

## **5.0 Permit Requirements**

### **E.4. Illicit Discharge Detection and Elimination**

Baltimore County shall maintain its illicit connection detection and elimination program to ensure that all discharges to and from the municipal separate storm sewer system that are not composed entirely of stormwater are either permitted by MDE or eliminated. The County shall follow the minimum requirements listed below or propose alternative methods for MDE approval:

- a. Field screen at least 150 outfalls annually. Each outfall having a discharge or suspected of having an illicit discharge shall be sampled using a chemical test kit;
- b. Conduct routine surveys of commercial and industrial watersheds for discovering and eliminating pollutant sources;
- c. Maintain a program to address illegal dumping and spills;
- d. Use appropriate enforcement procedures for investigating and eliminating illicit discharges, illegal dumping, and spills. Significant discharges shall be reported to MDE for enforcement and/or permitting; and
- e. Report illicit discharge detection and elimination activities as specified in PART IV of this permit. Annual Reports shall include any requests and accompanying justifications for proposed modification to the illicit discharge detection and elimination program.

### **5.1 Introduction**

The NPDES - Municipal Stormwater Discharge Permit program required full implementation of the County's stormwater outfall screening schedule by September 30, 1997. The Standard Operating Procedures for the Illicit Connections Program was revised January 20, 2010. The Watershed Monitoring Section of DEPRM is currently responsible for performing the outfall screenings, reporting screening data, and coordinating remedial actions. Specific correction measures may be the responsibility of DEPRM, the Department of Public Works (DPW), or both, depending upon the nature and sources of detected discharges. Certain illicit connections are referred to the Maryland Department of the Environment (MDE) for permitting or enforcement if there are indications that existing permit limits are being exceeded. Water main leaks are referred to Baltimore City Department of Public Works for correction. Because chlorine is extremely toxic to the fauna in a stream, it is of particular concern when leaks or discharges occur from the public distribution system. High volume, chlorinated leaks can go undetected or remain uncorrected for quite some time. This can affect any water quality monitoring projects being conducted downstream.

## **5.2 Program Status**

The results of this reporting period are presented as three separate components: analysis of routine outfall screenings, analysis of illicit connection investigations conducted by WMM staff, and analysis of illicit connection investigations conducted by DEPRM's Regional Environmental Health Program staff. Although the regional program typically focuses on complaint-driven community hygiene issues, a small percentage of those investigations involve illicit connections.

During the calendar year 2009, the Watershed Monitoring Section of DEPRM staff conducted 174 routine outfall screenings in which 15 required further investigative or remedial actions. WMM staff investigated 31 citizen complaints and 43 complaints from DEPRM staff or other agencies. Based on an analyses of complaints investigated by DEPRM's regional staff from 2005-2009, approximately 13% the complaints usually involve potential illicit connections.

As revealed in the analysis in the following section, routine outfall screenings for detection of illicit connections appear to compliment citizen complaints of problems they observe. The routine outfall screenings catch the chronic problems that may be missed by the public, such as chlorine leaks from the municipal water supply.

Aside from the benefits of greater public involvement and the resolution of complaints, citizens provide surveillance at a level beyond that of the monitoring staff. A majority of the time citizens call while they are actually observing a problem and often can provide immediate local information that increases the chance of eliminating illicit connections. Some of the citizen complaints are a result of the Stream Watch program. This program allows citizens to adopt a stream, which includes tracking the health of the stream and reporting problems or potential projects they observe.

## **5.3 Analysis of Outfall Screenings**

A routine outfall screening consists of:

- (1) A quantitative analysis of the effluent. This includes measuring the effluent flow rate, temperature and pH, and field-testing with the LaMotte NPDES test kit. This includes parts per million tests for copper, chlorine, and phenol. A qualitative assessment of the effluent, the outfall structure and the receiving channel, noting such conditions as water color, odor, vegetative condition, sedimentation, erosion, damage, etc.
- (2) A visual inspection of each outfall, noting any structural damage.

If the problem is severe enough to warrant immediate correction, then an investigation begins immediately. Some sites are determined to have problems severe enough to warrant immediate investigation and/or corrective action after only one screening.

In Baltimore County, there are approximately 3,569 total outfalls. There are two types of outfalls: major and minor. Major outfalls are >36" and minor outfalls are <36". There are 663 major outfalls in our database and 587 have been prioritized. The minor outfalls are just starting to become prioritized, 109 have been completed so far. There are a greater number of them (2,888), so they will be dealt with in phases. Concentration will be on the small outfalls in the area where the Small Watershed Action Plans (Section 7) are being focused.

Outfalls are chosen by their priority. The prioritization system works as follows: Outfalls that have not yet been screened twice have not been prioritized. Outfalls that have been screened two or more times are assigned one of three priority ratings. Outfalls with major problems that

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require immediate correction and/or close monitoring, or outfalls with recurrent problems will be assigned a *Priority 1 (Critical)* rating. Outfalls with moderate to minor problems that have the potential to become severe are assigned a *Priority 2 (High)* rating. Outfalls with minor or no problems that do not require close monitoring are given a *Priority 3 (Low)* rating. Outfalls categorized as “Low Priority” are on a ten-year screening cycle, “High Priority” outfalls are screened once each year, and “Critical” outfalls are screened four times each year. This system allows for a more streamlined approach in selecting outfalls to screen, and provides a more efficient use of manpower. Outfall priority may be changed if it improves or degrades. The small outfalls will be prioritized after one screening, due to there being many more of them than the major outfalls.

Table 5-1 lists the number of outfalls by watershed and by the priority classification described above. To date, 76 of the outfalls 36 inches or larger in diameter have not been sampled sufficiently to be prioritized. Additional screening effort will allow the County to assess and prioritize the status of these outfalls. Table 5-2 lists the non-prioritized outfalls by watershed.

**Table 5-1: Major and Minor Outfalls by Watershed and Priority Classification**

Watershed	Priority 1		Priority 2		Priority 3		Total
<b>Upper Western Shore</b>							
	Minor	Major	Minor	Major	Minor	Major	
Loch Raven	0	6	1	35	0	31	73
Lower Gunpowder	0	5	0	24	1	9	39
Gunpowder River	0	0	1	0	0	0	1
Little Gunpowder Falls	0	0	0	2	0	0	2
Bird River	0	2	7	9	3	28	49
Middle River	0	3	0	7	0	5	15
Deer Creek	0	0	4	0	1	0	5
Prettyboy Reservoir	0	0	0	0	1	0	1
<b>Total</b>	<b>0</b>	<b>16</b>	<b>13</b>	<b>77</b>	<b>6</b>	<b>73</b>	<b>185</b>
<b>Patapsco-Back River</b>							
Patapsco River	1	2	13	11	0	65	92
Gwynns Falls	1	18	6	45	2	94	166
Jones Falls	0	0		19	1	34	54
Back River	3	16	41	43	19	46	168
Baltimore Harbor	0	10	2	9	0	8	29
Liberty Reservoir	0	0		1	1	0	2
<b>Total</b>	<b>5</b>	<b>46</b>	<b>62</b>	<b>128</b>	<b>23</b>	<b>247</b>	<b>511</b>
<b>Grand Total</b>	<b>5</b>	<b>62</b>	<b>75</b>	<b>205</b>	<b>29</b>	<b>320</b>	<b>696</b>

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**Table 5-2: Non-prioritized outfalls by Watershed**

<b>Watershed</b>			
<b>Upper Western Shore</b>			
	<b>Minor</b>	<b>Major</b>	<b>Total</b>
Loch Raven	9	549	558
Lower Gunpowder	10	303	313
Gunpowder River	3	24	27
Little Gunpowder Falls	1	79	80
Bird River	5	215	220
Middle River	0	71	71
Deer Creek	0	0	0
Prettyboy Reservoir	0	0	0
<b>Total</b>	<b>28</b>	<b>1,241</b>	<b>1,269</b>
<b>Patapsco-Back River</b>			
	<b>Minor</b>	<b>Major</b>	<b>Total</b>
Patapsco River	6	229	235
Gwynns Falls	16	603	619
Jones Falls	11	369	380
Back River	6	247	253
Baltimore Harbor	9	59	68
Liberty Reservoir	0	31	31
<b>Total</b>	<b>48</b>	<b>1,538</b>	<b>1,586</b>
<b>Grand Total</b>	<b>76</b>	<b>2,779</b>	<b>2,855</b>

The locations of the prioritized major outfalls and those remaining to be prioritized are shown in Figure 5-1. As can be noted from the figure, the majority of the outfalls occur within the Urban-Rural Demarcation Line. There is no consistent pattern of outfall location in relation to the prioritization category.

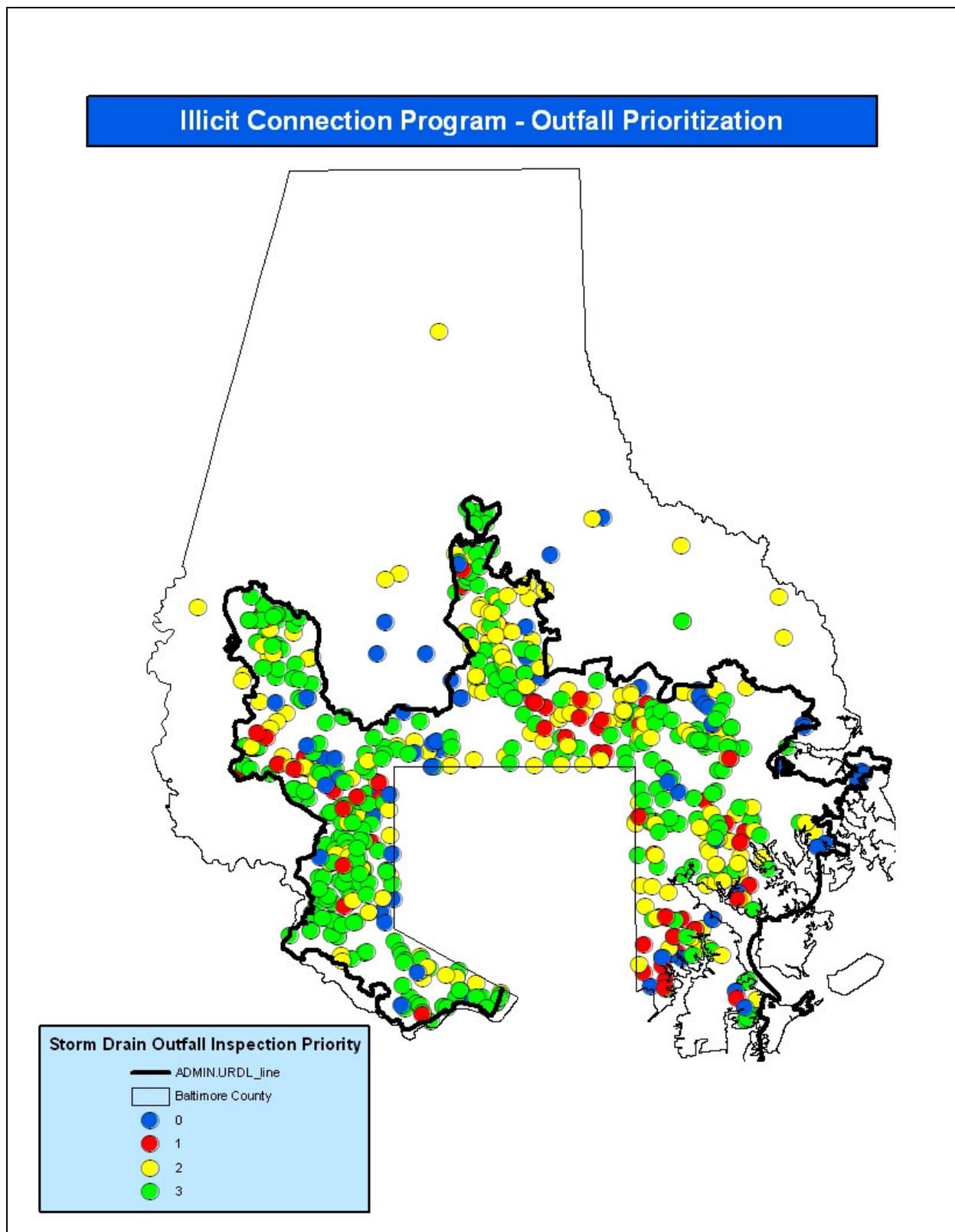


Figure 5-1a. Major Outfall Prioritization. Note most outfalls are inside the Urban-Rural Demarcation Line (URDL).

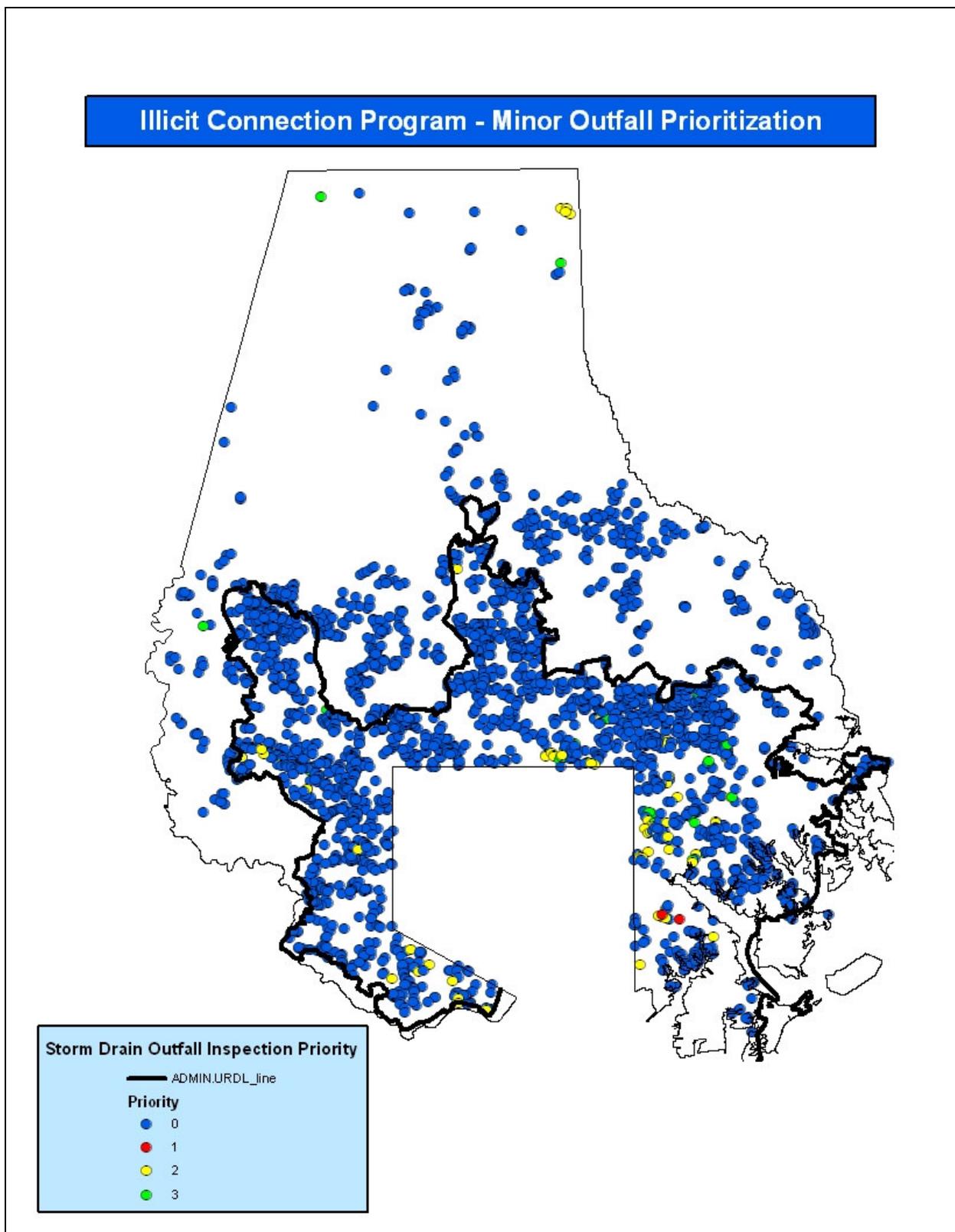


Figure 5-1b. Minor Outfall Prioritization. Note most outfalls are inside the Urban-Rural Demarcation Line (URDL).

The percentages of the 696 outfalls, which have been given a rating, in each category are shown in Figure 5-2.

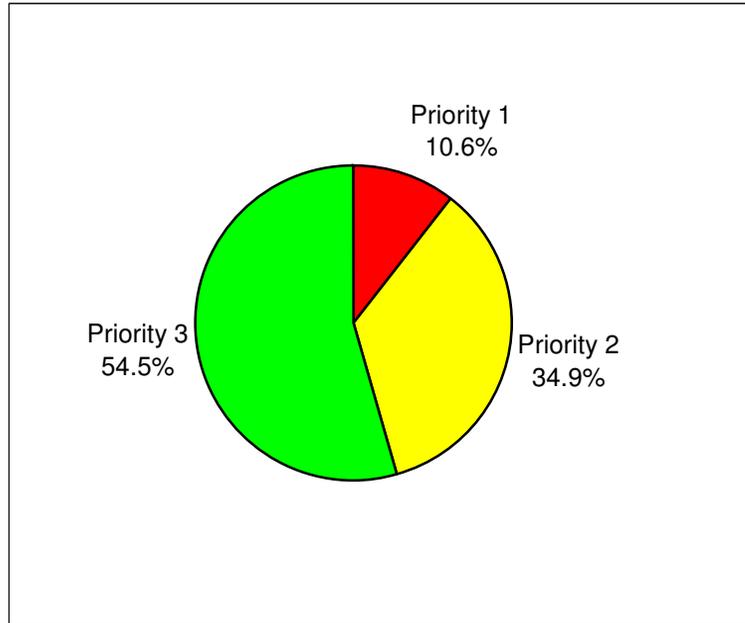


Figure 5-2a: Major Outfall Screening Priority Distribution

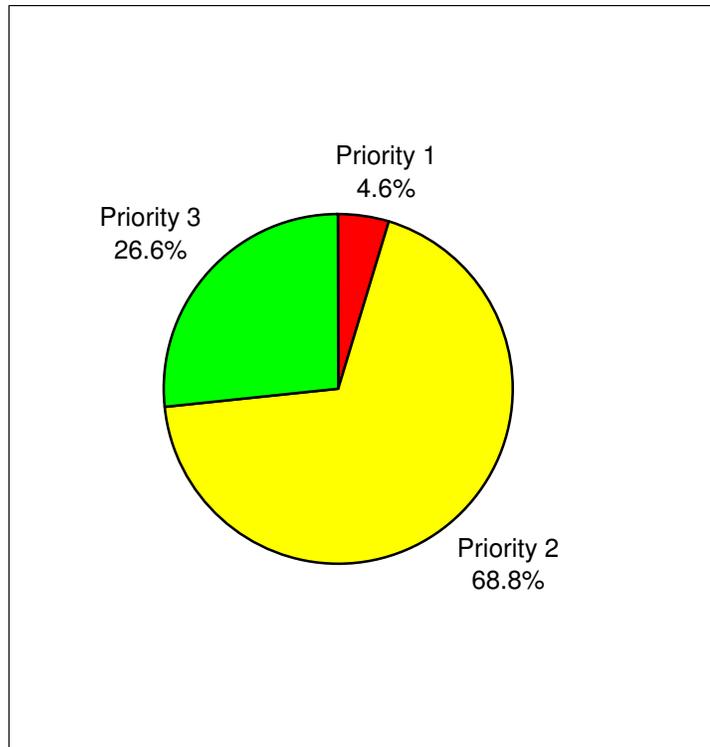


Figure 5-2b: Minor Outfall Screening Priority Distribution

Of the 174 outfalls screened during 2009, 106 were major outfalls and 68 were minor outfalls. They were selected from the newly prioritized database based on the following criteria:

- Citizens who called or wrote to express concern about stream water quality, but the indicated conditions did not warrant an immediate investigation; and
- Previous screenings indicated water quality problems might exist.

Figure 5-3 shows the quantitative problems and Figure 5-4 shows the qualitative problems found. As indicated in Figure 5-3, by the bar labeled “none detected”, 129 out of the 174 routine outfall screenings had no detectable quantitative problems. Phenol, chlorine, and copper are considered as indicators if they are above .17 mg/L, .4 mg/L, and .21mg/L respectively. Temperature is considered a potential problem if it exceeds 75 degrees F (23.9 degrees C), which occurred in 35 outfalls. The criteria used to determine if pH is out of range is if it is under 6.0 or above 9.0, and a problem was detected at two outfalls. Copper was detected at four outfalls and phenol was detected at 12 outfalls. Chlorine was detected at one outfall. There were a total of 54 quantitative problems.

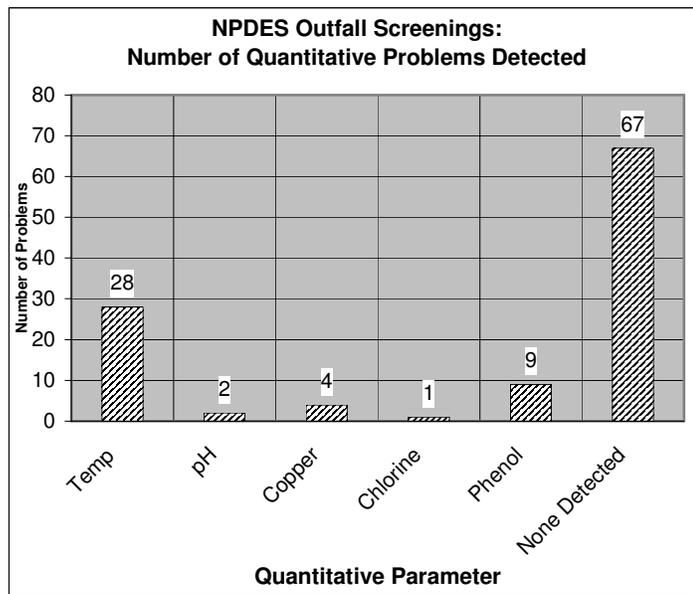


Figure 5-3a. Major Outfalls Number of quantitative problems detected.

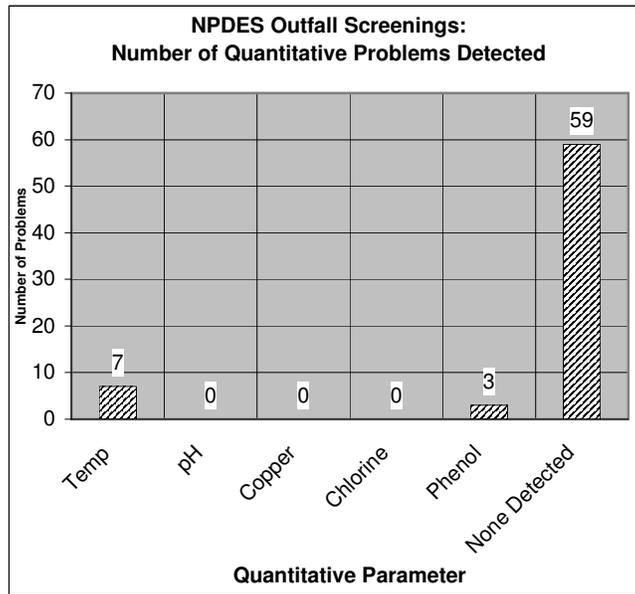


Figure 5-3b. Minor Outfalls Number of *quantitative* problems detected.

Figure 5-4 illustrates incidences of problems observed during *qualitative* assessments such as: visual evidence of sewage, oil, and structural problems. Qualitative and “visual problems” were those most frequently encountered which included observations regarding color, odor, clarity, and receiving water characteristics and sediment deposition immediately at and below each outfall. Trash, erosion, and sediment deposition were observed at 135, 48, and 132 outfalls, respectively. Of the total 174 outfalls screened, there were a total of 379 qualitatively assessed problems, however, 7 had no observed or qualitatively assessed problems. Many of the outfalls screened had more than one problem.

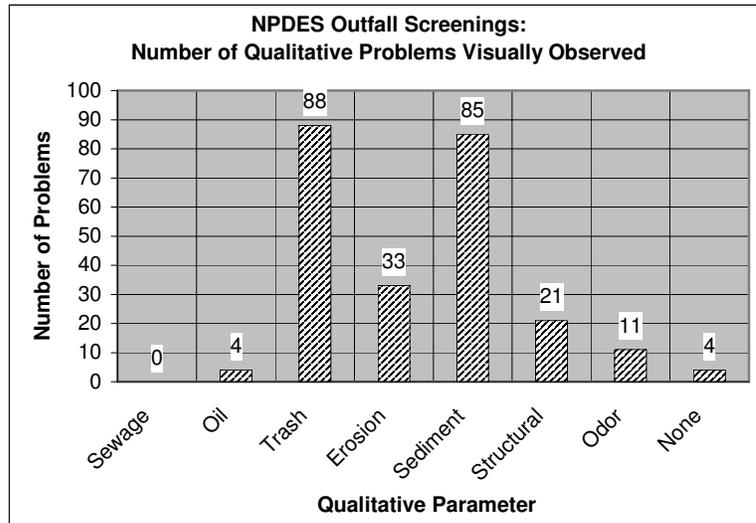


Figure 5-4a. Major Outfalls Number of *qualitative* problems visually observed.

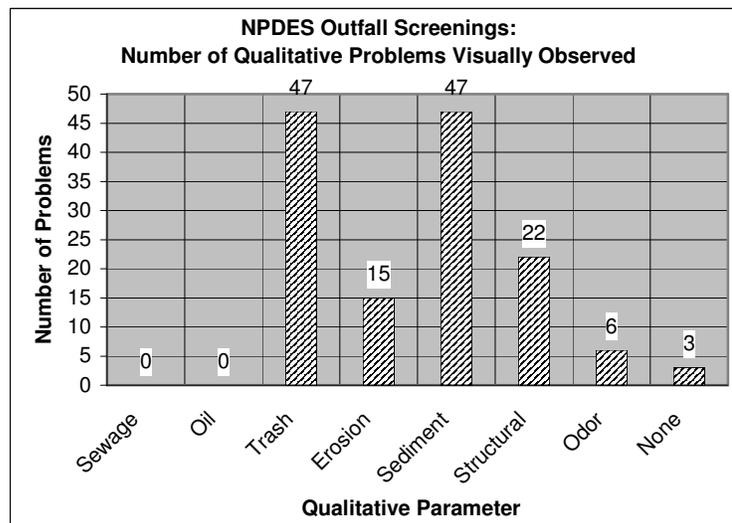


Figure 5-4b. Minor Outfalls Number of *qualitative* problems visually observed.

As described above, routine outfall screenings include a quantitative analysis, a qualitative assessment and a visual inspection. Based on these three procedures, a total of 433 problems were encountered during the 174 routine outfall screenings during this reporting period. Many of the outfalls had more than one problem. Observations regarding the receiving channel within the immediate vicinity of the outfall were also included.

During 2009, outfall screening was distributed among seven watersheds as follows: Gwynns Falls (36), Back River (97), Baltimore Harbor (14), Patapsco (3), Loch Raven (9), Bird River (2), Lower Gunpowder (1), and Jones Falls (7), Deer Creek (4), Liberty (1).

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**5.4 Illicit Connections Investigations and Corrections**

During the calendar year 2009, the Watershed Monitoring section processed seventy-five complaints, of which thirty-three were citizen complaints. Forty-five cases were referred to other agencies. Of those forty-five, fourteen are still ongoing. DEPRM is handling the remaining thirty complaints. Of those, nine remain ongoing investigations. These complaints and their status are detailed in Table 5-3.

**Table 5-3: Complaints Processed from January 1, 2009 through December 31, 2009**

<b>Case No.</b>	<b>COMPLAINT / DATE</b>	<b>ACTION TAKEN</b>	<b>STATUS</b>	<b>LOCATION</b>
09-001	Outfall separated at joint. 1/2/09	Referred to DPW Utilities.	Outfall has been repaired. <b>Case closed</b>	Outfall 380. 27 J1
09-002	Field staff found illegal tire dumping site. 1/5/09	Referred to MDE Scrap Tire Program.	Sent to PDM per MDE. <b>On-going</b>	Route 43. 30 B13
09-003	Field staff found trash and chlorine at outfall. 1/9/09	Liquor store reported for trash. Chlorine called into the city.	PDM issued citation to clean up trash. City repaired water main break. <b>Case closed</b>	Outfall 143. 36 E4
09-004	Field staff found trash and erosion at outfall. 1/9/09	Reported 2013 Longview for trash to PDM and erosion to CPO.	PDM will ask homeowner to clean up trash. No action needed at this time for erosion. <b>Case closed</b>	Outfall 305. 36 E8
09-005	Outfall blocked by yard waste. 1/9/09	Referred to DPW Highways.	Yard waste has been cleared. <b>Case closed</b>	Outfall 137. 36 E4
09-006	Field staff found severe stream erosion. 1/14/09	Stream erosion has worsened from last visit in 2007.	Referred to Capital Operations and Programs. <b>On-going</b>	Tall Oaks Apts., Collinsdale Road. 27 H11
09-007	Citizen complaint of dumpster trash getting into stream. 1/14/09	Referred to PDM.	Inspector issued citation to clean up the trash. <b>Case closed</b>	6159 Edmondson Avenue. 41 E2
09-008	Citizen complaint of pile of sediment next to stream. 1/22/09		Recreation and Parks will coordinate the removal of the dirt with Highways. <b>Case closed</b>	Catonsville Park. 41 B2
09-009	Citizen suspects sewage in stream on property. 2/2/09	Lab sample results showed E. coli within allowable limit.	Not a sewage problem. Advised owner to call us if it happens again. <b>Case closed</b>	Butler and Falls Road. 11 E8
09-010	Water main break in middle of road. 2/7/09	Leak had been occurring for over a week.	City has repaired line. <b>Case closed</b>	4214 Silver Spring Road. 29 A8
09-011	Citizen observed large piles of dirt with no sediment fence. 2/5/09	Referred to Sediment Control.	Sediment fences, where needed, have been installed. <b>Case closed</b>	Newburg and Hilton. 41 C6
09-012	Staff observed excessive foam in stream. 2/16/09	Traced source to an outfall that was no longer running. Tested pipe in sidewalk for boron, results were within limits.	All lab results were within acceptable levels and foam was natural. <b>Case closed</b>	Wynnwood Recreation Center. 42 A10
09-013	Staff observed stream erosion. 2/17/09		Referred to Capital Operations and Programs. <b>On-going</b>	8320 Dogwood Road. 32 F8
09-014	Fluorescent green in		DPW dye testing.	Boyce Avenue and

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	stream. 2/26/09		<b>Case closed</b>	Charles Street Avenue. 27 A6
09-015	Streamwatcher found unusual algae in stream. 2/17/09	Tested stream water, all tests were within limits.	Algae are naturally occurring. <b>Case closed</b>	120 Cockeysville Road. 18 G4
09-016	Staff noticed stream discoloration. 3/11/09	Traced the discoloration upstream.	Sediment was from curb repairs. <b>Case closed</b>	Meadow Road. 36 F2
09-017	Citizen noticed erosion from a development site. 2/17/09		Site was using all the necessary sediment control practices. <b>Case closed</b>	Next to 517 Oella Avenue. 40 H3
09-018	Staff noticed sanitary sewer manhole missing cover. 3/18/09	Called DPW Emergency Sewer Service.	Manhole cover has been replaced. <b>Case closed</b>	Red Run downstream of Owings Mills Blvd. 24 F6
09-019	Citizen said stream had black and foamy water. 3/18/09	Tested water and walked stream.	Black color was from dark algae on the bottom of the stream, water was clear. Tests showed water was fine. <b>Case closed</b>	937 Paradise Avenue. 41 H5
09-020	Staff found shingles and building material dumped next to stream. 3/18/09	Referred to PDM.	Inspector spoke to property maintenance person about cleaning up trash along stream. <b>Case closed</b>	Red Run downstream of Owings Mills Blvd. 24 F6
09-021	Staff saw dumpster surrounded by trash. 3/18/09	Upon revisiting dumpster area doors were closed.	PDM issued no citation. <b>Case closed</b>	10375 Red Run Boulevard. 24 G6
09-022	Citizen complained of stream erosion. 3/24/09		Referred to Capital Operations and Programs. <b>On-going</b>	Paradise Avenue. 41 H5
09-023	Staff found outfall damage and gray water in plunge pool. 3/24/09	Took water sample to DPW lab. Sent outfall damage to DPW.	<b>On-going</b>	Outfall #710. 42 A11
09-024	Citizen complained of "yellow" water. 3/24/09	Drove upstream, observed in pools.	Appears natural. <b>Case closed</b>	Dogwood Rd. near SocSec. Bldg. 33 F9
09-025	Staff witnessed carwash runoff discharging into storm drain. 3/09		Environmental Health observed no soapy discharge. <b>Case closed</b>	9330 Lakeside Boulevard. 24 E6
09-026	Streamwatcher found erosion and exposed sewer pipe. 3/20/09		Capital Operations and Programs has contracted a firm to fix the erosion and exposed sewer line. <b>Case closed</b>	Behind 819 Providence Rd. 27 G6
09-027	Citizen complained of neighbor clearing shrubs near stream. 4/9/09	Referred to EIR	Violations found. <b>Case closed</b>	205 Dorell Road. 37 A8
09-028	Stream bank failure on Minebank Run		Referred to Capital Operations and Programs. <b>On-going</b>	Cowpens Avenue. 27 J5
09-029	Citizen complaint of foam in stream. 4/21/09	Ran Illicit kit.	All test results were within acceptable range. <b>Case closed</b>	8302 Thornton Rd. 26 G3

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09-030	Citizen complaint of foul smelling outfall in backyard. 6/2/09	Traced source to a dumpster leaking into the storm drain system.	Dumpster was compacting to tightly. Setting has been corrected. <b>Case closed</b>	3427 Edcrest Road. 32 H1
09-031	Exposed pipe in stream. 4/8/09	Referred to DPW Utilities.	DPW construction unit will repair. <b>Case closed</b>	8130 Callo Lane. 36G5
09-032	Outfall 50% submerged, neighbor reported when it rains inlet backs up water into the street. 4/9/09	The part of the pipe that needs to be cleaned out is on private property.	County has no right of way on private property but Storm Drain Design will try to work with landowner. <b>On-going</b>	Outfall so-696. 37 B7
09-033	Severe erosion in dry tributary. 6/10/09	Found source of erosion to be an outfall from a SWM pond.	Referred to Capital Operations and Programs. <b>On-going</b>	End of Eiderdown Court. 24 B6
09-034	Citizen complaint of downed trees at several road culverts. 5/4/09		DPW Highways removed the trees. <b>Case closed</b>	Upstream of Painter's Mill on Red Run. 24 H5
09-035	Outfall coming apart at joint. 6/15/09	Referred to DPW Utilities.	Will be repaired. <b>Case closed</b>	Outfall #639. 25 K10
09-036	Citizen observed dead fish in stream and complained of erosion. 6/20/09		No dead fish observed upon inspection, erosion was not excessive. <b>Case closed</b>	5905 Daybreak Terrace. 36 F3
09-037	Staff doing fieldwork found exposed pipe in stream. 7/14/09	DPW confirmed it was a fire hydrant line.	Referred to DPW Utilities. <b>On-going</b>	Barry Paul Road. 32 G1
09-038	Citizen complaint of trash in woods. 7/09	Wooded lot is privately owned, not county property.	PDM talked to landowner and they are willing to clean up dumped trash. <b>Case closed</b>	Adjacent to 8817 Winterbrook Road, 24 G11
09-039	Staff found fallen tree and large pieces of trash blocking outfall. 7/10/09	Referred to DPW Highways.	Tree and trash will be removed. <b>Case closed</b>	Outfall #043. 44 H4
09-040	Staff found erosion downstream of outfall. 7/31/09		Referred to Capital Operations and Programs. <b>On-going</b>	Outfall #242. 44 G1
09-041	Homeowner reported yard sinking in where the storm drain line runs. 7/31/09	Referred to DPW Utilities.	Area has been topsoiled and seeded. <b>Case closed</b>	Outfall #so-294. 44 H1
09-042	Citizen reported trash dumping in stream by landfill. 5/13/09		Found no evidence of trash except roadside litter. <b>Case closed</b>	Texas Landfill. 18 H6
09-043	Citizen reported problem at outfall and culvert. 6/12/09	Erosion minor no projects warranted. Will have tree growing out of gabion removed.	DPW Highways removed tree growing out of gabion. <b>Case closed</b>	140 Edgewood Avenue. 41 B3
09-044	Staff found water flowing in storm drain inlet during dry weather. 7/9/09	Water tested positive for chlorine.	Referred four times to Baltimore City. <b>On-going</b>	19 Phlox Circle. 16 F13
09-045	While staff were investigating a separate issue, found an outfall	Water tested positive for chlorine. Tracked water to a leaking water valve in a	Referred three times to Baltimore City and once to DPW Utilities. <b>On-</b>	4 Ojibway. 24 A9

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	discharging suspiciously clean water. 7/14/09	storm drain manhole.	<b>going</b>	
09-046	Citizen complained of roadway dumping and standing pools of water. 7/8/09	Did not find roadside dumping, did find a big dirt area in woods used for bikes and some dumping.	Sediment Control said that unless grading is going on, the county has no authority to tell private landowner what to do. Referred trash to PDM. <b>On-going</b>	Middleborough and Marlyn. 37 F12
09-047	Staff doing fieldwork found exposed pipe in stream.	DPW Utilities found the pipe to a gas line and referred it to BGE	This is a gas line that was abandoned in 2006. <b>Case closed</b>	Rolandvue Avenue. 26 K7
09-048	Citizen complained of several sources of trash for Sawmill Branch. 7/13/09	Most of the sources cited were clean, very little trash was seen.	Trash in Catonsville Park Outfall has been cleaned. <b>Case closed</b>	Catonsville Park. 41 B2
09-049	Citizen complaint of dumping potentially causing midge infestation. 7/8/09		No dumping was found after visiting several spots. <b>Case closed</b>	Riverside Drive and Essexwood Court. 37 D11
09-050	Citizen complaint of sanitary sewer allowing sewage to get into stream. 7/8/09		Manholes were intact and sealed. <b>Case closed</b>	Manchester Road. 44 G1.
09-051	Citizen complaint of farm runoff affecting Brown's Cove. 7/8/09	Farm had adequate buffer and was set back from the water. Did find road next to farm fields filled with sediment.	Soil Conservation District and MDA will be meeting with farmer to discuss problems and update conservation plan. <b>Case closed</b>	Golupski Road. 46 C3
09-052	Staff found outfall to be 90% submerged. 8/7/09	Referred to DPW Highways.	DPW Highways referred to Rec and Parks because outfall is located on Local Open Space property. <b>On-going</b>	Outfall 615. 24 H10
09-053	DNR staff found stream was odd colored and turbid. 8/26/09		DPW Utilities found no evidence of sewage or any turbidity. <b>Case closed</b>	Adjacent to 2120 Frederick Rd. 40 K4
09-054	Staff found trash dumped at outfall. 8/4/09	PDM said they do not have authority to cite for any trash in a waterway.	They will cite for the trash located in the alley, but not the stream. <b>Case closed</b>	Outfall so-295. 44 H1
09-055	Large items of trash in road culvert. 8/4/09	This is a state maintained road.	Debris was removed. <b>Case closed</b>	Outfall 396. 44 H1
09-056	Observed county roto-roooter truck discharging water to storm drain. 9/24/09		Referred to DPW Utilities. <b>On-going</b>	Allegheny Avenue. 27 B6
09-057	Drum observed leaking grease. 9/14/09	Unsure of ownership of drum.	Property Manager had the drum removed. <b>Case closed</b>	1915 York Road. 19 A13
09-058	Broken concrete channel and outfall erosion.		Referred to DPW Highways. <b>On-going</b>	CCBC Catonsville Community College. 41

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	7/27/09			D7
09-059	Citizen reported employees are dumping down storm drain and spilling chemicals in parking lot. 10/2/09	Referred to PDM and MD Department of Agriculture Pesticide Licensing.	Trash has been removed and dumpster lids are down. <b>On-going</b>	1900 Landsdowne Road. 42 E7
09-060	Dumpster from restaurant leaking into storm drain. 10/5/09	Sampled puddle from dumpster and found elevated phenols.	Environmental Health has inspected here before. Stain is old and berm was installed to keep liquid from getting out of dumpster area. <b>Case closed</b>	1220 E. Joppa Road. 27 H7
09-061	Complaints resulting from stream watch walk conducted by Friends of the Patapsco Valley. 2/28/09	Found trash dumped at abandoned house. Found severe erosion around sewer stack.	Referred to Environmental Health and DPW Utilities. <b>On-going</b>	Cooper's Branch. 40 H4
09-062	Community pool may be draining directly into the stream. 9/24/09		Pipe is discharging water that has already been treated for chlorine. <b>Case closed</b>	Wooden Bridge Court. 16 D11
09-063	Excessive vegetation covering outfall. 10/21/09	DPW Highways said the area is maintained by BGE.	Referred to BGE. <b>On-going</b>	Rossville Boulevard. 28 J12
09-064	Citizen complaint of mattress dumped in stream. 11/3/09		Referred to Capital Operations and Programs. <b>On-going</b>	9320 Perglen Road. 29 B5
09-065	Animal carcasses dumped on side of road near stream. 10/5/09	Advised complainant to contact police about dumping and animal control to clean up the animals.	Forwarded complaint to Animal Control. <b>Case closed</b>	Wrights Mill and Davis. 32 A7
09-066	Trash dumped at end of dead end street. 11/3/09	Location of dumped trash is county owned property.	Highways cleaned up trash. <b>Case closed</b>	Quad Avenue. 36 F10
09-067	Staff found trash dumped at edge of parking lot and wooded area. 11/3/09		Referred to PDM. No record of previous complaint, Resent 1/19/10. <b>On-going</b>	8013 Philadelphia Road. 36 G8
09-068	Exposed pipe found in stream. 11/19/09	Pipe was investigated by DPW and found to be old galvanized pipe.	The pipe was probably used to pump water from the stream to a farmhouse, no need to remove. <b>Case closed</b>	Behind 8512 Countrybrooke Way. 26 G2
09-069	Citizen complaint of sediment in Towson Run. 12/4/09	Source is construction site on Towson University campus.	Referred to MDE. <b>On-going</b>	Towson Town Blvd. 27 B8
09-070	Field team saw fire hydrant that was leaking. 12/09		Has been repaired. <b>Case closed</b>	Scott's Branch Elementary. 32 K1
09-071	Field team observed feces and toilet paper on stream banks. 9/09	This was observed for the second year at this fish-sampling site.	Referred to MDE and Environmental Health. <b>On-going</b>	Milford Mill MTA station. 25 G13
09-072	Outfall pipe and apron have broken off into	Pipe was not from a broken outfall, it was the old pipe	Referred to DPW Utilities. <b>Case closed</b>	So-2429. 5 K5

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	stream. 12/16/09	from the road culvert that had been replaced.		
09-073	Outfall pipe 70% submerged. 12/16/09		DPW Highways will clean out as soon as the ground thaws. <b>Case closed</b>	So-2560. 4 G5
09-074	Citizen complained of property that has stream with no buffer and livestock access. 9/30/09	Ran water quality tests downstream and found all results to be within acceptable limits. Referred to Soil Conservation District.	No corrective action needed. Homeowner has asked for advice on how to make improvements to his stream. <b>Case closed</b>	Upstream of bridge on Bull Sawmill Road. 2 F11
09-075	Staff doing fieldwork found fence in stream buffer. 11/20/09	There is no easement so DEPRM does not have enforcement authority.	Referred to MDE. <b>On-going</b>	12 Wilderfield Court. 26 G2

**5.5 Regional Illicit Connections Investigations and Complaint Database**

For many decades, Baltimore County health inspectors have investigated complaints that are now categorized as potential illicit connections. These complaints include septic systems, leaky refuse and grease containers, the dumping of used motor oil, leaky engines, and industrial maintenance activities among others. Because these investigations are only a small percentage of the thousands of complaints received each year by the regional programs, it was difficult to separate complaints with a potential illicit connection from the rest of the caseload. These thousands of complaints were analyzed and broken down into the categories seen in Figure 5-5. After looking at the data from 2005-2009, it was determined that the breakdown into categories is approximately the same each year and we can assume these numbers will continue to be the same in the future.

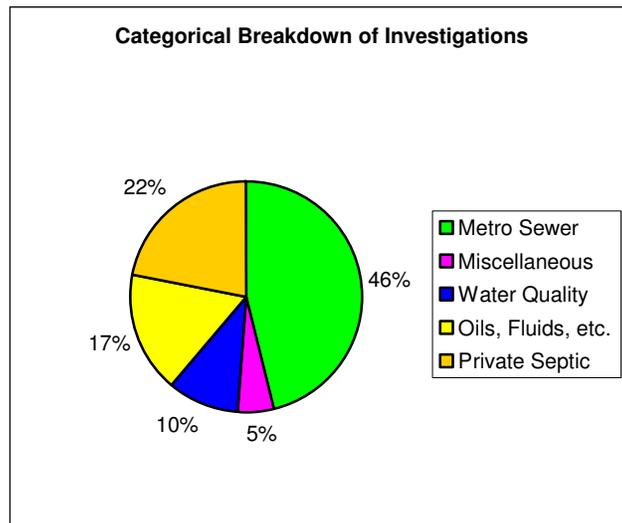


Figure 5-5. Involvement of the Regional Programs in the Investigation of Illicit Connections. This is the approximate breakdown of cases based on past data.

**5.6 Cooperative Projective with the Center For Watershed Protection**

Baltimore County is participating in the Illicit Discharge Detection and Elimination in Baltimore Project organized by The Center For Watershed Protection. This is a one-year grant project that will inventory both major and minor outfalls and investigate illicit connections on a subwatershed scale. The first subwatershed that will be examined is Western Run. Not only will the Baltimore County parameters be used each at outfall, but the additional parameters of fluoride, boron, ammonia, total nitrogen, total phosphorus, bacteria and potassium. Ammonia and boron are currently used as supplemental indicators, but are not used on a regular basis by Baltimore County. This project will enable Baltimore County to compare and see if by using only the traditional parameters illicit connections are being missed. At the end of the project the Center For Watershed Protection will create a short technical memo on loading contributions of outfalls. The ability to dice out the loadings of nitrogen, phosphorus and bacteria coming from the outfalls will allow Baltimore County to use the correction of illicit connections as a means to meet our TMDL reductions.

### **5.6 Summary**

The Outfall Prioritization Program has increased efficiency in detecting pollutants. A database is used to assign a priority rating for each outfall based on past screening data and the potential for having illicit connections. Outfalls are screened periodically based on their priority rating, which is assigned or appropriately changed when information is entered. The type and severity of pollution determines the outfall's position in the queue. The combination of citizen involvement, routine outfall screenings and the regional staff complaint investigations is working well to our continuing goal of preventing and eliminating illicit connections. The project with the Center For Watershed Protection will enable us to make improvements in the Illicit Connections program or will let us know the program is functioning at maximum efficiency in its present state.