### Summary of Investigations for both Counties: 2010-2013

<table>
<thead>
<tr>
<th>Problems Found</th>
<th>Problems Corrected</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 illicit connections</td>
<td>29 illicit connections</td>
</tr>
<tr>
<td>9 illicit discharges</td>
<td>1 illicit discharge</td>
</tr>
</tbody>
</table>

**Wastewater Eliminated**

- 2.2 million gallons annually
  - Based on 33 illicit connections
Oakland County IDEP Investigation Summary: 2010-2013

- 19 illicit connections found
  - Type: sanitary
  - 18 corrected

- Costs
  - $6,900 each to identify (on average)
  - $75,000 to correct 5 homes on Pearl Street (Farmington Hills)
  - $10,500 – $20,000 each to correct 13 homes (Farmington Hills)

<table>
<thead>
<tr>
<th>Oakland Co.</th>
<th>ARC $ Spent</th>
<th>Location</th>
<th>Results: Illicit connections found/corrected</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 - 2012</td>
<td>119,400</td>
<td>Section 36 in Farmington Hills</td>
<td>18/17</td>
</tr>
<tr>
<td>2013</td>
<td>12,000</td>
<td>Law Drain - Bloomfield Twp.</td>
<td>1/1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US 16 – Farmington</td>
<td>0 (so far)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fracassi – Southfield</td>
<td>0 (so far)</td>
</tr>
<tr>
<td>Total</td>
<td>131,400</td>
<td></td>
<td>19/18</td>
</tr>
</tbody>
</table>
Wayne County IDEP Investigation Summary: 2010-2013

- 14 illicit connections and 9 illicit discharges found
  - Type: outdoor washing, sinks, mop bucket dumping, floor drains, beverage concentrate, floor washing machine
  - Corrected: 11 IC and 1 ID
  - $6,400 to identify (on average)

<table>
<thead>
<tr>
<th>Wayne County</th>
<th>ARC $ Spent</th>
<th>Activities</th>
<th>Results: Illicit connections (IC) or discharges (ID) found / corrected</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>42,300</td>
<td>Investigations</td>
<td>0</td>
</tr>
<tr>
<td>2011</td>
<td>41,500</td>
<td>52 facilities dye tested</td>
<td>1 IC</td>
</tr>
<tr>
<td>2012</td>
<td>41,800</td>
<td>49 facilities dye tested</td>
<td>13 IC and 9 ID</td>
</tr>
<tr>
<td>2013</td>
<td>22,300</td>
<td>17 facilities dye tested</td>
<td>0 IC</td>
</tr>
<tr>
<td>Total</td>
<td>147,900</td>
<td></td>
<td>14/11 IC 9/1 ID</td>
</tr>
</tbody>
</table>
WC Complaint Response

- WCDPS Environmental Hotline in 2013
  - 1,454 calls received
  - 39 land/water pollution concerns
  - 8 confirmed illicit discharges
  - Corrections completed or ongoing
  - Referrals made for correction follow-up
Wayne County IDEP w/all funding sources: 2010-2013

- 35 Illicit Connections found
- 25 Illicit Discharges found
- 30 ID outstanding in 2013

<table>
<thead>
<tr>
<th>Wayne County</th>
<th># of Facilities Dye Testing</th>
<th>Illicit connections (IC) or discharges (ID) found</th>
<th>Corrections Verified</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>149</td>
<td>2 concerns</td>
<td>21 IC &amp; 5 ID</td>
</tr>
<tr>
<td>2011</td>
<td>100</td>
<td>2 concerns&lt;br&gt;1 IC &amp; 11 ID</td>
<td>1 concern&lt;br&gt;3 IC &amp; 1 ID</td>
</tr>
<tr>
<td>2012</td>
<td>194</td>
<td>4 concerns&lt;br&gt;34 IC &amp; 14 ID</td>
<td>1 concern&lt;br&gt;16 IC &amp; 9 ID</td>
</tr>
<tr>
<td>2013</td>
<td>47</td>
<td>0 IC</td>
<td>22 IC &amp; 1 ID</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8 concerns&lt;br&gt;35 IC &amp; 25 ID</td>
<td>2 concerns&lt;br&gt;62 IC &amp; 16 ID</td>
</tr>
</tbody>
</table>
Pernick and Pebble Creek (Farmington Hills, Southfield and Franklin) - $50,000

Potential problems
- 3 failed septic systems (1 likely)
- Illegal dumping from an RV
- Pet waste

Local community follow-up needed to pinpoint sources or provide educational materials

Additional investigations necessary
IDEP Work Group
Tools/Materials

- Tip card for municipal staff
- Pollutant volume and load calculator
- Regional training plan

Contact: ademaria@ectinc.com
May 2014 Spill Response on Johnson Creek
(simplified)

Who is Responsible for the Investigation?

City & County

Jetted the line to locate origin

City & County

Property investigation to locate source

City & County

Plan review:
Not a public sewer

City & County

Western Wayne Co. HAZMAT

Laid out booms but not responsible due to low volume

MDEQ

Oil release complaint from an outfall to Johnson Creek

City & County

Property investigation to locate source

City & County

Jetted the line to locate origin

City & County

Plan review:
Not a public sewer

City & County

Western Wayne Co. HAZMAT

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