

# CSO Annual Notification

# 2021

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Compiled annual data pursuant to the requirement of 40 CFR Part  
122.38(b)



**2021**

## **CSO Annual Notice**

*40 CFR Part 122.38(b)*

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## 1. Description of the Location and Receiving Water for CSOs

Table 1.1 lists the location and receiving stream of each Combined Sewer Overflow (CSO). In addition, these locations are graphically represented on a map of the City of Mishawaka in Figure 1.1

**Table 1.1  
Permitted CSO Locations**

Outfall	Location	Latitude <sup>a</sup>	Longitude <sup>a</sup>	Receiving Water
002	Middlesboro Street	41° 39' 37" N	86° 12' 48" W	St. Joseph River
003	Logan Street	41° 39' 36" N	86° 11' 48" W	St. Joseph River
004	Calhoun Street	41° 39' 44" N	86° 11' 43" W	St. Joseph River
006	Clay Street	41° 39' 51" N	86° 11' 34" W	St. Joseph River
008	Charlotte Street	41° 39' 54" N	86° 11' 17" W	St. Joseph River
009	West Street	41° 39' 51" N	86° 11' 10" W	St. Joseph River
011	Christyann Street	41° 39' 52" N	86° 10' 42" W	St. Joseph River
012	Cedar Street	41° 39' 43" N	86° 10' 24" W	St. Joseph River
012A	Lincolnway, East of Cedar	41° 39' 43" N	86° 10' 24" W	St. Joseph River
013	Laurel Street	41° 39' 42" N	86° 10' 21" W	St. Joseph River
014	Merrifield Park	41° 39' 50" N	86° 10' 03" W	St. Joseph River
015	Merrifield Park West	41° 39' 56" N	86° 10' 02" W	St. Joseph River
016	Battell Street	41° 40' 09" N	86° 10' 03" W	St. Joseph River
018	Roosevelt Avenue	41° 39' 56" N	86° 08' 53" W	St. Joseph River
019	Main Street	41° 39' 56" N	86° 10' 54" W	St. Joseph River
020	Vistula Rd. at Ballard Ave.	41° 40' 14" N	86° 07' 05" W	Eller Ditch
021	Linden at Home St.	41° 39' 56" N	86° 08' 52" W	St. Joseph River
022	Virginia at LWE CSO	41° 39' 46" N	86° 07' 46" W	Eller Ditch
023	Manor Dr. at LWE CSO	41° 39' 46" N	86° 07' 46" W	Eller Ditch
023A	N.E. quadrant of Manor Drive at LWE CSO	41° 39' 46" N	86° 07' 42" W	Eller Ditch
024	Oakley Ave. at Vistula Rd.	41° 39' 49" N	86° 07' 28" W	Eller Ditch

<sup>a</sup> CSO locations based on 2017 NPDES Permit

## 2. Documentation of CSO Volume and Duration

Table 2.1 Summarizes CSO volume and duration for each occurrence during the year.

## 3. Documentation of Dry Weather CSO Volume and Duration

In 2021 there were no CSO dry weather overflows.

#### **4. CSO Monitoring Data**

CSO volume and duration is quantified through a calibrated SWMM model. Other monitoring is not conducted.

#### **5. Description of Potentially-impacted Public Access Areas**

Mishawaka has four (4) locations in which public access could be potentially impacted. These locations are:

- Lincoln Park Boat Ramp
- Merrifield Park Boat Ramp
- Monkey Island Boat Ramp
- Zappia Fishing Park

The location of public access areas is marked on Figure 1.1

#### **6. Precipitation Data**

All precipitation data that resulted in a CSO is documented in Table 2.1

#### **7. Permittee Contact Information**

City of Mishawaka  
Mishawaka Utilities Wastewater Division  
1020 Lincolnway West  
Mishawaka, IN 46545  
(574) 258-1655

#### **8. Nine Minimum Controls Summary and Implementation status of LTCP**

##### **NMC #1: Proper Operation and Maintenance**

The Mishawaka Sewer Department has 14 employees, 2 combination sewer cleaning machines, 2 video inspection trucks, several utility vehicles including a backhoe, and a cement mixer trailer to perform various duties. They have a GIS/Locates/New Inspection Department, which locates sewer lines for contractors before digging, inspects new construction connections, and locates City assets in the ground to document their actual locations.

2021 Collection System Summary	
Total Sewer (Sanitary and Storm)	346 miles
Sewer Lines Cleaned	18.46
Sewer Lines Televised	17.95
Residential Service Calls	213
Residential Service after hours	40
Residential Laterals Televised	32
Sewer Insurance Claims	58
Sewer Permit Inspections	141
As-built Inspections	7
Sewer Line Rehab. CIPP	0
Sewer Lines Rehabilitated	0
Manhole Rehab. (poly line)	0
Rehab. Cost Total	0

System Inventory:

The City has a detailed GIS collection system map drawn to scale showing all separate, combined and storm sewers with sewer sizes, length, slope, material, direction of flow, interceptors, manhole location and elevations, catch basins, pump stations, CSO locations, and the WWTP.

**NMC #2: Maximum Use of the Collection System for Storage**

The City has modified CSO diversion structures by raising weirs to provide additional in-system storage and additional hydraulic capacity in the Interceptor. Between the years 1989 and 2015, at least 20 CSO diversion structures have been modified which increased the Interceptor capacity. In addition, the City added parallel Front St. interceptor sewer from CSO 009 to the WWTP and expanded the capacity of River Crossing #2 in Central Park.

In 2020 the City made some large strides in these continued sewer separation improvements including major improvements in and around Crawford Park.

In Crawford Park area the combined sewer overflow was relocated and two new concrete diversion structures were constructed. The construction continued through 2021 with the installation of new 30-inch and 72-inch sewer, and the replacement and rerouting of approximately 600 feet of existing 48-inch sewer within Crawford Park. Despite some delays due to pipe availability associated with the impacts of the pandemic, over 600 feet of new 18-inch force main was installed for future use. The project is tentatively scheduled to be completed in spring 2022. The estimated total City investment in this project is 4 million dollars.

In the Linden area sewer separation continues with multiple phases being completed each year since its inception in 2016. In 2020 construction on new phases began with separating flows on Fourth Street from Mason Street to Byrkit Avenue. This phase also continued the sanitary sewer south including boring under the Norfolk Southern railroad tracks. The crossing under the tracks and pipe south of the tracks remains to be completed in 2021 based on environmental issues on adjacent properties which prevented dewatering operations without a detailed operations plan being approved by multiple entities. The project separates flow and improves Sixth Street, Bradford Court, and Fifth Street south of the railroad tracks.

The Linden Improvements also included a diversion chamber at Linden and Indiana Avenues to divert flow away from Crawford Park to help prevent overflows in the park area, an element that was designed in concert with the Crawford Park improvements. The construction at Linden and Indiana Avenues was completed in late fall 2020. The remainder of the construction is planned for 2021. Over the past four years the City has invested 10.3 million dollars in this project.

A project was initiated in fall 2020 that is intended to address storm drainage issues that have historically impacted Helen Avenue and Delorenzi Avenue at the intersections of Third Street as well as provide combined sewer separation, which is also a component of the Linden Area separation. Improvements will include new storm sewers, curbs, and sidewalks as well as reconstructed streets, replacement of water service lines, and replacement of sanitary sewer laterals. Survey work was completed in 2020. Project design and the first phase of construction are scheduled for 2021 with an anticipated City investment of \$2.4 million.

Phased storm sewer and infrastructure improvements are occurring in the West Street Corridor. The current phase of the West Street project was designed in 2020 and will reduce wet weather flows in our existing combined sewer system and includes West Street from Sixth Street to Seventh Street, Wells Street from Fifth Street to Seventh Street, and Fifth Street and Sixth Street between West Street and Wells Street. Improvements will include new storm sewer; roadway reconstruction including curb, gutter, and sidewalk; water main replacement as necessary; cured-in-place pipe rehabilitation of existing combined sewers; replacement of water service lines and sanitary lateral services; and intersection improvements at Spring Street and Sixth Street including upgrading of curb ramps. Construction is scheduled to begin in spring 2021 with an anticipated City investment of \$2.4 million.

### **NMC #3: Review/Modification of Pretreatment Program**

The purpose of the Mishawaka Industrial Pretreatment Program is to prevent pollutants from being introduced into the sewer system that may be discharged through a CSO during wet weather or may interfere with plant operations and to prevent pollutants that cannot be treated from passing through the plant and into the environment. All permitted industries are

required to monitor and reduce the amount of pollutants being discharged into the city sewer system before entering the wastewater plant.

The pretreatment program currently employs one pretreatment coordinator. Pretreatment duties consist of, but are not limited to the following:

- Permitting and Classification
- Self-monitoring and IU Submission
- Pretreatment Monitoring
- Inspection and Analysis
- Compliance and Enforcement

The City currently has eleven (11) permitted Significant Industrial Users and several non-permitted industries that are routinely monitored and inspected.

#### **NMC #4: Maximization of Flow to the WWTP**

Flow maximization through the wastewater treatment plant is an important element of Mishawaka's CSO LTCP. Hydraulically, the WWTP is designed to pass approximately 42 mgd through the treatment facility. The WWTP expansion, completed in late 2008, provided an average design capacity of 20 mgd and 42 mgd peak sustained flow. The capacity of the upgraded facility is currently being utilized to the maximum extent possible to treat peak wet weather flows and minimize combined sewer overflows. Peak flows of up to 60 mgd have been treated while meeting all NPDES permit effluent limits.

In 2021 the highest peak flow rate treated was 61.5 mgd on August 6th. The maximum total flow treated on a single day was 22.20 million gallons on October 25th.

In 2021 the average daily flow was 9.23 million gallons.

#### **NMC #5: Prohibition of Dry Weather Overflows**

Dry weather overflows are self-reported to IDEM and kept on file at the City. CSOs structures are inspected weekly for evidence of dry weather overflows, debris, or anything out of the ordinary. CSOs that show evidence of unusual flow are inspected more frequently.

To provide a higher degree of preventive maintenance, the Sewer Maintenance Department is equipped with two combination jetting/vacuuming trucks and two video inspection trucks that routinely operate 5 days per week.

In 2021 there were no CSO dry weather overflows.

## **NMC #6: Control of Solids and Floatables**

The following activities comprise the NMC #6 activities in Mishawaka:

- Street Cleaning – The City operates a street cleaning program, with cleaning conducted approximately 9 months out of the year. A complete cycle is made throughout the city every 9 to 11 days.
- New Sign Campaign to Raise Awareness – In conjunction with the Michiana Stormwater Partnership (MSP), signs have been installed near all major surface water bodies in the City. The signs are intended to alert residents to the abundant surface water bodies in the area, and to serve as a reminder to keep these vulnerable resources clean and free of pollutants.
- Leaf Removal Program – The City limits the amount of litter and debris that enters the collection system by operating a leaf and yard waste collection program with weekly pickup through each fall and spring.
- Household Hazardous Waste Collection Program – The Household Hazardous Waste facility located at 1105 East Fifth St. collects hazardous waste from St. Joseph County residents during regular business hours, 8:30 to 3:30 Tuesday through Saturday.
- Recycling Program – The City operates a curbside pick-up recycling program to collect newspapers, glass, plastic, aluminum, metal cans, cardboard, and mixed paper. Recyclables are picked up weekly.
- Catch Basin Signs – To prevent oil and other contaminants from reaching the river, storm drain inlet are cast with the words “DUMP NO WASTE. DRAINS TO RIVER” are utilized by the City.
- Erosion Control – The City has adopted standards concerning erosion control, post-construction stormwater pollution prevention and other provisions related to the regulation of earthmoving, excavation, and stormwater discharge.

**NMC #7 – Pollution Prevention** – Mishawaka is dedicated to a pollution prevention program to reduce contaminants to the St. Joseph River. The programs described in NMC #6 are pollution prevention programs. A public education program has been implemented that utilizes the City’s website and includes a public education video, and information on CSOs.

**NMC #8 – Public Notification** – In accordance with Federal Law (40 CFR 122.38 (c)), Mishawaka operates a CSO notification program. The program provides an initial notification of a CSO event within four (4) hours of becoming aware of an overflow, and a supplemental notice within seven (7) days of the event that provides an estimated CSO volume and estimated start and stop times. Interested persons may get notifications by following Mishawaka CSO Alerts on Twitter. Go to <https://twitter.com/CSOAlerts>. Persons may also search Twitter for “Mishawaka CSO Alerts”.



**NMC #9 – Monitoring** – The purpose of Mishawaka’s monitoring program is to characterize CSO impacts and record rainfall data to estimate CSO frequency, volumes and durations to complete the CSO Monthly Report of Operations (MRO). The river is sampled on a weekly basis for E. coli at five locations. CSO structures are inspected weekly to ensure that there are no instances of dry weather overflows or other impending issues. Dry weather overflows are a very rare occurrence in Mishawaka.

**Implementation Status of LTCP**

The current status of the Implementation of the LTCP is summarized in Table 8.1



**LEGEND**

- CSO
- △ WWTP (001)
- CSO IMPACTED PUBLIC ACCESS
- 1. LINCOLN PARK BOAT RAMP
- 2. MERRIFIELD PARK BOAT RAMP
- 3. MONKEY ISLAND BOAT RAMP
- 4. ZAPPIA FISHING PARK

**CSO LOCATION MAP**

SCALE: 1" = 2000'

FILE: J:\Projects\07190 Mishawaka LTCP- Phase 2\21 CADD Files\21.30 Study and Reports\07190DOR01 1:1 04/01/11 09:20 GH-H



CITY OF MISHAWAKA  
MARCH 2019





City of Mishawaka, Indiana  
 Consent Decree Reporting Requirements (Section VII)  
 Case No. 3:14-cv-00281-JD-CAN  
 Effective Date: May 23, 2014  
 Semi-Annual Report #15  
 30-Sep-21

Project	No.	Start Date	End Date	Description	Note	Status	Work this Period (April 1, 2021 - September 30, 2021)	Work Projected Next Period (October 1, 2021 - March 31, 2022)			
Milburn Area	1	2007	2026	Sewer Separation and Middleboro LS Improvements		Divisions A – G Completed Middleboro LS Upgrade Complete					
Wilson Boulevard Area	2	Dec. 2011	Dec. 2020	Parallel interceptor to redirect Flows from CSO 004, 005, 006, 007 and 008 to RC 4.		Phase I Completed Phase II - Completed					
Central Park Area	3	Started 2008	Dec. 2013	Main St. Underpass Sewer Improvements		Completed					
	4	Dec. 2021	Dec. 2029	Daisy Road Lift Station	*	Property Acquired from AEP June 21, 2011					
				Forcemain	*	95% of Forcemain Installed					
				RC 5		River Crossing 5 Installed					
	5	Started 2008	Dec. 2014	Conveyance from RC 5 to Merrifield Park	*	Preliminary Alignment (Mishawaka Ave to RC5) developed. Design and construction of ~600 feet of FM completed (Linden to Mishawaka Ave).					
	6	Started 2008	Dec. 2031	Front Street Sewer		Completed					
CSO 016 Improvements				*							
East Area	7	Dec. 2016	Dec. 2028	Linden Area Sewer Separation	*	2014 Model Recalibration Completed, Sewer Improvements Study Completed, Design & Construction of Div. A, Phase I & II, Div. B, Div. C and Div. N&P completed. Design of Linden Div. M Phases IA and IB Completed.	Progressed Construction of Division M Phases IA and IB. Progressed construction of ~250 feet of storm sewer (portion of Linden Division H).	Progress Construction of Division M Phases IA and IB. Complete construction of ~250 feet of storm sewer (portion of Linden Division H).			
				8	Dec. 2017	Dec. 2028	Storage and Conveyance – Capital Ave to Merrifield Avenue	*	2014 Model Recalibration Completed Preliminary alignment developed. 60% Design Completed for 1 block, incorporated in Item 10 Project.		
				9	Started 2011	Dec. 2031	Sewer Improvements East of Capital Ave.	*	2014 Model Recalibration Completed		
Mariellen Lift Station (US 331 Underpass)		Phase I - LS w/ 2 Pumps and 3 Siphons Completed and in Operation									
River Center / CSO 009 Area	10	Dec. 2015	Dec. 2023	Storage and Conveyance Merrifield Park to 4th Street	*	Survey 80% Complete Geotechnical Investigation Completed. Preliminary Engineering Completed. 2014 Model Recalibration Completed. 60% Design Completed (Merrifield Ave.). Construction of Crawford Park Storage/Conveyance Completed.	Completed Construction of Storage/Conveyance in Crawford (Merrifield) Park.				
				11	Dec. 2014	Dec. 2022	Storage and Conveyance Merrifield to Main Street	*	90% GBR Completed. Phase I & II Geotech. Investigation Completed. Preliminary Engineering Report Completed. 2014 Model Recalibration Completed. ROW Acquisition, Demolition & Remediation Completed for Parcel 13. Environmental Screening Completed. 90% Design Completed.		
				12	Dec. 2012	Dec. 2020	Storage and Conveyance Main Street to WWTP	*	90% GBR Completed. Phase I & II Geotech. Investigation Completed. Preliminary Engineering Report Completed. 2014 Model Recalibration Completed. 90% Design Completed. ROW Acquisition & Demolition Completed for Parcels 2 and 3. Environmental Screening Completed		

Shading indicates project completed.

\* The City of Mishawaka submitted a request for modifications to their current Consent Decree on August 23, 2018. Modifications are being requested for projects identified with '\*'. As part of the submittal, the City requested that the schedule for projects 10, 11 and 12 be placed in abeyance during agency review. The City responded to the EPA Letter dated November 14, 2019 on February 20, 2020, and to EPA/IDEM April 1, 2020 e-mail on July 9, 2020. The City provided updated information January 15, 2021 and February 11, 2021 in response to Agency request. City provided Long Term Control Plan Update No. 6 to Agencies on September 29, 2021.