

# South Barrel Conversion & Sewer Separation Project

The primary objective of this project is to completely separate the “South Barrel” so that it can be converted from a combined sewer to a storm sewer-only conduit to the Missouri River.

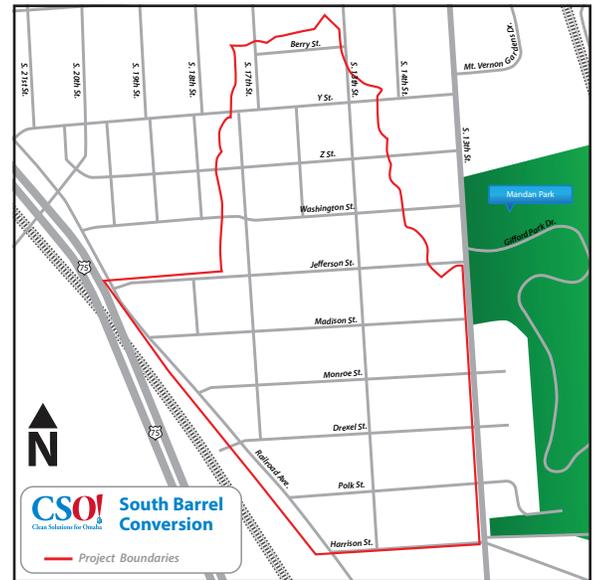
Converting the South Barrel to a storm only sewer will result in all wastewater flows being directed to the North Barrel, where these flows can be diverted for treatment at the Missouri River Water Resource Recovery Facility (MRWRRF) during dry weather conditions.

The South Barrel is the southern of two existing combined sewers that make up the “Monroe Outfall” in the Ohern/Monroe CSO sub-basin. North and South Barrels were originally constructed as concrete sewers, together comprising the Monroe Outfall. The South Barrel was originally constructed as the “City of South Omaha Mud Creek Main Sewer” in 1907, followed by the North Barrel constructed as Storm Sewer #1120 in 1933.

Under existing conditions, North and South Barrels are interconnected through two sets of “windows” or openings, which serve to balance the flow between the Barrels in Structure 104 at the intersection of Railroad Avenue and Washington Street. Three additional openings connect the Barrels in Structure 105 west of the intersection of Railroad Avenue and “Y” Street. These interconnecting openings cause both the North and South Barrel sewers to function as combined sewers, where dry weather flow is diverted to the MRWRRF, and wet weather flow enters the Missouri River as combined sewer overflow.

By closing the openings between North and South Barrels, closing diversion structures along Monroe Street downstream of Railroad Avenue, and disconnecting all sanitary and combined sewer flow from the South Barrel, the South Barrel will be converted to a dedicated storm sewer that outlets directly to the Missouri River. The North Barrel will remain as a combined sewer, diverting dry weather flows to the MRWRRF and wet weather overflow to the Missouri River. As a result, the volume capture of wet weather flows will increase in the Ohern/Monroe basin.

Secondary objectives include completing local sewer separation in a portion of the neighborhood east of Railroad Avenue, south of Berry Street, west of 13th Street and north of Harrison Street. Sewer separation in this area is necessary to ensure that no combined sewer connections remain connected to the South Barrel.



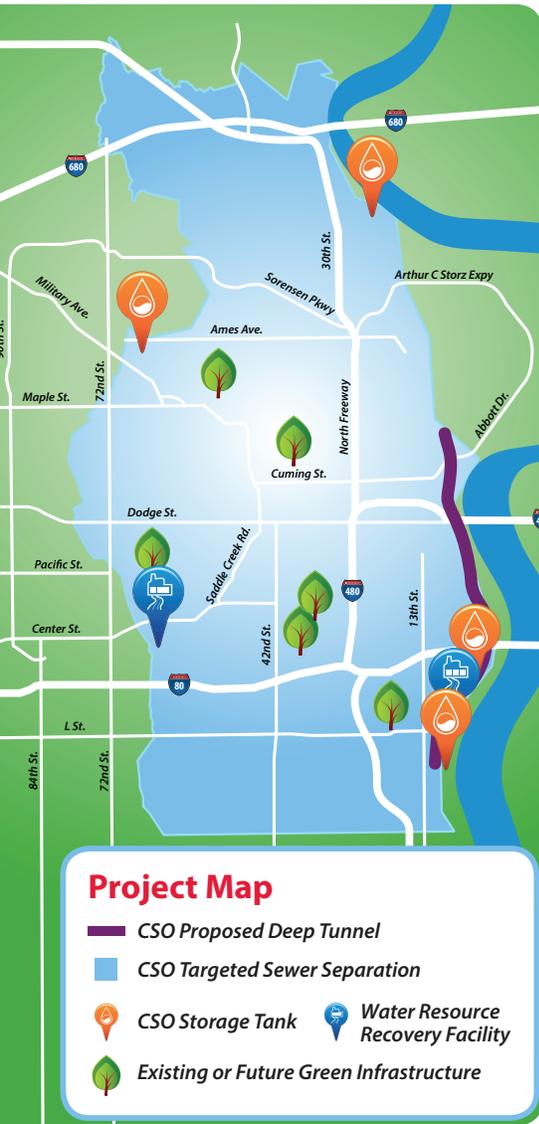
## SCHEDULE:

The project team will complete the conceptual basis of design report by early 2019. The City will then determine the path forward for preliminary and final design by the project team.



## PROJECT LOCATION:

The Project area is bounded on the north by Berry Street; on the east by 13th Street; on the south by Harrison Street; and on the west by Railroad Avenue.



Omaha's wastewater infrastructure includes a combined sewer system. This system collects rainwater runoff, domestic sewage and industrial wastewater into a pipe conveyance system. In times of severe wet weather, the system has the potential to reach or exceed capacity causing backups or overflow to nearby streams, creeks and the Missouri River without treatment, causing potential risk to human health, wildlife and the environment. In 2006, in an effort to comply with Environmental Protection Agency and the Federal Clean Water Act (CWA) water quality requirements, the City of Omaha initiated the Clean Solutions for Omaha (CSO) Program to study, plan and update infrastructure to improve and ensure water quality in the community.

**As a result, Omaha and its CSO Program are among more than 772 U.S. cities required by federal mandate to improve water quality in local rivers and streams.**

## IMPROVED WATER QUALITY HAS BENEFITS

Updating infrastructure dating back to the 1860s certainly creates significant challenges, but not without benefit. Aside from improving water quality for the community, projects offer opportunities for additional neighborhood enhancements including new streets, curbs, pedestrian ramps compliant with the American Disabilities Act and driveway approaches. New trees, plants and other green infrastructure features, such as bioswales, rain gardens or ponds, for water retention add beauty and recreational features to some projects.

## FUNDING THE PROGRAM

The CSO Program is primarily financed by 30-year revenue bonds issued in increments periodically, as approved by the Mayor and City Council. Sewer fees will be used to pay off the bonds—60% from residential customers, 30% from industrial and commercial users, and 10% from regional customers who use the City's sewer services.

## RATEPAYER ASSISTANCE PROGRAM

Recognizing that increased sewer use fees may become a hardship for some residents, in 2011 the City took a proactive role to identify and implement a Ratepayer Assistance Plan to help low and fixed income households. Ratepayers are eligible if they qualify and receive Lower Income Heat and Energy Assistance Program (LIHEAP) benefits from other local utilities. The Ratepayer Assistance Program helps keep administrative costs to a minimum while providing the maximum benefit to those who need it. **For assistance or to apply for Nebraska LIHEAP, call 800-383-4278.**

## JOB CREATION: LOCAL LABOR AND MATERIALS

The City and the CSO Program actively encourage local labor and the use of locally purchased or locally available materials. Through the City's Small and Emerging Small Business (SEB) Program, businesses of all sizes have the opportunity to bid or work on CSO Program contracts and projects. **For more information about Small and Emerging Small Business opportunities, call 402-444-5055.**



A City of Omaha Public Works Initiative

Report Street Flooding and Sewer Backups: **402-444-5332**

Contact the CSO Program Hotline: **402-341-0235**

Email: **Info@OmahaCSO.com**