

**Wayne County Illicit Discharge Elimination Program
ARC IDEP Services 2025 Report**

Executive Summary

Wayne County Department of Public Services Environmental Services Division (ESD) performed source identification advanced investigations in the cities of Plymouth, and Livonia (Table 1). ESD also collaborated with ARC staff with source identification efforts in the cities of Livonia and Wayne. Other tasks completed in 2025 include IDEP Training, water quality monitoring, and activity reporting.

Table 1: Findings and recommended actions for illicit discharge investigations

Community	Outfall/ target area	Findings	Recommendations
Plymouth	PY8	Elevated <i>E. coli</i> and HF183 marker	No additional investigation in this area recommended
Plymouth	PY5	Elevated <i>E. coli</i> and HF183 marker	Perform follow up sampling for <i>E. coli</i> and HF183 marker at outfall after illicit connections are identified/confirmed corrected
Plymouth	Mill/Park Street	Ongoing compliance efforts with the City of Plymouth and the property owners of the 3 remaining illicit connections	Recommend continued communication and compliance efforts to correct remaining illicit connections. Once corrections are made, perform follow-up sampling for <i>E. coli</i> and HF183 marker at outfall and Mill Street laterals
Livonia	2680	Elevated <i>E. coli</i> and HF183 marker at outfall and storm sewer laterals	Recommend continuing investigations, including sampling for <i>E. coli</i> and HF183 marker in storm sewer laterals, and dye testing as needed
Lower Rouge	Lower Rouge Water Trail	Monitoring 7 sites on the Lower Rouge Water Trail during the recreational season	Follow up investigations as needed in sections of the river upstream of sites with elevated <i>E. coli</i> concentrations

Task 1: Field Investigations

ESD conducted IDEP investigations at various outfalls and upstream storm sewer manholes. Water samples were tested for *E. coli* and observations were recorded regarding water clarity, color, odor, and

debris. In addition to ESD's typical IDEP investigation methods, select samples were analyzed for the Human Source (HF183) marker. The presence of the marker above 1,000 gene copies (GC)/100 mL is used as a threshold to indicate potential human source (s) of bacteria present when correlated with elevated *E. coli* levels.

City of Plymouth

ESD coordinated with ARC staff and the City of Plymouth on investigations of outfalls PY8, PY5, and the Park Street municipal separate storm sewer systems (MS4). The PY8 and PY5 outfalls discharge to the North Branch Tonquish Creek. The Park Street MS4 captures the Mill Street drainage and discharges to the Rouge River Middle Branch.

Outfall PY8

ESD did not perform any manhole and storm sewer lateral investigations upstream of the outfall in 2025. Elevated HF183 marker was identified in a segment of storm sewer during manhole sampling during investigative work of previous years. This segment is the furthest upstream segment of the Blunk Street storm sewer (between Junction and Farmer Streets). There are known sanitary sewer integrity issues in the area, and the City of Plymouth has plans for infrastructure improvements. No additional investigation is planned in this area for 2026.

Outfall PY5

ESD did not perform any manhole and storm sewer lateral investigations upstream of the outfall in 2025. Elevated HF183 marker was identified in segments of storm sewer during manhole sampling during investigative work of previous years. The City of Plymouth dye tested six out of seven residences in the investigation area on William Street. The residences dye tested did not have illicit connections. The one remaining residence on William Street is not allowing access to perform a dye test, and an illicit connection is suspected.

Completing dye testing of the remaining residence, confirming correction of illicit connections, and follow up sampling for *E. coli* and HF183 marker at the outfall is planned for 2026.

Park Street/Mill Street Investigation Area

Efforts are ongoing to resolve illicit connections remaining at three residences. Two of the residences discharge into Wayne County Mill Street MS4 (195 S. Mill and 485 S. Mill). The third, a residence on Amelia Street (175 Amelia), discharges into the City of Plymouth MS4. Amelia Street is tributary to the Mill Street storm sewer.

Once the illicit connections are confirmed corrected, the Mill Street storm sewer laterals and the Park Street storm sewer outfall will be resampled for *E. coli* and HF183 marker.

City of Livonia

Outfall 2680

The City of Livonia televised the storm sewer line on the north side of Pickford Street between Hillcrest and Bainbridge Streets during July 2025. Elevated *E. coli* and HF183 marker were detected during previous investigations. The televising crew found an unpermitted six-inch edge drain 90 feet west of Flamingo Street from a residential back yard. The pipe may be receiving stormwater drainage from the residence. Two unknown leads were identified between Bainbridge and Milburn Streets, but these leads appear to be stormwater drainage, possibly from beehive drains adjacent to the roadway. No signs of illicit discharge (s) were observed during the televising.

DPS-ESD and ARC staff performed additional source tracking on the Pickford Street storm sewer line on September 18, 2025. Elevated *E. coli* and HF 183 markers were detected in samples from the Sunset Street inlet. The City of Livonia performed televising on the Pickford Street line to Purlingbrook Street, and Sunset, Milburn, Flamingo, and Hillcrest Streets north to Clarita Steet in November 2025. No illicit discharges were identified.

Further source tracking efforts on the Sunset Street storm sewer line, and dye testing performed as needed are recommended for 2026.

The 2680 source tracking area is shown in Figure 1. The dry weather screening data is in Appendix A, Table A1.

Source Investigation Support

ESD supported ARC staff with performing source investigations on Wayne outfalls #36, 47, and 65, and Livonia outfall U2008170. Summaries of the investigations are in the 2025 ARC Activity report, prepared by ARC staff.

Lower Rouge Water Trail Monitoring

Wayne County continued monitoring *E. coli* at seven sites along the Lower Rouge Water Trail route during the 2025 recreational season. The monitoring was performed for eight weeks during August-October 2025. A total of 57 *E. coli* samples were collected on the Lower Rouge Water Trail, including one sample collected at an additional site on the Lower Rouge at Merriman Road.

The samples collected on the Lower Rouge Water Trail met 1000 CFU/100mL *E. coli* partial body contact standard for six out of eight monitoring events. One sample exceeded the 1000 CFU/100mL *E. coli* partial body contact standard during dry weather. This sample was collected at LR-05 (Henry Ruff Road) on September 15, 2025, and had an *E. coli* concentration of 1100 CFU/100mL.

Fifteen of the 57 samples (26.3%) were at or below the full body contact standard of 300 CFU/100mL *E. coli*.

Geomeans performed on the data by monitoring event demonstrate that the partial body contact standard was met for seven out of eight events, a wet weather event on September 24, 2025, being the exception. The geomean was below 300 CFU/100mL for three of the events, with the lowest geomean occurring on October 13, 2025.

DPS-ESD plans to continue the Lower Rouge Water Trail Water Quality monitoring during the 2026 recreational season.

Appendix C contains the 2025 Lower Rouge Water Trail monitoring data and event geomeans

Task 2 IDEP Training

Four IDEP training workshops were presented in 2025 in partnership with the Southeast Michigan Council of Governments (SEMCOG) Partners for Clean Water and the ARC. ESD provides support to ARC and SEMCOG for these training efforts. The Alert Observer training was offered as an in-person training and included a visit to a nearby outfall for an outfall screening demonstration. The IDEP Investigator training workshop was also in-person.

Alert Observer

The IDEP Alert Observer training workshop is a one-hour session that includes a question and answer session at its conclusion. This training introduces illicit discharges, why it is important to identify and report, and reporting procedures. The in-person training workshop was held in person at the Oakland County Water Resource Commission Office, in Oakland County on November 5, and at the Northville Township Essential Services Complex in Wayne County November 12. A total of 73 persons attended the sessions. Forty-two (42) attendees were representatives of (or consultants representing) ARC member communities.

IDEP Investigator

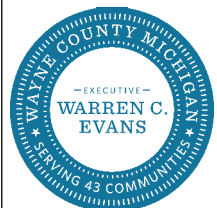
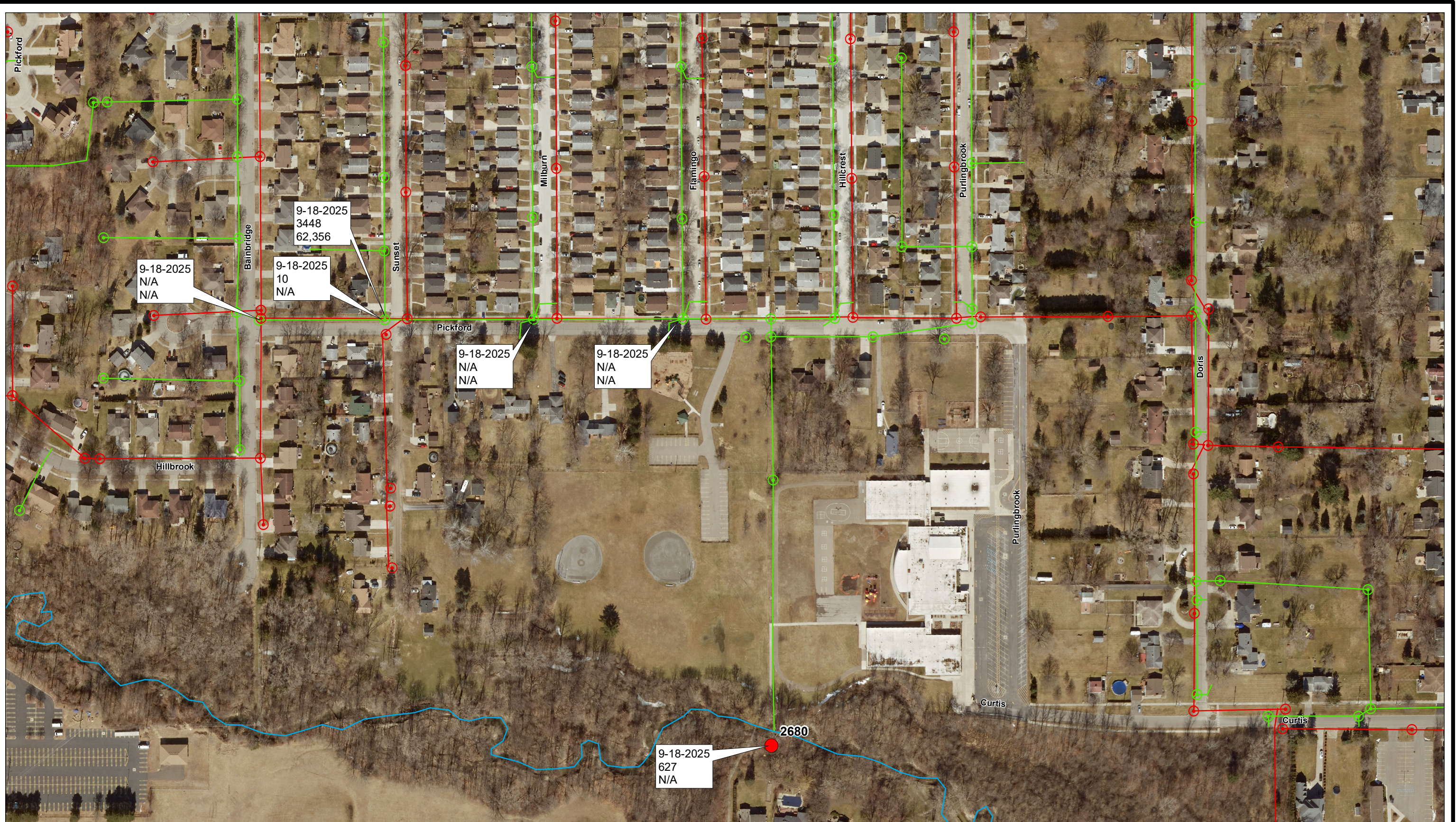
The IDEP Investigator training workshop is a three-hour session that includes a question and answer session at its conclusion, and a tabletop exercise. This training details the various techniques used to investigate, identify and eliminate illicit discharge sources. The Investigator training in-person training workshop was held in person at the Oakland County Water Resource Commission Office, in Oakland County on November 5, and at the Northville Township Essential Services Complex in Wayne County November 12. A total of 52 persons attended the sessions. Thirty-two (32) of the attendees were representatives of (or consultants representing) ARC member communities.

Appendix C contains the attendance lists for the Alert Observer and IDEP Investigator workshops. Attendees representing ARC communities are highlighted.

Task 3 Reporting

Written progress summaries of IDEP activities were provided. The 2024 IDEP Activities Summary was completed and the 2024 activities summary drafted.

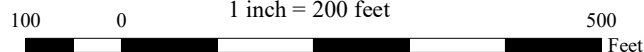
2025 ARC IDEP Field Investigations
Figure 2: Outfall 2680 Investigation Area Map



CITY OF LIVONIA
2025 IDEP Investigation
Outfall 2680



Scale: 1:2,400
 1 inch = 200 feet



E. coli reporting units - CFU/100 ml
 2021 E. coli only
 HF183 reporting units - GC/100 ml
 2023 & 2024 HF183 and E. coli.
 top value E. coli - CFU/100 ml
 bottom value HF183 - GC/100 ml

- Category B outfall
- Sanitary Gravity Main
- Sanitary Manhole
- Stormwater Gravity Main
- Stormwater Manhole

Appendix A
2025 ARC IDEP Field Investigation Data
City of Livonia
Table A1: Outfall 2680 Investigation Area

APPENDIX A
 OUTFALL 2680 INVESTIGATION
 CITY OF LIVONIA
 ARC IDEP 2025

Number	Date	Investigation Location	Site Location	<i>E. coli</i> (colony-forming units (CFU)/100mL)	HF183 Gene copies (GC)/100mL	Ammonia (PPM)	Surfactant (PPM)	Conductivity (mS/cm)	Temperature (degrees Celsius)	Observations	Sanitary Flow Evidence	Odor
1	9/18/2025	Outfall 2680	Outfall 2680	627	NA	NA	NA	NA	NA	Water clear at outfall	No	No
2	9/18/2025	Pickford/Sunset north inlet	Outfall 2680	3448	62356	NA	NA	NA	NA	Trickle flow from north inlet; steady flow from west	No	No
3	9/18/2025	Pickford/Sunset west inlet	Outfall 2680	10	NA	NA	NA	NA	NA	Trickle flow from north inlet; steady flow from west	No	No
4	9/18/2025	Pickford/Flamingo	Outfall 2680	NA	NA	NA	NA	NA	NA	Clear flow from west inlet, north inlet dry	No	No
5	9/18/2025	Pickford/Milburn	Outfall 2680	NA	NA	NA	NA	NA	NA	Clear flow from west inlet, north inlet dry	No	No
6	9/18/2025	Pickford/Bainbridge	Outfall 2680	NA	NA	NA	NA	NA	NA	Trickle flow from catch basin, lots of sediment in bottom of sump and north inlet. Clear water	No	No

Appendix B

Table B 2025 Lower Rouge Water Quality Monitoring Data and event geomeans

Wayne County Lower Rouge Water Trail Water Quality Monitoring Summary

Escherichia coli (*E. coli*) reported as Colony Forming Units (CFU)/100mL

State of Michigan recreational total body contact standard: 300 CFU/100mL

State of Michigan recreational partial body contact standard: 1000 CFU/100mL

Results exceeding recreational partial body contact standard in red font

Sample Site Location	Community	Date Sampled							
		8/4/2025	9/3/2025	9/8/2025	9/15/2025	9/24/2025	9/30/2025	10/6/2025	10/13/2025
LR-01 Morton Taylor Rd	Canton	180	200	200	200	4000	310	410	<1
LR-02 John Hix Rd	Wayne	380	310	410	850	8000	310	<1	200
LR-03 Elizabeth St	Wayne	400	410	410	410	9800	410	750	200
LR-04 Venoy Rd	Wayne	330	200	310	860	24000	630	740	630
Merriman Rd	Wayne	NA	NA	NA	NA	NA	980	NA	NA
LR-05 Henry Ruff Rd	Westland	360	740	300	1100	18000	630	200	<1
LR-06 John Daly Rd	Inkster	350	750	100	410	12000	200	740	100
Beech Daly	Inkster	550	410	410	520	9900	980	510	410
48 hour rainfall total prior to sampling (inches ")		T	0.00"	0.00"	T	0.43"	0.00"	0.00"	0.00"
Last recorded measurable rainfall prior to sampling amount/date		0.39" 7/31/2025*	0.10" 8/24/2025	0.41" 9/4/2025	0.41" 9/4/2025	0.89" 9/24/2025	0.89" 9/24/2025	0.89" 9/24/2025	0.01" 10/10/2025

Notes:

T-Trace of Precipitation recorded

*1.80" of precipitation recorded July 30, 2025, and 2.68" July 28, 2025

NA: Not Applicable

Precipitation data from NOAA-Record of Climatological Observations Detroit Metropolitan Airport (DTW)

E. coli Geomeans per sampling event 2025

Sample Date	Geomean per Event (CFU/100mL)
8/4/2025	348.6
9/3/2025	381
9/8/2025	277.95
9/15/2025	543.77
9/24/2025	10703.48
9/30/2025	437.44
10/6/2025	208.58
10/13/2025	52.04

Monitoring performed during wet weather 9/24/2025

Appendix C
2025 Partners for Clean Water Regional IDEP Training Workshop
Alert Observer Training
Investigator Training
Attendance Lists

November 5, 2025, Alert Observer Attendee List Oakland County
November 5, 2025, IDEP Investigator Training Attendee List Oakland County
November 12, 2025, Alert Observer Training Attendee List Wayne County
November 12, 2025, IDEP Investigator Training Attendee List Wayne County

SEMCOG UNIVERSITY
 ALERT OBSERVER TRAINING
 ATTENDANCE LIST
 NOVEMBER 5, 2025
 OAKLAND COUNTY

Number	Name	Community
1	Jamie Moore	Bingham Farms
2	Nick Brown	Bloomfield Charter Township
3	Jacob Mead	Bloomfield Charter Township
4	Andrew Lozon	City of Allen Park
5	Jacob Pobursky	City of Allen Park
6	Xavier Marshall	City of Allen Park
7	James Turner	City of The Village of Clarkston
8	Lydia Nicholas	Clinton River Watershed Council
9	Shannon Ervin	Clinton River Watershed Council
10	William Lieberman	Clinton Township Department of Public Works
11	Jason D. Mills	Clinton Township Department of Public Works
12	John Griffor	Macomb County
13	Brad Beels	Macomb County Public Works
14	Brad Clark	Macomb County Public Works
15	Garrett Beels	Macomb County Public Works
16	RJ Mauldin	Macomb County Public Works
17	Colin Gibbs	Oakland County
18	Sarah Stoolmiller	Oakland County
19	Aaron Bush	Oakland County Parks And Recreation
20	Dathon Skelton	Oakland County Parks And Recreation
21	Dave Patnaude	Oakland County Parks And Recreation
22	Robbie Jeglum	Oakland County Parks And Recreation
23	Lydia Rooney	Oakland County Road Commission
24	Nate Jessee	Oakland County Road Commission
25	Richard D. Walker, Jr.	
	ARC Member Community/Partner	

SEMCOG UNIVERSITY
 IDEP INVESTIGATOR TRAINING
 ATTENDANCE LIST
 NOVEMBER 5, 2025
 OAKLAND COUNTY

Number	Name	Community
1	Nick Brown	Bloomfield Charter Township
2	Jacob Mead	Bloomfield Charter Township
3	Doug Waldon	City of Keego Harbor
4	James Turner	City of The Village of Clarkston
5	William Lieberman	Clinton Township Department of Public Works
6	Jason D. Mills	Clinton Township Department of Public Works
7	William Lieberman	Clinton Township Department of Public Works
8	Stephanie List	DLZ
9	Colin Gibbs	Oakland County
10	Sarah Stoolmiller	Oakland County
11	Aaron Bush	Oakland County Parks And Recreation
12	Dave Patnaude	Oakland County Parks And Recreation
13	Joel Joslin	Oakland County Parks And Recreation
14	Luke Murchie	Oakland County Parks And Recreation
15	Robbie Jeglum	Oakland County Parks And Recreation
16	Viacheslav Atkins-Dovbenko	Oakland County Parks And Recreation
17	Lydia Rooney	Oakland County Road Commission
18	Nate Jessee	Oakland County Road Commission
	ARC Member Community/Partner	

SEMCOG UNIVERSITY
ALERT OBSERVER TRAINING
ATTENDANCE LIST
NOVEMBER 12, 2025
WAYNE COUNTY

Number	Name	Community
1	Clayton Markert	Bloomfield Charter Township
2	Shane Beslock	Bloomfield Charter Township
3	David Thickstun	Bloomfield Charter Township
4	Andrew Lozon	City of Allen Park
5	Jacob Pobursky	City of Allen Park
6	Xavier Marshall	City of Allen Park
7	Grayson Obey	City of Detroit
8	Juliana Witt	City of Detroit
9	Dustin Drake	City of Dexter
10	Scott Taphouse	City of Dexter
11	Josh Harris	City of Farmington Hills
12	Tyler Sonoga	City of Farmington Hills
13	Katie Gallagher	City of Farmington Hills DPW
14	Melanie Guyette	City of Farmington Hills DPW
15	Jason Lhamon	City of Hazel Park
16	Aaron Staup	City of Novi
17	Jeffrey Vancurler	City of Novi
18	Kate Purpura	City of Novi
19	Milad Layth Alesmail	City of Novi
20	Derek Frizzell	City of Wayne
21	James Basballe	City of Wayne
22	Jason Middleton	City of Wayne
23	Jason Proudlock	City of Wayne
24	Mikela Dean	Clinton River Watershed Council
25	Lisa Boyce	Farmington Public Schools
26	Josh Gornowicz	Huron Valley Schools
27	Shane Laszlo	Livingston County
28	Dan Raupp	No affiliation listed
29	Richard D. Walker, Jr.	No affiliation listed
30	Tim Musuta	No affiliation listed
31	Antonio Manzo	Northville Township
32	Brenden Villalobos	Northville Township
33	Dylan Webb	Northville Township
34	Elliot Michael Forde	Northville Township
35	Lamont Powell	Northville Township
36	Brian Tack	Northville Township
37	Brad Wethy	Oakland County Parks And Recreation
38	Erik Koppin	Oakland County Parks And Recreation
39	Daniel Hamann	Plymouth Township
40	Joseph Overaitis	Plymouth Township
41	James Scholten	Plymouth Township
42	Adam Kulinski	Village of Milford
43	Michael Karll	Village of Milford
44	David Streeter	Washtenaw County
45	Dominic Long	Washtenaw County

SEMCOG UNIVERSITY
ALERT OBSERVER TRAINING
ATTENDANCE LIST
NOVEMBER 12, 2025
WAYNE COUNTY

Number	Name	Community
46	Stas Bialecki	Washtenaw County
47	Olivia Lazic	Wayne County
48	Gregory Boney	Wayne County
	ARC Member Community/partner	

SEMCOG UNIVERSITY
 IDEP INVESTIGATOR TRAINING
 ATTENDANCE LIST
 NOVEMBER 12, 2025
 WAYNE COUNTY

Number	Name	Community
1	David Thickstun	Bloomfield Township
2	Shane Beslock	Bloomfield Township
3	Clayton Markert	Bloomfield Township
4	Andrew Lozon	City of Allen Park
5	Jacob Pobursky	City of Allen Park
6	Xavier Marshall	City of Allen Park
7	Grayson Obey	City of Detroit
8	Juliana Witt	City of Detroit
9	Dustin Drake	City of Dexter
10	Scott Taphouse	City of Dexter
11	Tyler Sonoga	City of Farmington Hills
12	Jason Lhamon	City of Hazel Park
13	Troy Hall	City of Livonia
14	Milad Layth Alesmail	City of Novi
15	Derek Frizzell	City of Wayne
16	James Basballe	City of Wayne
17	Jason Proudlock	City of Wayne
18	Jason Middleton	City of Wayne
19	Lisa Boyce	Farmington Public Schools
20	Shane Laszlo	Livingston County
21	Roderick Soos	Livingston County Drain Commission
22	Richard D. Walker, Jr.	No affiliation listed
23	Lamont Powell	Northville Township
24	Antonio Manzo	Northville Township
25	Elliot Michael Forde	Northville Township
26	Ryan Webb	Northville Township
27	Erik Koppin	Oakland County Parks And Recreation
28	Daniel Hamann	Plymouth Township
29	James Scholten	Plymouth Township
30	Joseph Overaitis	Plymouth Township
31	Adam Kulinski	Village of Milford
32	Michael Karll	Village of Milford
33	Olivia Lazic	Wayne County
34	Gregory Boney	Wayne County
	ARC Member Community/Partner	