Missouri River Water Resource RECOVERY FACILITY IMPROVEMENTS

CSO Clean Solutions for Omaha

PROJECT SCHEDULE:

- Phase 1 (Schedule A) Completed spring 2014
- Phase 2 (Schedule B1) Completed summer 2016
- Phase 3 (Schedule B2)– Operationally complete fall 2019
- Transfer Lift Station Pump Replacement Construction is began in March 2020; site utility work is complete. Pump installation will start in Q3 2020.



COST AT COMPLETION:

- Phase 1 (Schedule A) \$19.6 million
- Phase 2 (Schedule B1) \$61.7 million
- Phase 3 (Schedule B2)- \$52 million

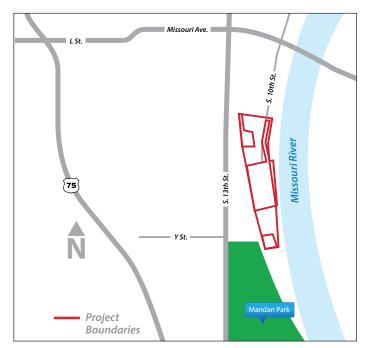
PROJECT LOCATION:

• South of Missouri Avenue (South Omaha Bridge), east of 13th Street adjacent to the Missouri River.

The Missouri River Water Resource Recovery Facility (MRWRRF) was built in 1964. Before improvements, the MRWRRF could treat approximately 50 million gallons of wastewater per day during wet weather events. Upgrades allow the MRWRRF to treat 150 million gallons per day during wet weather flows, ultimately reducing the amount of untreated wastewater sent to the Missouri River. The MRWRRF CS0 improvements were constructed in multiple phases (schedules) through four construction contracts further defined as follows:

Schedule A (Completed) – Facilities were added to provide preliminary and primary treatment of high strength industrial waste from the South Omaha Industrial Area. Also during Schedule A, firm pumping capacity to achieve 64 million gallons per day was added to the reliable biological treatment capacity to treat all dry weather flow and smaller wet weather flow events. Schedule A improvements were completed in spring 2014 and include water quality improvements, odor reduction and energy sustainability.

Schedule B1 (Completed) – Preliminary and Primary Treatment Facilities were constructed to increase the capacity to 150 million gallons per day during wet weather events. Flows from wet weather events that exceed the



64 million gallons per day biological treatment capacity now undergo screening, grit removal and solids removal before being discharged to the Missouri River. Schedule B1 benefits include maximizing flow to the MRWRRF for treatment, water quality improvements and odor reduction. Schedule B1 improvements were placed into operation in summer 2016.

Schedule B2 (Completed) – Facilities were added to disinfect flows that received preliminary and primary treatment in excess of the 64 million gallons per day biological treatment capacity before being discharged to the Missouri River. Odor control facilities were constructed to complete the improvements to the primary clarifiers from Schedule B1. Benefits include water quality improvements and odor reduction. Schedule B2 improvements were placed into operation in fall 2019.

Transfer Lift Station Pump Replacement – The Missouri River Water Resource Recovery Facility–Transfer Lift Station Pump Replacement Project was identified to replace the existing five wastewater pumps that have had operational issues since being placed into operation as part of the MRWRRF Schedule A project in 2014. The improvements also include replacement of the existing stormwater pumps, bridge crane, and other ancillary equipment to support operation of the new pumps.

These improvements, when combined with other projects that are being built to deliver additional wet weather flows to the plant, will result in a significant reduction in bacterial loading to the Missouri River, consistent with the goals of the Long Term Control Plan.

*As of August 2017, the Missouri River Wastewater Treatment Plant (MRWWTP) Improvements Project is now known as the Missouri River Water Resource Recovery Facility (MRWRRF) Improvements Project.