

MDC HARTFORD

Baseline

In the 1970s, there were approximately 170 combined sewer overflow (CSO) regulators in the Metropolitan District (District) combined sewer system that discharged through 47 outfall locations to the receiving streams in the Hartford area. Prior to the implementation of the current program, the estimated volume of CSO discharged through these outfalls in a typical year was 974 million gallons.

Strategy

The District submitted its CSO Long Term Control Plan (LTCP) in December 2004. This LTCP proposed to eliminate all overflows for wet weather events up to the 1-year, 24-hour design storm. This report was approved by the DEEP in 2007. The LTCP was subsequently updated in 2012 in compliance with the DEEP Consent Order which requires project concept reviews every five years. The LTCP Update was modified in response to public input and DEEP review comments and subsequently approved in April 2014. The LTCP Update includes:

- **Expansion of the Hartford Water Pollution Control Facility (HWPCF) for wet weather treatment.** The existing HWPCF facilities are being upgraded and expanded up to a peak wet weather flow rate of 200 million gallons per day (mgd). The current wet weather peak capacity is 120 mgd.
- **Tunnel Storage.** An 87 million gallon deep rock tunnel storage and conveyance system which consists of a South Tunnel and an interconnecting North Tunnel, a new dewatering pump station, connecting drop shafts and odor control is proposed to store overflows and pump them back for treatment at the HWPCF. The tunnel system will also provide for complete elimination of the CSOs that currently discharge to Wethersfield Cove and the free flowing portion of the North Branch of the Park River.
- **Consolidation Conduits.** The tunnel storage plan includes more than 6.5 miles of large diameter consolidation pipes to connect the CSOs to the tunnel storage and conveyance system.
- **Sewer Separation.** The Metropolitan District will conclude construction of multiple sewer separation contracts by the end of 2015. No further system-wide sewer separation is proposed except to correct localized sewer capacity issues.
- **Reduction of Infiltration and Inflow (I/I) through sewer rehabilitation.** Achieving a 10% reduction of I/I in the separated sewer systems serving District communities that contribute flow to the Hartford combined sewer system.

In 2012, the estimated cost to implement the District's Clean Water Project was \$2.1 Billion dollars. This includes over \$1.8 Billion dollars for the control of CSOs.

Status

- Through the implementation of best management practices, CSO regulator modifications, sewer separation projects over the years and the implementation of the initial stages of the Clean

Water Project improvements, the District combined sewer system now includes 84 CSO regulators that discharge through 38 outfall locations.

- The HWPCF improvements are currently under construction and are anticipated to be complete by late 2018.
- The design of the District's South Tunnel is complete and construction is anticipated to begin in 2016.
- Design of Consolidation Conduits is ongoing.
- Sewer separation work is nearing completion and I/I removal work is currently underway.
- Upon completion of the initial stages of the Clean Water Project that are currently under construction, CSO volume in a typical year will be reduced by 33% to 652 million gallons.

Upon implementation of all the recommended improvements in 2026, CSO volume discharged in a typical year will be reduced to 0.