

City of Flint Water Infrastructure Improvements for the Nation (WIIN) Act Project Summary

Executive Summary

The State of Michigan remains committed to supporting the city of Flint as it recovers and rebuilds from the effects of switching the city's water source from Lake Huron to the Flint River on April 25, 2014.

The city of Flint stopped using the Flint River as a water source in October 2015. In 2017, it entered into a 30-year agreement in 2017 with the Great Lakes Water Authority (GLWA) in Detroit to be its primary supplier of water. It now uses water from Lake Huron.

Since July 2016, the city of Flint's water system has met state and federal standards for lead in drinking water for 18 consecutive monitoring periods. The most recent monitoring has shown the 90th percentile for lead to be 3 parts per billion (ppb), below the strict state requirement of 12 ppb.

This historic investment has been supported by thousands of hours of technical assistance on the ground in Flint from EGLE, DHHS, and EPA staff who engaged directly with the public and city officials. This technical assistance included the collection of thousands of drinking water samples to demonstrate through testing data that the people of Flint can once again trust their drinking water system and enjoy clean Great Lakes water for decades to come.

The state has provided more than \$350 million to Flint which included \$100 million from the federal government in the form of a WIIN grant supporting water quality improvements, pipe replacement, healthcare, food resources, educational resources, job training and creation, and more. The following is a detailed breakdown on WIIN granted-funded projects:

Lead Service Line Replacement

WIIN Amount Disbursed: \$44,086,145.00

State WIIN Match Disbursed: \$20,000,000

This project included the excavation of 29,777 lines to confirm the pipe material on both the private and public side of individual water service lines. Based on the results of those excavations, 10,529 water service lines constructed with lead and/or galvanized pipe were replaced with copper pipe. In addition, the WIIN funds were used for the restoration activities associated with the excavation and replacement of these water service lines.

Secondary Water Source

WIIN Amount Disbursed: \$16,637,236

Prior to completing this project, there was a single pipeline that provided treated drinking water from the Great Lakes Water Authority (GLWA) to the city of Flint. The city built a 5.5 mile 36-inch-diameter water main between the Genesee County water system and the Flint water treatment plant to provide a backup water source. This project provides treated water in

emergency situations or if the city exceeds the GLWA withdrawal rate and/or city storage capabilities.

Water Meter Replacement

WIIN Amount Disbursed: \$9,208,450

Aging water meters in the city were unreliable requiring residents to often pay estimated water usage bills. After installing approximately 28,771 meters with WIIN funds, all residential meters in the city not previously updated through a former City project have been replaced. The project used the Badger-LTE M model meter which incorporates automated usage readings using cell towers to transmit data for billing purposes.

Dupont and Atherton Water Main Replacement (Includes a portion of NW Transmission Main)

WIIN Amount Disbursed: \$7,984,815

This project replaced sections of several water mains within the City of Flint's network.

- 15,814 lineal feet of 16-inch diameter water main along Atherton Road from Van Slyke Road and Fenton Road and Fenton Road to Dort Highway
- 5,352 lineal feet of 24-inch and 5,480 lineal feet of 8-inch diameter water main along Dupont South Street from University Avenue to Concord Street
- 3,904 lineal feet of 24-inch and 3,893 lineal feet of 8-inch diameter water main along Dupont North Street from Pasadena Avenue to Bishop Avenue.

Chemical Feed Building

WIIN Amount Disbursed: \$5,493,721

While the city receives treated water from the GLWA and/or Genesee County, there is a need to add additional chemicals at the Flint Water Treatment Plant. A new, permanent chemical feed building was constructed at the water treatment plant site replacing the existing, temporary treatment facilities. The new building provides proper storage of treatment chemicals and houses equipment to maintain chlorine residuals throughout the distribution system, and sodium hydroxide and/or phosphoric acid feed equipment for corrosion control.

Dort Pump Station

WIIN Amount Disbursed: \$4,344,476.95

This project rehabilitated the aging Dort Pump Station. The pump station is designed to provide a firm pumping capacity of 15 million gallons per day. This pump station repumps stored, treated water from the Dort Reservoir to the Flint Distribution System.

Court Street Water Main

WIIN Amount Disbursed: \$4,046,955

This project replaced the existing 24-inch diameter water main and installed a new 8-inch diameter parallel distribution main on Court Street from Albert R. Horrigan Drive to Kensington Avenue and replaced the existing 12-inch diameter water main on Court Street from Kensington Avenue to Center Road.

Dort Reservoir**WIIN Amount Disbursed: \$3,249,230**

This project rehabilitated the underground Dort Reservoir which stores 20 million gallons of water. Water is pumped from this reservoir by the Dort Pump Station into the water distribution system. This storage tank gives Flint additional emergency water reserves and allows the city to buy water outside of peak water usage times to save customers money.

Local Assistance/Capacity Development**WIIN Amount Disbursed: \$2,593,671.05**

Flint partnered with Arcadis of Michigan and their subcontractors Cornwell Engineering Group, Inc, Confluence Engineering Group, and McConnell Communication on a Water Distribution System Optimization Plan. The plan's purpose was to guide improvements for the distributed water quality, sustainability, and long-term operation of the water system. As part of this plan, the engineering groups also completed an Asset Management Plan, a Hydraulic Study, a Corrosion Control Study and a Pipe Loop Study. The purpose of these studies was to guide future water system upgrades and to determine the recommendations for corrosion control including the range of orthophosphate that should be added to the water before and after all lead service line were removed.

Kearsley Street Water Main Replacement**WIIN Amount Disbursed: \$1,115,344**

This water main replacement project was completed along with an MDOT road resurfacing project on Kearsley Street from Chevrolet Avenue to Beach Street. The WIIN funding associated with this project included the replacement and installation of approximately 700 linear feet of 8-inch diameter water main and 5,750 linear feet of 12-inch diameter water main.

Water Quality Monitoring Panels**WIIN Amount Disbursed: \$519,597**

Prior to the is project being completed; water monitoring was done manually at several locations in the water system. An automated monitoring system that included six water quality monitoring stations spread across the distribution system was installed to monitor chlorine residuals, turbidity, pH level, conductivity, pressure, phosphate, and bacteriological indicators. This will assist with water quality compliance and provide real time data. This project ensures a safe supply of drinking water and allows operators to respond faster to water quality changes in the distribution system.

Northwest Transmission Main**WIIN Amount Disbursed: \$423,595**

WIIN funds were used for the planning and design of the Northwest Transmission Main Replacement project. The current 24-inch diameter transmission main was constructed in the 1930s, is near the end of its useful life and is too large of a diameter for current water demands. Flint is seeking financing from the Drinking Water State Revolving Loan for construction costs.

Final determination of DWSRF funded projects will be announced by EGLE in October 2025. If awarded funding, the project would begin in 2026.

Saginaw Street Water Main

WIIN Amount Disbursed: \$185,353

The water main located on Saginaw Street, between Court Street and the Flint River has had numerous breaks and repairs since its installation nearly one hundred years ago. Flint is working with the Michigan Department of Transportation (MDOT) on a brick reconstruction project in the roadway and was awarded an American Rescue Plan-State Revolving Fund Grant from EGLE to cover the water main construction costs related to the project. The WIIN related amount disbursed was for construction engineering activities related to the project.

Longway Water Main

WIIN Amount Disbursed: \$111,411

This water main replacement project was constructed along with an MDOT road resurfacing project on Robert T Longway Boulevard from Chavez Drive to East Boulevard Drive. The WIIN funding associated with this project was for the replacement and installation of approximately 390 linear feet of 12-inch diameter water main.