



Separating Stream Flows from Combined Sewer Provides System Relief

With the start of construction of the Forest Lawn Creek Inflow Removal and Outfall Storm Sewer, the City is in the process of removing the last of the creeks that previously flowed into the City’s combined collection system, freeing up capacity in the system and reducing overflows.

Stream Removals

The Omaha CSO Program has removed several metro-area streams from the sewer system. Visit www.OmahaCSO.com to learn more about storm removals related to the following projects:

- **Saddle Creek Area – 55th to 64th Avenue Sewer Separation** near Westlawn-Hillcrest Cemetery – completed 2014
- **Gilmore Avenue Sewer Separation, Phase 1 and 2 Project** – completed 2017
- **Missouri Avenue Sewer Separation / Spring Lake Park Project** – completed 2021
- **Forest Lawn Creek Inflow Removal and Outfall Storm Sewer Project** – expected to be completed 2025

Nearly 100 years ago, as the City of Omaha grew, several creeks in eastern Omaha were enclosed in sewers. In 1909, Omaha had 189 miles of sewers, including several large, combined sewers that were “capped” creeks conveying stream flow, stormwater, and untreated sanitary sewage to the Missouri River. Later, the City constructed the Missouri River Water Resource Recovery Facility (MRWRRF) and the Papillion Creek Water Resource Recovery Facility (PCWRRF) and connected sewers to the treatment facilities to treat the sanitary sewage. The creek flows enclosed in sewers increased the amount of wastewater requiring treatment and contributed to the combined sewage that overwhelmed the City’s collection system during wet weather events, creating CSO overflows.

One of the early CSO Program goals was to remove four creek flows from Omaha’s sewer system. Projects that have involved the removal of creeks include: **Saddle Creek Area – 55th to 64th Avenue Sewer Separation, Missouri Ave/Spring Lake Park Sewer Separation, Gilmore Avenue Sewer Separation Phase 1, and Forest Lawn Creek Inflow Removal and Outfall Storm Sewer.** This has been accomplished by separating the stormwater system from the sanitary/combined sewer system. In two of these instances, the removal of the creeks was enhanced with green infrastructure in the form of stormwater retention.

Creek removal has many benefits:

- In some instances, it restores natural surface flow of streams
- Reduces street flooding and sewer backups
- Provides additional treatment capacity at our wastewater recovery facilities—saving money related to energy-usage, treatment chemicals, facility management, maintenance, upkeep, and improvements.

The creek flows removed from the sewer system revert back to a natural drainage pattern and are not mixed with sanitary or combined sewer flows. This allows our sewer system to function as intended—carrying sanitary flows to the treatment system.

Creek removal projects lower the overall operations and maintenance costs for Omaha ratepayers with reduced overflow and sewer backup events.



Decades ago, several creeks were enclosed and diverted into the combined sewer system.



During heavy rain or snow events, stream and stormwater runoff rushes into nearby gutters and storm drains that lead to the sewer system. If the system reaches or exceeds capacity, basement back-ups or street flooding can occur, causing hazardous conditions.



In the instance of the Saddle Creek Area – 55th to 64th Avenue Sewer Separation Project, the removal of the creek was enhanced with green infrastructure for stormwater retention.