

CSO PROGRAM MAKES SIGNIFICANT IMPROVEMENTS TO WATER QUALITY, INFRASTRUCTURE



Former Economy Products Building
near 11th & Nicholas Streets



Nicholas Street Sewer Separation,
Phase 3A



MRWRRF



Missouri Avenue Sewer Separation/
Spring Lake Park Project



Missouri River Water Resource
Recovery Facility Aerial View



Spring Lake Park

Before and After: Black and white photos depict prior conditions; color photos depict improved infrastructure.



Lake James to Fontenelle Park Lagoon



Lake James to Fontenelle Park Lagoon

Since 2009, the City has made significant progress implementing the Long Term Control Plan (LTCP) to reduce impacts from combined sewer overflows (CSOs) on the Missouri River and other receiving waters.

The City is working to ensure that CSO Projects outlined in the Long Term Control Plan are constructed and operational by October 2037, in accordance with the Consent Order between the City and the Nebraska Department of Environment and Energy (NDEE). Since the Program's inception, many accomplishments have been realized:

- The Program has completed 26 CSO Projects that have achieved 56 percent capture of annual combined sewage volume in the Missouri River Watershed and 84 percent capture in the Papillion Creek Watershed. In addition, it is estimated that bacteria loading to the Missouri River has been reduced by approximately 50 percent.
- By March 2021, all planned sewer separation projects will be either completed, in design or under construction.
- All CSO projects, including both facility and sewer separation projects, have met specified compliance dates.
- Several CSO projects have included green infrastructure elements that, while providing some CSO control at reduced costs, have also resulted in enhanced public amenities. Examples

include expanded stormwater detention within Fontenelle Park's Lagoon, Adams Park Wetlands, and re-establishment of the lake within Spring Lake Park.

- Upgrade, expansion and continuous refinement of the InfoWorks collection system model has allowed the Program to better understand both combined and separate sewer systems and impacts of projects and other changes. Additionally, the development of a water quality model has allowed the City to estimate to what extent the CSO program will improve water quality in the rivers and streams receiving discharges from CSOs.

The City has faced several challenges since inception of the Program, including increased construction costs, Missouri River flooding in 2011 and 2019, delays due to utility coordination, and a global pandemic. The City has successfully adapted to these challenges and continues to make significant progress. The next LTCP update will be submitted to NDEE by March 31, 2021. The CSO Program will be sharing findings and future revisions to the LTCP Update during early 2021.

