

Attachment A - 2016 Oakland County ARC IDEP Scope of Work

June 15, 2016

The Oakland County Water Resources Commissioners Office (WRC) will conduct illicit discharge elimination investigations for the purpose of identifying sources of sanitary sewage contamination in the Rouge River watershed. The drains targeted for investigation are prioritized below. The initial effort will be focused on the First Priority Drains. Second and Third Priority Drains will be investigated, and additional drains will be dry weather screened and sampled respectively, as budget allows.

Prior to the onset of field work, WRC will notify the local community of the planned investigations. A draft summary report will be submitted to the ARC by December 1, 2016. Comments from the ARC will be incorporated by WRC and the final report will be completed by December 31, 2016.

Schedule: May 1- Dec 31, 2016

Budget: \$55,000 from ARC dues plus \$15,000 of in-kind effort from OCWRC. Additional detail is attached.

First Priority Drains

US 16 Drain – Farmington (Rouge River Upper Branch)

- 3 Houses were confirmed connected to the US-16 Drain in 2015. Farmington is going to have OHM do storm and san elevations and design plans for crossing the US-16 and tying into the sanitary. Also 1 house has the kitchen, downstairs laundry and floor drains tied into the roof conductor system. They may need to hire a plumber to CCTV the roof conductor lead and confirm whether or not the roof conductor system is tied into the house lead or if it has a separate tap to drain. They'll also need to figure out what to do with the plumbing fixtures tied to this system. Farmington will need to provide a scope of work and budget for this if necessary. Work may be able to be used as match.
- WRC will need to monitor at the US-16 outlet once the corrections are complete, and may need to do additional upstream, sampling and investigation, based on monitoring results.

Fracassi Drain - Southfield (Rouge River Main Branch)

- Identify properties that still may be operating on septic systems and have never connected to the sanitary sewer.
- Sample/inspect additional upstream manholes along Seminole, Poinciana, and Negaunee streets at Emmett St., Sedalia Ave., and Shiawassee to determine the limits of the problem area.
- Obtain any site plans from the City to verify the source of the flow from 21030 Indian St.
- Conduct CCTV inspection of the drain and laterals (or obtain video from any previous efforts) to locate taps to the drain and potential illicit connections. The inspection should extend along Indian St. from 8 Mile to Shiawassee, Byron St. east of Inkster, and Seminole, Poinciana and Negaunee streets from south of Byron St. to at least Emmett St. Further upstream inspections along Seminole, Poinciana and Negaunee streets may be needed based on additional sampling data.
- Dye test and/or smoke test to verify the presence of illicit connections based on CCTV results.

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Second Priority Drains

Austin Drain - Southfield (Rouge River Main Branch)

- Review local storm sewer maps to determine the extent of the drainage area along Jeanette St. and further west;
- Review sanitary records for potential suspect properties;
- Segment and sample the local storm drain at select locations to narrow down the source of the high *E. coli*; and
- May need to Conduct CCTV inspections and dye testing based on records, inspections and sampling results.

Claude H. Stevens No. 3 Drain – Bloomfield Twp. (Rouge River Main Branch)

- Obtain local storm plans for subdivisions on Whippers Lane, Hunt Master St., and Steeple Chase St. from RCOC to determine extent of the drainage systems and storm manhole locations;
- Perform upstream investigation and sampling of upstream manholes to isolate potential segments of the drains with illicit connections;
- May need to Conduct CCTV inspections on Charing Cross and portions of local storm drains based on additional inspections and sampling in order to locate potential illicit connections;
- Dye test suspect properties with connections to confirm illicit discharges; and
- Follow up with homeowners, Bloomfield Twp. and RCOC for corrective actions.

Third Priority Drains

Devonshire – Bloomfield Twp. (Rouge River Main Branch)

- Select additional upstream sampling locations and schedule dry weather screening inspections and *E. coli* sampling; and
- Evaluate additional screening and sampling data and conduct IDEP investigations as necessary to locate discharges sources based on results.

Claude H. Stevens No. 4 Drain – Bloomfield Twp. (Rouge River Main Branch)

- Additional investigations should be conducted along Kensington and any upstream local storm drains to determine if an illicit discharge is occurring, and
- Conduct follow up illicit discharge investigations as needed based on inspections and sampling results.

Claude H. Stevens No. 10 Drain – Bloomfield Twp. (Rouge River Main Branch)

- Obtain updated storm drain plans from Bloomfield Township, and
- Schedule additional IDEP investigations and sampling of the drain.

2016 Oakland County ARC IDEP Budget

Community	Drain	Activity	Grant	Match	Match Description
Farmington	US 16	Sampling CCTV, & Dye testing	\$10,000	\$13,000	(2015, CCTV & Dye testing)
Southfield / WRC	Fracassi Drain	Plan Review Sampling, CCTV & Dye Testing	\$20,000	\$1,000	(City of Southfield, Staff Time)
Southfield / WRC	Austin Drain	Plan Review, Sampling, Dye Testing	\$5,000		
Bloomfield TWP / WRC	Devonshire Drain	Plan Review, Sampling, Dye Testing	\$5,000	\$1,000	(Bloomfield Twp., Staff Time)
Bloomfield TWP / WRC	CH. Stevens 3 Drain	Plan Review, Sampling & Dye Testing	\$5,000		
Bloomfield TWP / WRC	CH. Stevens 4 & 10 Drain	Plan Review , Sampling and Dye Testing	\$5,000		
WRC / ECT	Administrative	Meeting Coordination and Reporting	\$5,000		

Totals **\$55,000** **\$15,000**

Total Project Costs (Grant + Match): \$70,000