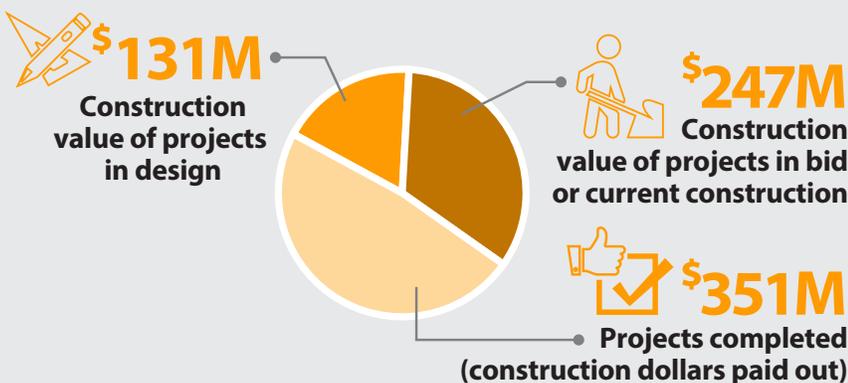


Budget Details

The City and Program Management Team has developed an initial project delivery schedule that reflects the ten year time extension negotiated with the Nebraska Department of Environment and Energy. The Long Term Control Plan schedule, including regulatory milestones, will be modified when an updated project list and schedule are submitted in spring 2021. The total Program budget for the potential project delivery schedule is now at \$2.39 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 **\$479M** has been paid out for construction activities through March 2021.

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 amount 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.

*2016-2020



FIGURE 1

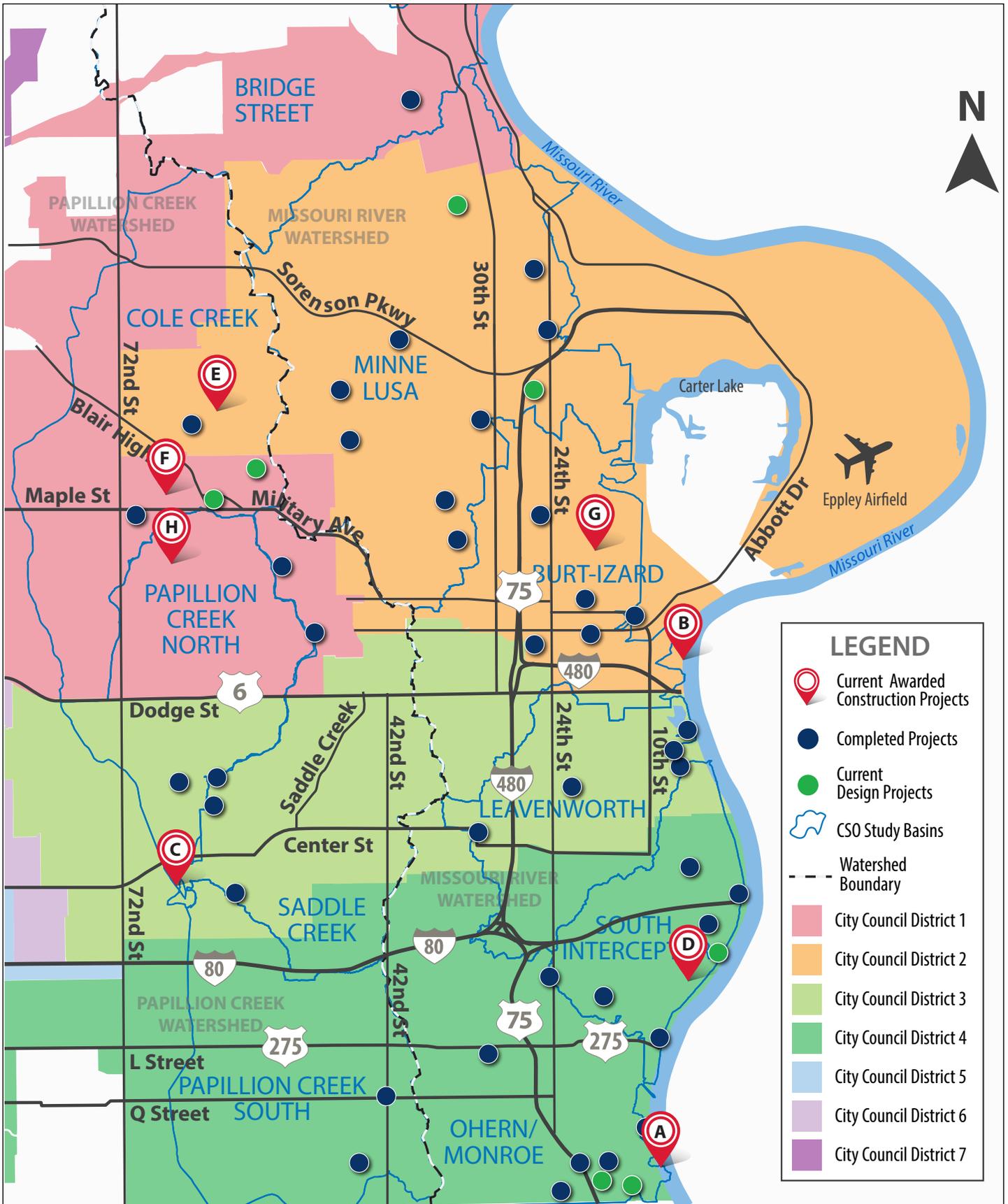


Figure 1 and the corresponding table to the right identify current and completed construction projects.



CURRENT CONSTRUCTION

	KEY	CONSTRUCTION CONTRACTS	CONSTRUCTION MANAGER'S CURRENT ESTIMATE AT COMPLETION REFLECTS CSO FUNDING	
		MRWRRF – Transfer Lift Station Pump Replacement (OPW 53408)	\$5,583,000 48% Complete	Pump installation continues.
		Burt-Izard Lift Station Improvements (OPW 52472)	\$14,800,000 85% Complete	Pumps delivered and installed in Q1 2021.
		Saddle Creek Retention Treatment Basin (OPW 52049)	\$94,000,000 49% Complete	Basin walls nearly complete.
		Riverview Lift Station Replacement (OPW 52402)	\$25,846,000 40% Complete	Lift station lower level mass concrete pours are complete. Sewer construction along Gibson Road is complete.
		Cole Creek CSO 204 Area – Phase 3 Sewer Separation (Taylor to Ruggles Between 56th & 61st Street) (OPW 53206)	\$4,729,000 0% Complete	Construction began Q1 2021.
		Cole Creek CSO 203 Sewer Separation Project (OPW 53059)	\$7,092,000 0% Complete	Construction expected to begin Q2 2021.
		Nicholas Street Sewer Extension – Phase 3B (OPW 53753)	\$21,806,000 0% Complete	Bids were opened Q1 2021 and recommendations will be forwarded to the City Council for approval.
		Papillion Creek North (PCN) 210 Sewer Separation (OPW 53320)	\$6,962,000 0% Complete	Construction contract awarded to Roloff Construction; construction expected to begin Q2 2021.



ACTIVE DESIGN PROJECT STATUS

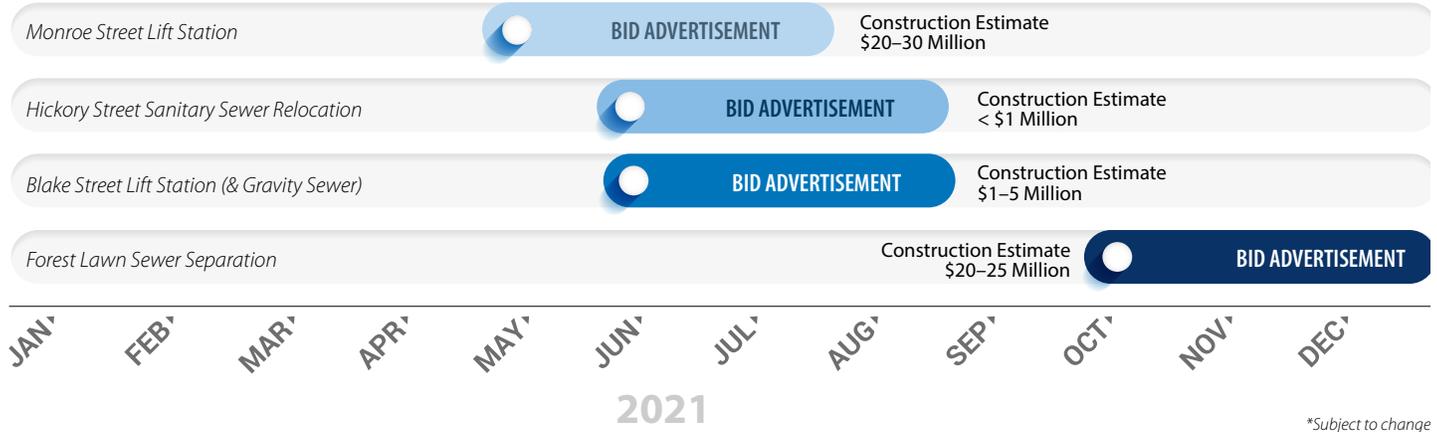
Active projects are defined as projects that are currently in request for proposal phase, study or design (preliminary or final), or planned for construction (advertised for bid but not yet under construction). Projects will continue to be divided into multiple design/construction contracts as appropriate 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	\$20–25 million (October 2019)			✓		Design revisions underway.
52814	1	Cole Creek CSO 204 Phase 2 Sewer Separation	\$15–20 million (November 2020)			✓		Proposed to be replaced in the 2021 LTCP Update.
53270	4	Blake Street Lift Station Improvements Project ²	\$1–5 million (June 2020)			✓		Construction bid advertisement anticipated in Q2 2021.
53082	4	Monroe Street Lift Station Improvements Project	\$20–25 million (January 2020)			✓		Construction bid advertisement expected in Q2 2021.
53869	1	CSO 202 Phase 2 – 70th Avenue and Spencer Street	\$8–10 million (August 2020)			✓		Final design underway, with construction in 2024.
53899	4	Hickory Street Sanitary Sewer Relocation	<\$1 million			✓		Bid advertisement expected in Q3 2021.
53149	4	CSO 119 South Barrel Conversion & Sewer Separation	\$8–10 million (July 2020)		✓			Preliminary design underway.
53820	1	CSO 204 Phase 4a – 57th Street and Pratt Street; CSO 204 Phase 4b – 56th Street and Bedford Avenue	\$35–40 million (December 2019)		✓			Preliminary design to start Q2 2021.
51685	3	CSO 212 – 64th Avenue and William Street	\$5–10 million (August 2020)		✓			Preliminary design to start Q2 2021.

¹—Current Opinion of Probable Construction Cost and corresponding estimate date are shown.
²—Blake Street Lift Station was previously part of the Riverview Lift Station, but is being constructed as a separate construction package.



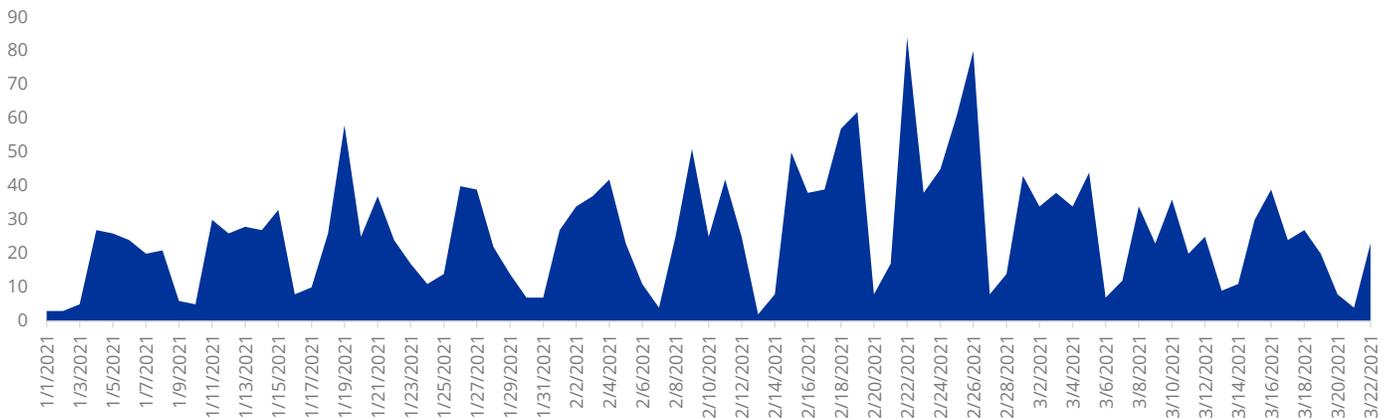
UPCOMING BID OPPORTUNITIES*



WEBSITE SUMMARY

Use of the Omaha CSO Program’s public website is tracked and year-to-date summary information is provided below. This continues to show active public use of the website. The website is located here: www.OmahaCSO.com

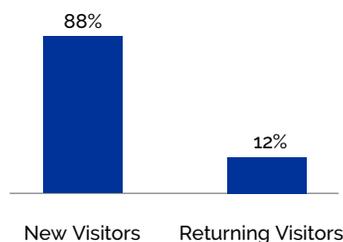
Year-to-date Users per Day (January 1 – March 22, 2021)



Totals

New (first-time) Users	676
Web Page Views	6,352
Sessions*	2,418
Avg Visit Duration	2:46
Avg Pages/Visit	3.06

Visitors by Type



Sessions by Device



Some Sessions do not have a set device.

*Sessions include all visits to the website by new and returning users.





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 Departments 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 SCHEDULE

The Long Term Control Plan (LTCP) project schedules shown below are consistent with the 2014 LTCP Update, CSO Permit (including permit modifications), and other formal communications to Nebraska Department of Environment and Energy (NDEE). An update to the LTCP was submitted to NDEE by March 2021 for their review and approval. This LTCP update included a revised list of projects with new milestones.

Schedules 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																	
ML 105-15 Forest Lawn Separation																	
BURT-IZARD (BI) BASIN																	
BI Basin 108-3; Nicholas St Phase 3 Sewer Separation																	
BI Basin 108-3; Webster/Nicholas Phase 2 Sewer Separation																	
BI Basin 108-3; 18th & Seward Sewer Separation																	
OHERN-MONROE (OM) BASIN																	
OM 119-5A; South Barrel Conversion																	
OM 119-5B; South Barrel Conversion																	
CSO 119 Monroe Basin Storage Facility																	
CSO 118 Ohern Basin Storage Facility																	
SOUTH INTERCEPTOR (SI) BASIN																	
SI Basin CSO 117; Missouri Avenue Phase 2 Sewer Separation																	
SI Basin CSO 110; Pierce Street Sewer Separation																	
SI Basin CSO 111; Hickory Street Sewer Separation																	
DEEP TUNNEL SYSTEM (DTS)																	
CSO Deep Tunnel Lift Station & Force Main																	
CSO Deep Tunnel and Drop Shafts																	
CSO Deep Tunnel Conveyance to Drop Shafts																	
CTS Grit Basin Facilities																	
MRWRRF Retention Treatment Basin																	
Leavenworth Jones Street to Leavenworth Diversion																	
Papillion Creek Watershed Projects																	
COLE CREEK (CC) BASIN																	
CC CSO 204 Phase 3 Sewer Separation																	
CC CSO 204 Phase 4 Sewer Separation																	
CC CSO 204 Phase 2 Sewer Separation																	
CC CSO 204 Phase 5 – Inflow Reduction																	
CC CSO Cole Creek Diversions (204)																	
CC CSO 204 Storage																	
CC CSO 203-1 Sewer Separation																	
CC CSO 202 Phase 2 Sewer Separation																	
PAPILLION CREEK NORTH (PCN) BASIN																	
PCN 210-1; Sewer Separation																	
PCN 210-2; Inflow Reduction Project																	
PCN 211-2; Inflow Reduction Project																	
PCN 212-1; Sewer Separation																	
SADDLE CREEK BASIN																	
Saddle Creek Retention Treatment Basin																	

*For the tunnel, storage tasks and RTB, the start date is the start of final design. For all others, the start is bid advertisement.



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