2014 Illicit Discharge Detection and Elimination Program Annual Report

Northeast Ohio Regional Sewer District

Protecting Your Health and Environment

CONTENTS

INTRODUCTION

During 2014, the Northeast Regional Sewer District (NEORSD) continued to work to identify and eliminate illicit discharges within its service area (Table 1). Pollutant loads from these discharges may be significantly degrading the water quality of the receiving stream or waterway and, therefore, elimination of them is critical in ensuring aquatic, wildlife, and human health.

Work related to 52 different outfalls was completed by NEORSD personnel in 2014. Of these outfalls, a total of thirteen investigations into all the sources of contamination contributing to discharges were completed. For 21 of the outfalls, initial sampling and source tracking investigations were started, but not finished. It is expected that most of these investigations will be completed in 2015.

Table 1. Summary of 2014 Program Activities	
Number of Outfalls Investigated	53
Number of Investigations Completed	13
Number of Problems Remediated	6
Reduction in Sanitary Sewage Entering Streams	>422,771 gallons/day

For many of the outfalls, the investigations into what was causing the problems were completed in 2013. Activities in 2014, instead, focused on working with the communities to remediate those problems. As necessary, in-person meetings were held to discuss remediation steps and remaining problem-identification needs. Other related activities included following-up with the communities to determine the current status of problems and verifying remediation efforts to determine if they did indeed fix the problem. As a result of these efforts, the total reduction in sanitary sewage entering local waterways in 2014 from illicit discharges was greater than 400,000 gallons per day.

Water Quality and Industrial Surveillance (WQIS) Division personnel also responded to a number of spills that entered local streams in 2014. Activities related to

these spills included, where possible, determining a volume of material spilled and working with other agencies to minimize impacts to the receiving streams through the use of spill containment equipment.

In the following pages, the outfalls that were investigated and the spills and other complaints that WQIS personnel responded to in 2014 are detailed. Included for each is a summary of issues and further actions that are needed to help remediate the problem, along with the current status for the investigation. For those outfalls that were sampled, but not investigated, a table is included showing the sampling results.

ABRAM CREEK

ACMB1354

Receiving Water: Abram Creek Main Branch

Community: Middleburg Heights

Location: Across from 7031 Fry Road

Outfall conditions as of most recent sampling:

E. coli Density: 11,778 Most Probable Number (MPN)/100mL

Problem Summary: Dry-weather flow was traced to between 7031 and 6975 Fry Road. Improper connections between homes and storm sewer may be present. Dye testing should be conducted to determine all sources of sanitary sewage to the storm sewer.

Community Notification: A letter was sent to the City of Middleburg Heights on October 11, 2013, detailing need to conduct dye testing of homes. A follow-up email to the community was sent on November 25, 2014.

Status: Community notified. Remediation pending.

AMH10030

Receiving Water: Abrams Creek Middleburg Heights Tributary 1

Community: Middleburg Heights

Location: Behind 14400 Newton Road

Outfall conditions as of most recent sampling:

Flow: 26,000 gallons/day
E. coli Density: 5,400 Colony-Forming Units (CFU)/100mL

Problem Summary: Problem is intermittent. Dry-weather flow was traced to between 14200 Newton Road and 14400 Newton Road. Improper connection between the home at 14223 Newton Road and the storm sewer has already been documented. Other possible improper connections may also be present in area; dye testing by the City of Middleburg Heights should be conducted to determine all sources of sanitary sewage to the storm sewer.

Community Notification: A letter was sent to the City of Middleburg Heights on February 6, 2014, detailing need to conduct dye testing of homes. A follow-up email to the community was sent on November 25, 2014.

Status: Community notified. Remediation pending.

BAKERS CREEK

OUTFALLS SAMPLED, NOT INVESTIGATED

Outfall	Date	*E. coli* Density (CFU/100mL or MPN/100mL)	Flow (Gallons per day)
BKMB0520	4/28/14	132	---

BALDWIN CREEK

BCMB0510

Receiving Water: Baldwin Creek Main Branch

Community: Middleburg Heights

Location: Under Bagley Road bridge

Outfall conditions as of most recent sampling:

Flow: 196,363 gallons/day
E. coli Density: <1 MPN/100mL

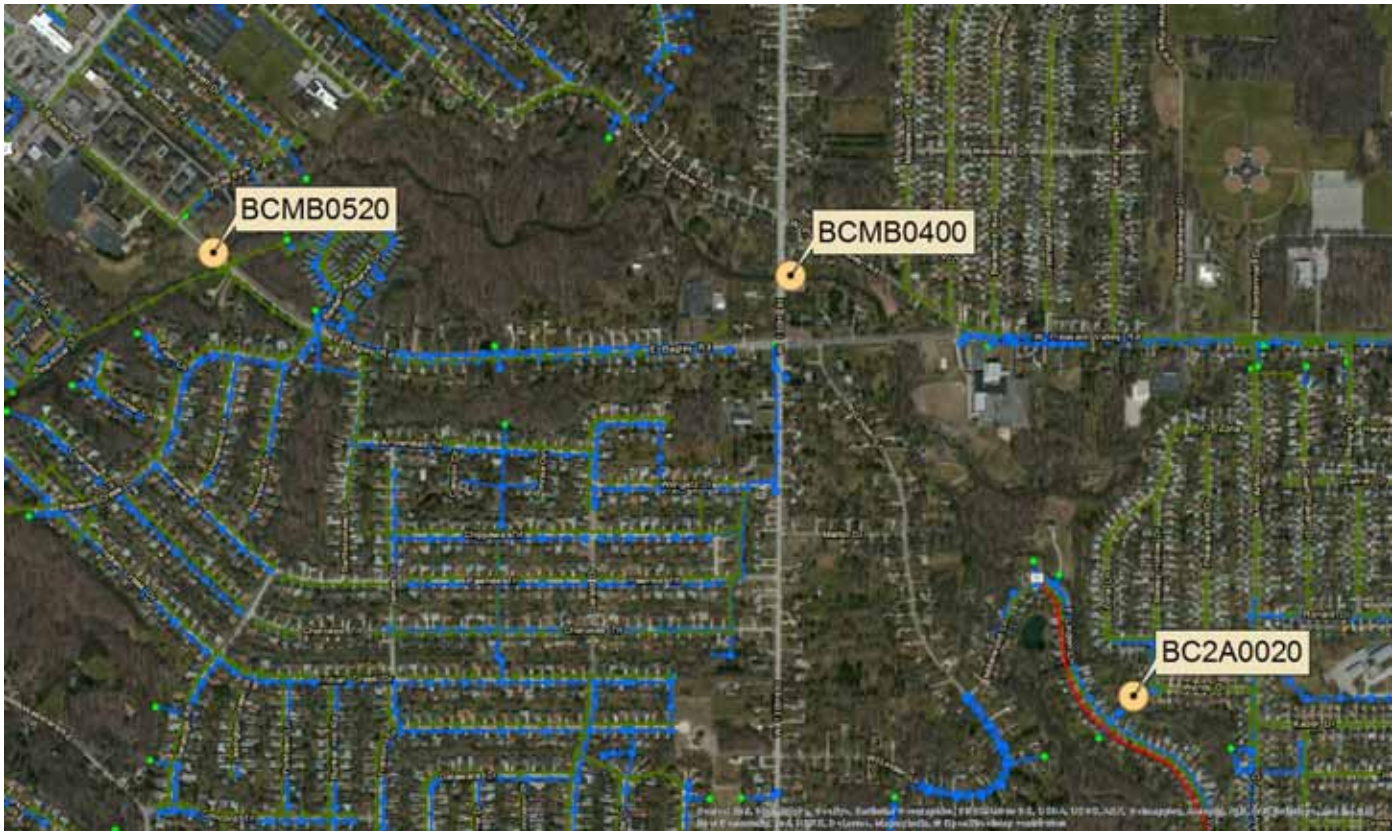
Problem Summary: Water leak located upstream of outfall near 7259 Pearl Road.

Community Notification: The City of Cleveland Water Department was notified of the problem through a phone call on 4/23/2014.

Status: Cleveland Water Department notified. Remediation pending.

OUTFALLS SAMPLED, NOT INVESTIGATED

Outfall	Date	*E. coli* Density (CFU/100mL or MPN/100mL)	Flow (Gallons per day)
BCMB0400	4/28/14	86,645	4,805
BCMB0520	6/20/2014	25	29
BC2A0020	5/23/14	>120,980	2,634



BEECHERS BROOK

BBMB0025

Receiving Water: Beechers Brook Main Branch

Community: Mayfield

Location: Behind 6827 Thornapple Road

Outfall conditions as of most recent sampling:

Flow: 22,982 gallons/day
E. coli Density: 100,800 CFU/100mL

Problem Summary: Some homes in area have home sewage treatment systems that may be failing. According to the Mayfield Village Service Director, these homes will be connected to the sanitary sewer within the next three to five years.

Community Notification: Mayfield Village was notified of problem via letter on July 31, 2014.

Status: Community notified. Remediation pending.

BBMB0026

Receiving Water: Beechers Brook Main Branch

Community: Mayfield

Location: Behind 6827 Thornapple Road

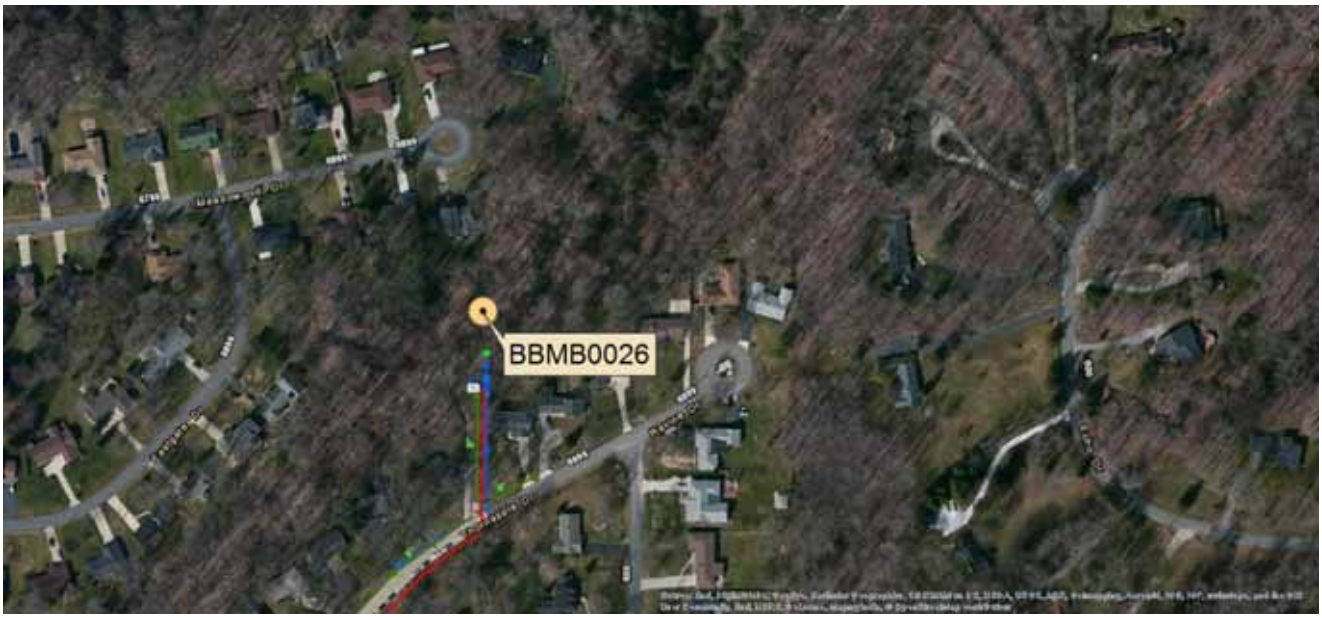
Outfall conditions as of most recent sampling:

Flow: 20,377 gallons/day
E. coli Density: 6,800 CFU/100mL

Problem Summary: Some homes in area have home sewage treatment systems that may be failing. According to the Mayfield Village Service Director, these homes will be connected to the sanitary sewer in 2015.

Community Notification: Mayfield Village was notified of problem via letter on July 31, 2014.

Status: Community notified. Remediation pending.



BIG CREEK

BGMB0080

Receiving Water: Big Creek Main Branch

Community: Parma

Location: State Rd / Coral Gables Dr.

Outfall conditions as of most recent sampling:

Flow: 16,200 gallons/day
E. coli Density: 82,150 MPN/100mL

Problem Summary: Dry-weather flow with elevated *E. coli* densities was traced to between the intersection of State Road and Coral Gables Drive and 4865 Coral Gables Drive and to between the intersection of State Road and Ocala Drive and 4419 Ocala Drive. Recommend dye testing homes in these areas to determine improper connections.

Status: Investigation complete. Community notification pending.

BGMB0155

Receiving Water: Big Creek Main Branch

Community: Parma

Location: Ridge Road at Hidden Valley Lane

Outfall conditions as of most recent sampling:

Flow: 10,966 gallons/day
E. coli Density: 10,378 MPN/100mL

Problem Summary: Dry-weather flow with elevated *E. coli* densities was traced to between 7580 and 7592 Ridge Road. Recommend dye testing homes in this area to determine improper connections.

Status: Investigation complete. Community notification pending.

BGMB0340

Receiving Water: Big Creek Main Branch

Community: Parma Heights

Location: Between 7002 and 7008 Greenbriar Drive

Outfall conditions as of most recent sampling:

Flow: 4,818 gallons/day
E. coli Density: 1,214 MPN/100mL

Problem Summary: Dry-weather flow with elevated *E. coli* densities was traced to between 7026 and 7041 Greenbriar Drive. Recommend dye testing homes in area to determine improper connections.

Status: Investigation complete. Community notification pending.

BGMB0350

Receiving Water: Big Creek Main Branch

Community: Parma Heights

Location: Independence Boulevard at Greenbriar Drive

Outfall conditions as of most recent sampling:

Flow: 1,966 gallons/day
E. coli Density: 5,595 MPN/100mL

Problem Summary: Dry-weather flow with elevated *E. coli* densities traced to Anthony Lane at Independence Boulevard.

Status: Investigation not complete.

BGMB0370

Receiving Water: Big Creek Main Branch

Community: Parma Heights

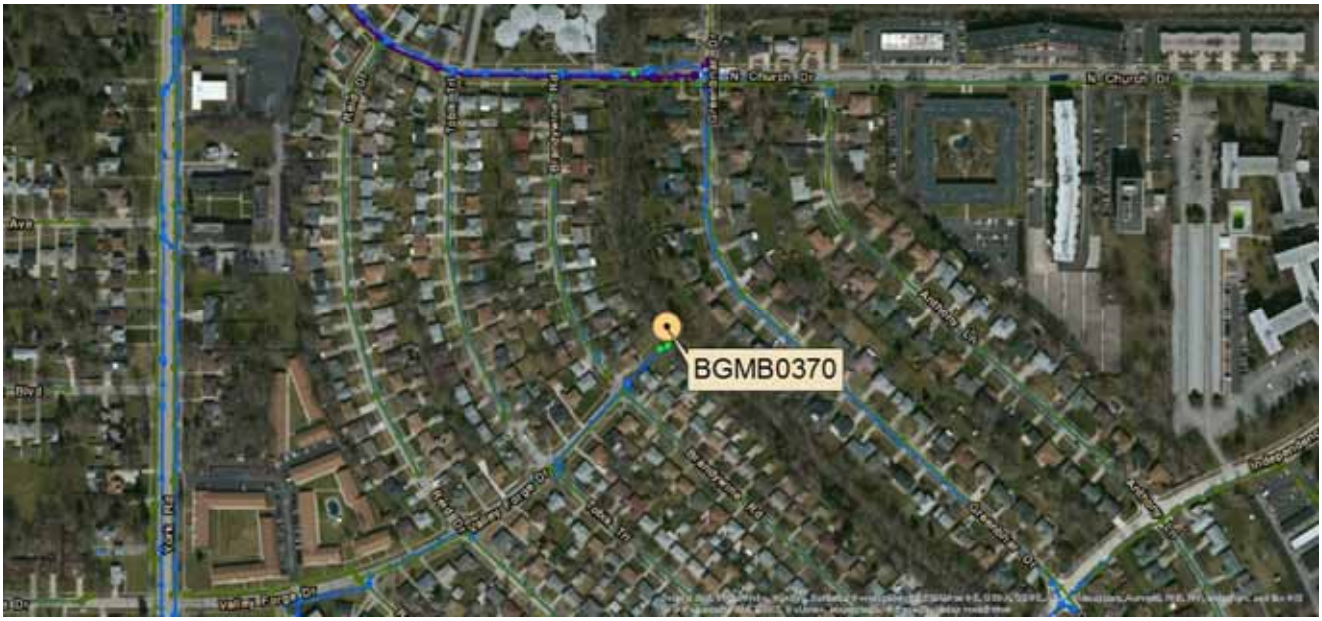
Location: Independence Boulevard at Greenbriar Drive

Outfall conditions as of most recent sampling:

Flow: 10,271 GPD
E. coli Density: 5,460 MPN/100mL

Problem Summary: Dry-weather flow with elevated *E. coli* densities traced to Brandywine Road, Lantern Lane and Valley York Apartments.

Status: Investigation not complete.



BGMB0411

Receiving Water: Big Creek Main Branch

Community: Parma Heights

Location: Corner of Ames Road & North Church Drive

Outfall conditions as of most recent sampling:

Flow: 9,672 gallons/day
E. coli Density: 14,660 MPN/100mL

Problem Summary: Flow tracing and source tracking in the system were started, but no causes for the elevated *E. coli* densities at the outfall have been found, yet.

Status: Investigation not complete.

BGMB0600

Receiving Water: Big Creek Main Branch

Community: Parma Heights

Location: Under Pearl Road Bridge

Outfall conditions as of most recent sampling:

Flow: 8,640 gallons/day
E. coli Density: 87,040 MPN/100mL

Problem Summary: Dry weather flow was traced to Sherborn Drive between Glendora Lane and Appleton Drive. Recommend dye testing of homes between 11661 and 12067 Appleton Drive and on Sherborn Road between Appleton Drive and Glendora Avenue.

Community Notification: The City of Parma Heights was contacted via email on February 10, 2014, regarding status of the problem. They are working with residents to determine any improper connections in the area.

Status: Community notified. Remediation pending.

BGMB1420 (CSO 053)

Receiving Water: Big Creek Main Branch

Community: Cleveland

Location: Brookside Park / John Nagy Blvd

Problem Summary: A sanitary sewer was found leaking into the CSO 053 stormwater outlet near 4087 West 56th Street. Repairs to the sewer were completed September 8, 2014.

Community Notification: The problem was discussed with the City of Cleveland on May 13, August 12 and September 15, 2014.

Status: Problem remediated.

BCRC0080

Receiving Water: Big Creek Reservoir Creek

Community: Parma Heights

Location: Under Pearl Road

Outfall conditions as of most recent sampling:

Flow: 107 gallons/day
E. coli Density: 154,020 MPN/100mL

Problem Summary: NEORSD was notified of an improper connection to storm sewer by a resident. Dry-weather flow with elevated *E. coli* densities was traced to Pearl Road.

Status: Investigation not complete.

OUTFALLS SAMPLED, NOT INVESTIGATED

Outfall	Date	*E. coli* Density (CFU/100mL or MPN/100mL)	Flow (Gallons per day)
BGMB0410	3/25/14	220	40,000
BGMB0480	10/28/14	120,980	1,783
BGMB0490	4/28/14	173,290	2,645

CHAGRIN RIVER

CT112080

Receiving Water: Chagrin River Mayfield Tributary 11

Community: Mayfield Heights

Location: West of I-271, east of Best Buy parking lot

Outfall conditions as of most recent sampling:

Flow: 102 gallons/day
E. coli Density: 2,120 MPN/100mL

Problem Summary: Dry-weather flow with elevated *E. coli* densities was traced to between the intersection of Golden Gate Boulevard and Maplewood Road. Recommend that the City of Mayfield Heights conduct dye testing to determine any improper connections in the area. The City of Mayfield Heights is working with Cuyahoga County Public Works Department to identify and remediate these problems.

Community Notification: A letter notifying the City of Mayfield Heights of the problem was sent on October 13, 2014.

Status: Community notified. Remediation pending.

CT161020

Receiving Water: Chagrin River Mayfield Tributary 16

Community: Mayfield Heights

Location: Behind Middle School off of the track - Behind Hamilton House on City Line (even w/ Pepper Hollow)

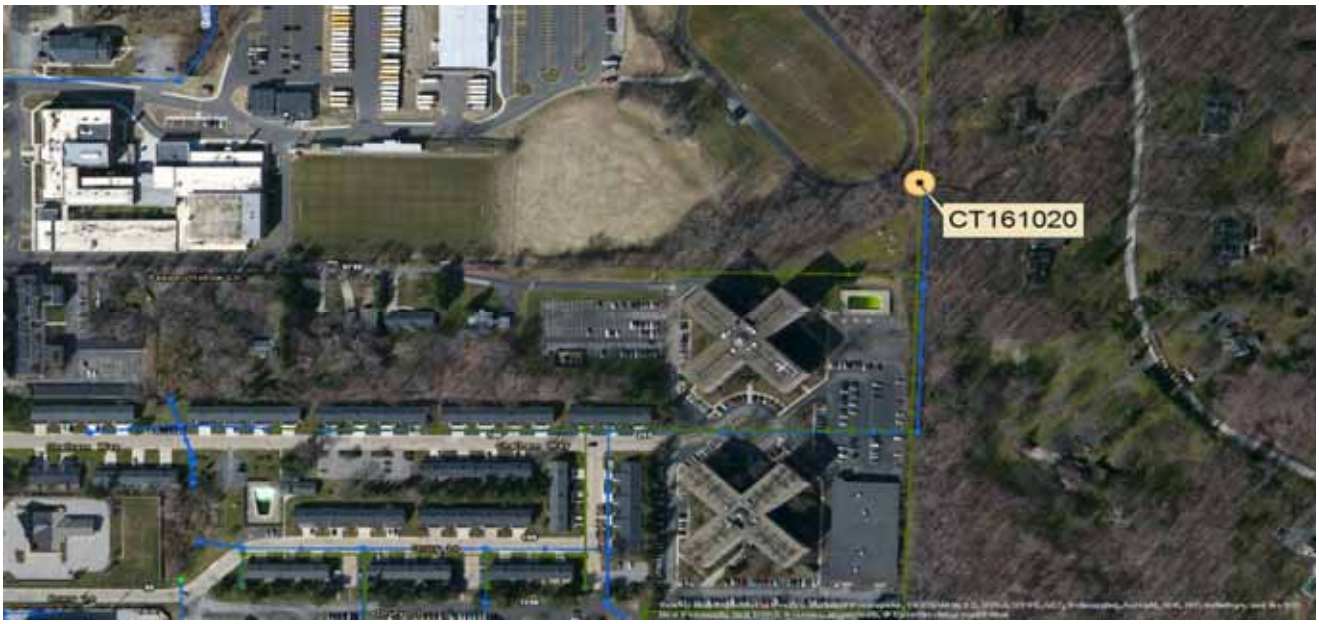
Outfall conditions as of most recent sampling:

Flow: 95 gallons/day
E. coli Density: 50 MPN/100mL

Problem Summary: The headwall of the outfall is cracked and has fallen partially northward into the tributary. Additionally, approximately five feet upstream of the outfall opening, the storm sewer pipe has completely separated from the remainder of the pipe and flow is discharged into the ground through the crack and not through the opening of the outfall. The concrete headwall and exposed pipes are in the process of being fixed by the City of Mayfield Heights.

Community Notification: The community was notified of the problem on October 13, 2014.

Status: Community notified. Remediation pending.



CHIPPEWA CREEK

CCMB0253

Receiving Water: Chippewa Creek Main Branch

Community: Brecksville

Location: Behind 6938 Mill Road

Outfall conditions as of most recent sampling: No flow

Problem Summary: Floor drains in the basement at 6938 Mill Road were improperly connected to the storm sewer outfall that discharged in the back yard. Work was completed on the home to properly connect its sanitary sewer lateral to the sanitary sewer.

Community Notification: The City of Brecksville was notified of the problem via letter on January 26, 2009.

Reduction in Sanitary Sewage Entering Stream: 8,300 gallons/day

Status: Problem remediated.

CUYAHOGA RIVER

CBT60030

Receiving Water: Cuyahoga River Brecksville Tributary 6

Community: Brecksville

Location: Left of east end of Amber Lane

Outfall conditions as of most recent sampling:

Flow: 5,706 gallons/day
E. coli Density: 30,655 MPN/100mL

Problem Summary: Failing home sewage treatment systems are located immediately upstream of the outfall. Dry-weather flow with elevated *E. coli* densities was also found upstream of 7395 Winding Way. The City of Brecksville is working to identify and remediate any improper connections to the storm sewer.

Community Notification: The City of Brecksville was notified of the problem via a letter sent on July 31, 2014. An in-person meeting between NEORSD and the City of Brecksville Building Commissioner took place at the problem area on August 14, 2014.

Status: Community notified. Remediation pending.

DOAN BROOK

DBMB2120

Receiving Water: Doan Brook Main Branch

Community: Shaker Heights

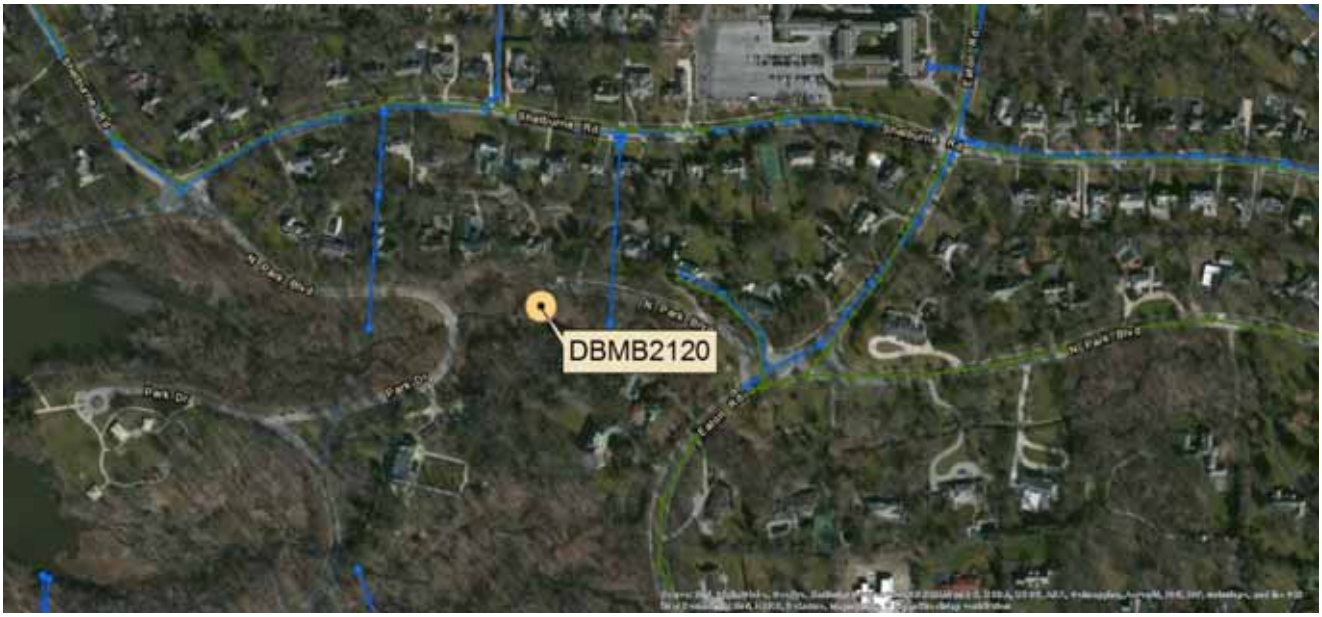
Location: South of Fairhill Road

Outfall conditions as of most recent sampling:

E. coli Density: 1,319 MPN/100mL

Problem Summary: Dry-weather flow with elevated *E. coli* densities was traced to Shelburne Avenue. Recommend that City of Shaker Heights conduct dye testing to determine any improper connections on that street.

Status: Investigation complete. Community notification pending.



EUCLID CREEK

ECMB0050

Receiving Water: Euclid Creek Main Branch

Community: Cleveland

Location: Western end of Hoover Road

Outfall conditions as of most recent sampling:

E. coli Density: 1,350 CFU/100mL

Problem Summary: An improper connection was found between the basement of a home at 817 Hoover Avenue and the storm sewer. The problem was fixed on August 29, 2014.

Community Notification: The problem was discussed with the City of Cleveland Division of Water Pollution Control at in-person meetings on April 8, May 7, June 3, August 12, September 15 and October 31, 2014.

Status: Remediation complete. Verification pending.

ECMB0060

Receiving Water: Euclid Creek Main Branch

Community: Cleveland

Location: Western end of Lakeport Avenue

Outfall conditions as of most recent sampling:

E. coli Density: 3,143 CFU/100mL

Problem Summary: A sanitary sewer connection to the storm sewer near 17506 Lakeport Boulevard still needs to be remediated. Sanitary sewer flow was also found to be leaking to the storm sewer through a catch basin, which was then fixed on September 22, 2014. Dye testing still needs to be conducted at several homes on the street in order to determine any other improper connections.

Community Notification: The problem was discussed with the City of Cleveland at in-person meetings on April 8, May 7, June 3, August 12, and September 15, 2014.

Status: Community notified. Remediation pending.

ECMB0120

Receiving Water: Euclid Creek Main Branch

Community: Cleveland

Location: Under Lakeshore Boulevard

Outfall conditions as of most recent sampling:

E. coli Density: 3 MPN/100mL

Problem Summary: An improper connection between the apartment building at 17530 Lake Shore Boulevard and the storm sewer was found. The problem was remediated on October 23, 2014.

Community Notification: The problem was discussed with the City of Cleveland at in-person meetings on April 8, May 7, June 3, August 12, and September 15, 2014.

Reduction in Sanitary Sewage Entering Stream: 6,171 gallons/day

Status: Problem remediated.

ECMB0150

Receiving Water: Euclid Creek Main Branch

Community: Cleveland

Location: 17805 Brian Avenue

Outfall conditions as of most recent sampling:

Flow: Trickle
E. coli Density: 11,550 MPN/100ml.

Problem Summary: A sanitary sewer overflow (SSO) located at 959 E. 178th Street has not been remediated. The City of Cleveland Division of Water Pollution Control monitored the SSO in 2014 to determine the frequency of activation; no events were found.

Community Notification: The problem was discussed with the City of Cleveland at in-person meetings on April 8, May 7, June 3, August 12, and September 15, 2014.

Status: Community notified. Remediation pending.

ECMB0300

Receiving Water: Euclid Creek Main Branch

Community: Euclid

Location: 1464 Dille Road

Outfall conditions as of most recent sampling:

Flow: 57,600 gallons/day
E. coli Density: 20,530 MPN/100mL

Problem Summary: Improper connections were found between two of the buildings at Indian Hills Apartments and the storm sewer; these problems were remediated. Additional improper connections from one of the buildings were found on October 15, 2014.

Community Notification: On October 9 and 15, 2014, WQIS Investigators met with the City of Euclid at Indian Hills Apartments to verify remediation of two of the improper connections and determine any remaining ones at the apartment complex.

Status: Community notified. Problem partially remediated.

ECMB0350

Receiving Water: Euclid Creek Main Branch

Community: Euclid

Location: 20611 Euclid Avenue

Outfall conditions as of most recent sampling:

Flow: 3,000 gallons/day
E. coli Density: 13,619 CFU/100mL

Problem Summary: Flow with elevated *E. coli* densities was traced along Euclid Avenue to Grand Boulevard. A video inspection of the area indicated improper connections between the apartment buildings located at 20200 and 20240 Grand Boulevard and the storm sewer. Recommend that the City of Euclid conduct dye testing to verify improper connections.

Community Notification: The report detailing the problem was sent to the City of Euclid on October 29, 2014.

Status: Community notified. Remediation pending.

OUTFALLS SAMPLED, NOT INVESTIGATED

Outfall	Date	*E. coli* Density (CFU/100mL or MPN/100mL)	Flow (Gallons per day)
ECMB1080	7/18/2014	77,655	326
ECMB1130	5/30/2014	40,820	6,848
ECE31040	5/5/2014	3,880	3,804

HEMLOCK CREEK

HEMB1180

Receiving Water: Hemlock Creek Main Branch

Community: Seven Hills

Location: 2190 Hillside Road

Outfall conditions as of most recent sampling:

Flow: 713 gallons/day
E. coli Density: 4,600 MPN/100mL

Problem Summary: A home sewage treatment system is located upstream of property. Elevated *E. coli* densities could be due to a failing system.

Status: Investigation complete. Cuyahoga County Board of Health notification pending.

HET11020

Receiving Water: Hemlock Creek Tributary 1

Community: Seven Hills

Location: Behind 7631/7639 Edgewood Drive

Outfall conditions as of most recent sampling:

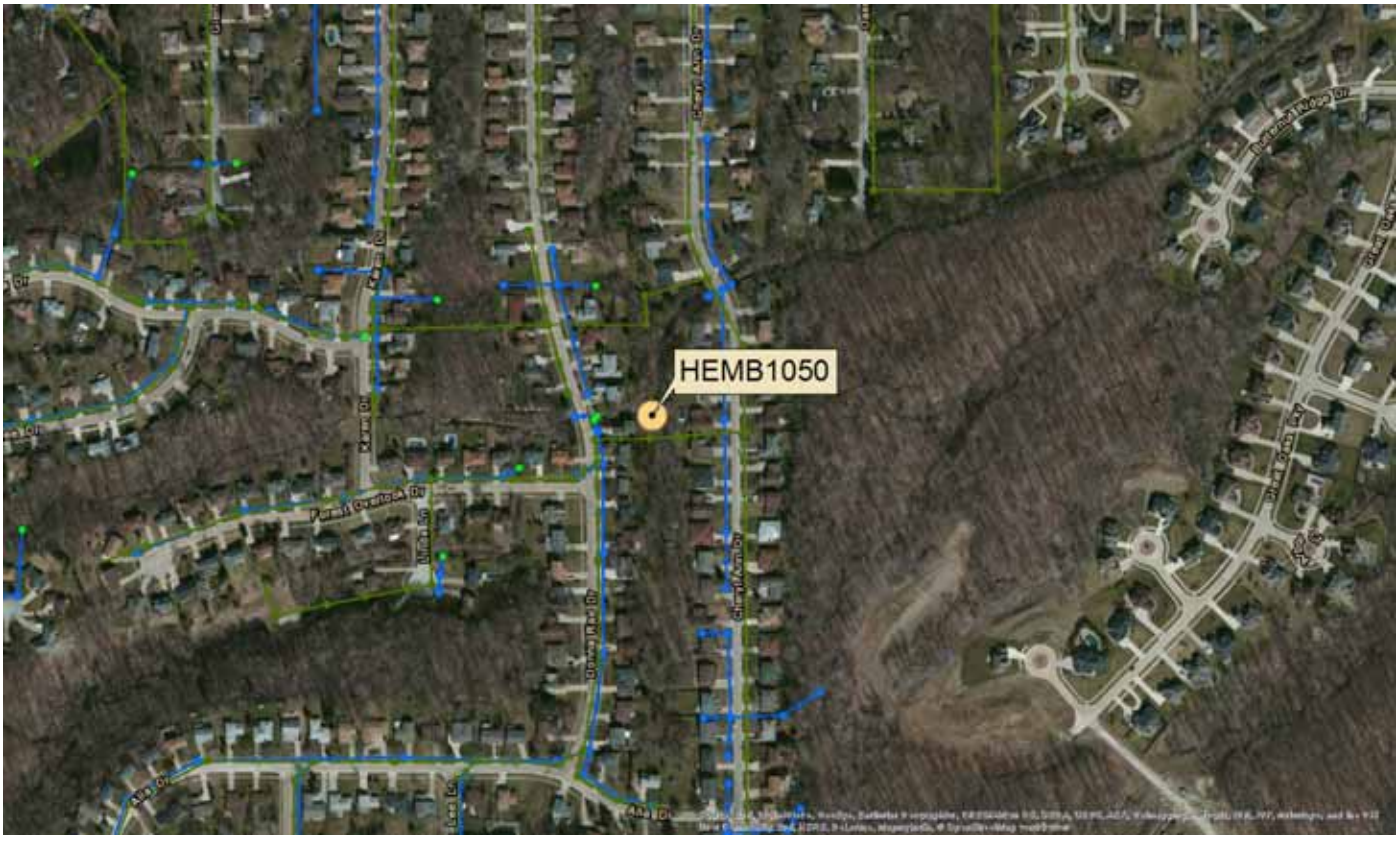
Flow: 3,261 gallons/day
E. coli Density: 52,310 MPN/100mL

Problem Summary: Dry-weather flow with elevated *E. coli* densities traced to Vezper Drive.

Status: Investigation not complete.

OUTFALLS SAMPLED, NOT INVESTIGATED

Outfall	Date	*E. coli* Density (CFU/100mL or MPN/100mL)	Flow (Gallons per day)
HEMB1050	5/5/2014	888	19,636



LAKE ERIE

CSO 093

Receiving Water: Lake Erie

Community: Cleveland

Location: West 3rd Street and Lakeside Road

Outfall conditions as of most recent sampling:

E. coli Density: 460,400 MPN/100mL

Problem Summary: Buildings at 1150 West 3rd Street and 310 Lakeside Avenue are improperly connected to the CSO 093 stormwater outlet. The City of Cleveland is working with the property owners to remediate these problems.

Community Notification: The problem was discussed with the City of Cleveland at in-person meetings on April 8, May 7, June 3, August 12, and September 15, 2014. A notice of violation of the District's Community Combined Sewer Discharge Permit and Title IV Code of Regulations was sent to the City of Cleveland on December 4, 2014.

Status: Community notified. Remediation pending.

CSO 099

Receiving Water: Lake Erie

Community: Cleveland

Location: North of East 38th Street and King Avenue

Problem Summary: An improper connection exists between Par-One Golf Specialties located at 3807 King Avenue and the CSO 099 stormwater outlet. The City of Cleveland is working with the property owner to remediate the problem.

Community Notification: The problem was discussed with the City of Cleveland at in-person meetings on April 8, May 7, June 3, August 12, and September 15, 2014. A notice of violation of the District's Community Combined Sewer Discharge Permit and Title IV Code of Regulations was sent to the City of Cleveland on December 4, 2014.

Status: Community notified. Remediation pending.

CSO 206

Receiving Water: Lake Erie

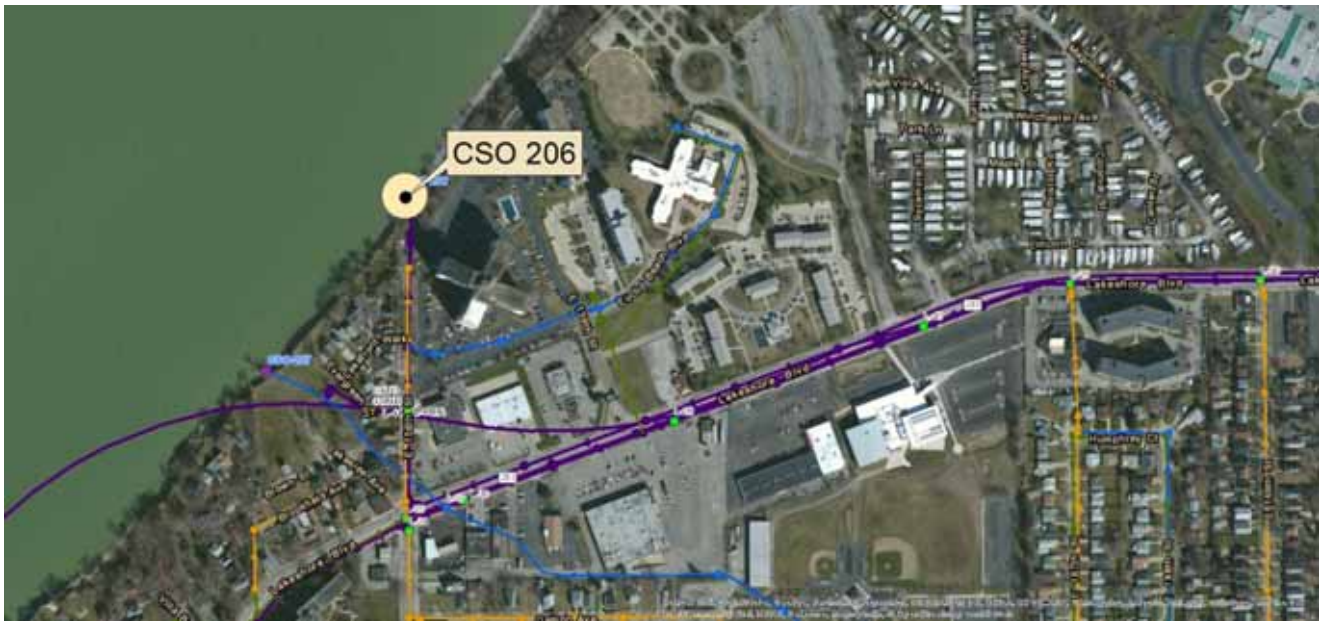
Community: Cleveland

Location: North end of East 156th Street.

Problem Summary: A sanitary sewer overflow was present at the Euclid Beach Mobile Home Community. The problem was remediated in August 2014.

Community Notification: The problem was discussed with the City of Cleveland at in-person meetings on April 8, May 7, June 3, and August 12, 2014

Status: Problem remediated.



MILL CREEK

MCMB2005

Receiving Water: Mill Creek Main Branch

Community: Warrensville Heights/Shaker Heights

Location: Under Warrensville Center Road

Outfall conditions as of most recent sampling:

Flow: 259,200 gallons/day
E. coli Density: 20 MPN/100mL

Problem Summary: A blocked sanitary sewer was found in Shaker Heights along Warrensville Center Road. This blockage was cleared on March 14, 2104. Dry-weather flow with elevated *E. coli* densities was still present in area afterwards. One water leak was found and remediated, while a second has not been fixed. An improper connection to the storm sewer was also found at 20207 Harvard Avenue.

Community Notification: The City of Shaker Heights and the Cuyahoga County Sanitation Engineers were contacted on March 10, 2014, regarding the sanitary sewer blockages. The Cleveland Water Department was notified of the water leaks in the area on April 10, 2014.

Reduction in Sanitary Sewage Entering Stream: 388,800 gallons/day

Status: Investigation not complete

MCMB2200

Receiving Water: Mill Creek Main Branch

Community: Highland Heights

Location: South of Chagrin Boulevard

Outfall conditions as of most recent sampling:

Flow: 50,214 gallons/day
E. coli Density: 28,970 MPN/100mL

Problem Summary: Flow tracing and source tracking in the system were started, but no causes for the elevated *E. coli* densities at the outfall have been found, yet.

Status: Investigation not complete.

ASSET ID MC00089

Receiving Water: Mill Creek Main Branch

Community: Garfield Heights

Location: Near Osborne Avenue

Problem Summary: A sanitary sewer blockage resulted in the surcharging of sewage through a manhole cover and into Mill Creek. The blockage was cleared on August 8, 2014. A collapsed manhole column was also found and repaired.

Community Notification: The City of Garfield Heights was notified of the problem on June 17, 2014.

Reduction in Sanitary Sewage Entering Stream: 19,500 gallons/day

Status: Problem remediated.

ROCKY RIVER

RRMB0100 (CSO-068)

Receiving Water: Rocky River Main Branch

Community: Cleveland

Location: Hogsback Lane and Rocky River Drive

Outfall conditions as of most recent sampling:

Flow: 480,000 gallons/day
E. coli Density: 3,915 MPN/100mL

Problem Summary: Dry-weather flow with elevated *E. coli* densities was traced to Montrose Avenue and upstream locations. Improper connections were found between St. Mark School and Rectory and the storm sewer. The City of Cleveland is working with them to remediate the problems. Dye testing should be conducted to determine all other sources of sanitary sewage to the storm sewer in that area.

Community Notification: The problem was discussed with the City of Cleveland at in-person meetings on April 8, May 7, June 3, August 12, and September 15, 2014. A notice of violation of the District's Community Combined Sewer Discharge Permit and Title IV Code of Regulations was sent to the City of Cleveland on December 4, 2014.

Status: Community notified. Remediation pending.

RRMB0340 (CSO-067)

Receiving Water: Rocky River Main Branch

Community: Cleveland

Location: 17504 Allien Avenue

Outfall conditions as of most recent sampling:

Flow: 32,400 gallons/day
E. coli Density: 44,000 MPN/100mL

Problem Summary: Improper connections to the storm sewer were found at 4037 and 4049 Rocky River Drive.

Community Notification: The problem was discussed with the City of Cleveland at in-person meetings on April 8, May 7, June 3, August 12, and September 15, 2014. A notice of violation of the District's Community Combined Sewer Discharge Permit and Title IV Code of Regulations was sent to the City of Cleveland on December 4, 2014.

Status: Community notified. Remediation pending.

RRMB0630 (CSO-064)

Receiving Water: Rocky River Main Branch

Community: Cleveland

Location: Valley Road

Outfall conditions as of most recent sampling:

Flow: 17,280 gallons/day

E. coli Density: 99,320 MPN/100mL

Problem Summary: Dry weather flow with elevated *E. coli* densities was traced to Westdale Avenue and to North Rocky River Drive.

Status: Investigation not complete.

RREB0570

Receiving Water: Rocky River East Branch

Community: Berea

Location: 95 Prospect Road

Outfall conditions as of most recent sampling:

Flow: 27,490 gallons/day
E. coli Density: 3,665 MPN/100mL

Problem Summary: Dry-weather flow with elevated *E. coli* densities traced to between 346 Edgewood Drive and the intersection of Edgewood Drive and West Street. Dye testing of homes in the area began on December 15, 2014.

Community Notification: The City of Berea was informed of the problem on August 19, 2014.

Status: Community notified. Remediation pending.

RREB0880

Receiving Water: Rocky River East Branch

Community: Berea

Location: 67 Riverside Drive

Outfall conditions as of most recent sampling:

Flow: 16,200 gallons/day
E. coli Density: 9,070 MPN/100mL

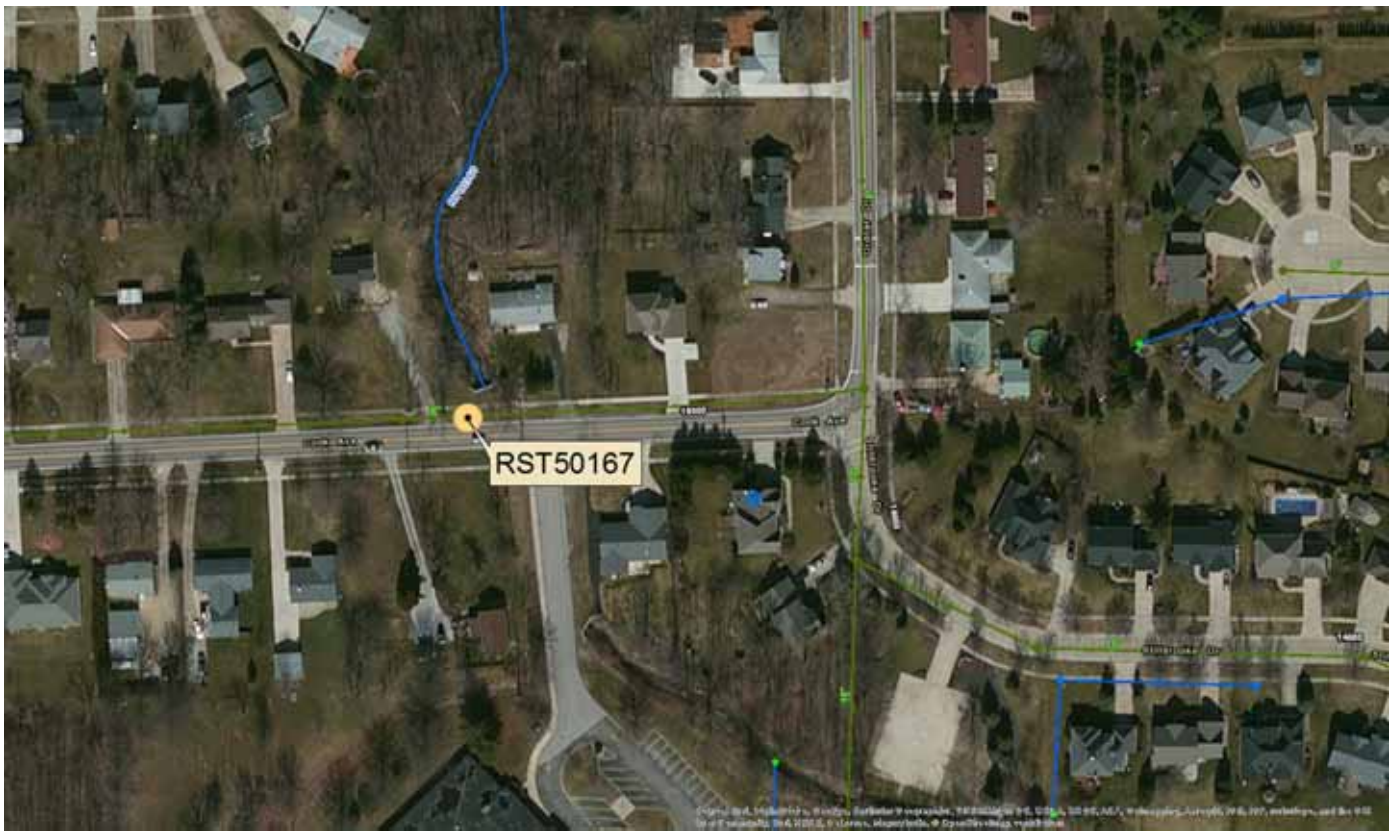
Problem Summary: Dry-weather flow with elevated *E. coli* densities was traced to Front Street between 31 Riverside Drive and 87 Front Street. A water main break was also found between 44 and 54 Front Street. The City of Berea is conducting dye tests and working to remediate any problems with improper connections and water leaks in the area.

Community Notification: The City of Berea was notified of the problem via a letter sent on July 31, 2014.

Status: Community notified. Remediation pending.

OUTFALLS SAMPLED, NOT INVESTIGATED

Outfall	Date	*E. coli* Density (CFU/100mL or MPN/100mL)	Flow (Gallons per day)
RST50167	4/21/2014	99,315	39



STICKNEY CREEK

SKMB0040

Receiving Water: Stickney Creek Main Branch

Community: Brooklyn

Location: Valley Road

Outfall conditions as of most recent sampling:

E. coli Density: 120,980 CFU/100mL

Problem Summary: Dry-weather flow with elevated *E. coli* densities was traced to Outlook Drive, Memphis Villas Boulevard, Roadoan Road, Forest Edge Drive, and Northlane Drive. The City of Brooklyn is currently working with the Cuyahoga County Department of Public Works to identify and remediate any improper connections to the storm sewer.

Community Notification: A letter was sent to the City of Brooklyn on February 10, 2014, detailing the need to dye test homes. An in-person meeting was also held between NEORSD, the City of Brooklyn and the Cuyahoga County Department of Public Works on September 9, 2014, to discuss the problem.

Status: Community notified. Remediation pending.

WEST CREEK

WCMB0700

Receiving Water: West Creek Main Branch

Community: Parma

Location: Broadview Road

Outfall conditions as of most recent sampling:

Flow: 6,000 gallons/day
E. coli Density: 9 CFU/100mL

Problem Summary: Cracks and holes were found in a storm sewer at the intersection of Broadview Road and Broadrock Court that allowed sanitary sewage to discharge during sewer blockages. Repairs to the storm sewer were made to prevent future discharges to the outfall.

Community Notification: A letter was sent to the City of Parma detailing the problem on July 28, 2014.

Status: Problem remediated.

OUTFALLS SAMPLED, NOT INVESTIGATED

Outfall	Date	*E. coli* Density (CFU/100mL or MPN/100mL)	Flow (Gallons per day)
WCMB0690	5/23/2014	21,750	540

MISCELLANEOUS INVESTIGATIONS

OUTFALL TO BIG CREEK (HEXAVALENT CHROME)

Receiving Water: Tributary to Big Creek Main Branch

Community: Cleveland

Location: 9921 Clinton Road

Volume Spilled: Unknown

Problem Summary: On July 13, 2014, a water line at Plastic Platers, Incorporated ruptured over a hexavalent chrome recovery tank, flooding the area. Some of the contaminated water made it to the nearby storm sewer and, eventually, to a tributary to Big Creek. Enviroscience, Incorporated was contracted to provide cleanup of the spill, which included pumping out the water from pools in the stream bed.

Status: Problem remediated.

BGMB1010 (GASOLINE)

Receiving Water: Big Creek Main Branch

Community: Brooklyn

Location: Tiedeman Road

Volume Spilled: 500 gallons

Problem Summary: On February 12, 2014, a gasoline leak occurred from a Buckeye Pipeline valve fitting. Once the spill was found, an absorbent boom was placed in front of the outfall. An unknown amount of gasoline, however, had already entered Big Creek by that time. Remediation efforts included removal of contaminated soil in the affected area to prevent the further release of gasoline to the stream.

Status: Problem remediated.

CRBH0030 (LUBRICANT)

Receiving Water: Cuyahoga River Brooklyn Heights Tributary

Community: Brooklyn Heights

Location: 201 Eastview Road

Volume Spilled: Unknown

Problem Summary: On May 1, 2014, a spill of Tuf Draw 1919 lubricant occurred at the Die-Matic Corporation. This material traveled through a storm drain and entered an un-named tributary to the Cuyahoga River. After the spill was discovered, a plug was put into the outfall to prevent the further discharge of the substance to the stream. The lubricant remaining in the storm sewer was later pumped into a nearby sanitary sewer.

Status: Problem remediated.

MANHOLE ADJACENT TO EUCLID CREEK (OIL)

Receiving Water: Euclid Creek

Community: Cleveland

Location: 1201 East 185th Street

Volume Released: Unknown

Problem Summary: An oil-water separator located at a Marathon Gas Station that contained any excessive amount of solids allowed water with dilute petroleum products in it to surcharge through a manhole and flow over ground into Euclid Creek. The gas station owners were directed to clean out the separator to prevent the further release of contaminated flow to the creek.

Status: Problem remediated.

CSO-094 (SANITARY SEWAGE)

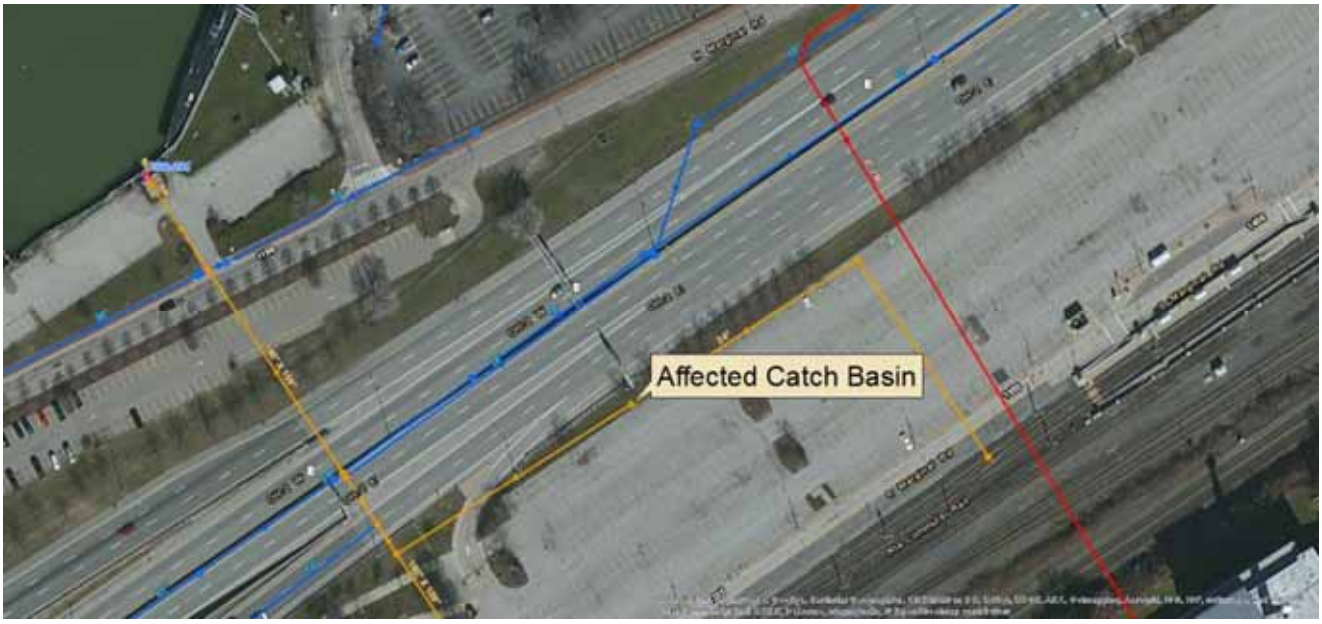
Receiving Water: Lake Erie

Community: Cleveland

Location: 1501 South Marginal Road

Volume Released: Unknown

Problem Summary: On October 12, 2014, owners of a recreational vehicle parked at the City of Cleveland Municipal Lot dumped sanitary waste from the vehicle into a nearby catch basin. It was determined through dye testing that this catch basin was tributary to CSO 094.



CONCLUSIONS

Over the past two years, more than 500,000 gallons per day of raw sewage discharging to the environment has been eliminated as a result of the illicit discharge source tracking and follow-up investigations that were completed as part of NEORSD's Illicit Discharge Detection and Elimination Program. While a significant volume, a great need still exists to continue to work on these problems, as a high percentage of storm sewer outfalls in the NEORSD's service area still discharge unacceptable levels of sanitary sewage and other pollutants to the environment. As indicated in this report, illicit discharges can be due to a variety of issues such as improper connections to the storm sewer, water leaks, and blocked sanitary sewers, among others. Because of this, a collaborative effort between NEORSD and the affected community is often needed in order to remediate these problems in an effective and efficient manner. With focused efforts to identify and remove illicit discharges using this process, water quality conditions in area waterways, along with human and biological health, will continue to improve in upcoming years.