

ILLCIT DISCHARGE DETECTION AND ELIMINATION PLAN (IDD&EP)



EVANS CITY BOROUGH Stormwater Management Committee Breakneck Creek and Local Tributaries (#35024, 35025, 35026, 35029, and 35030)

Introduction

In March 2018, Evans City Borough joined Pennsylvania's statewide PAG-13 NPDES General Permit covering municipal stormwater discharges. As required, the Borough now operates a Stormwater Management Program (SWMP) to comply with the regulatory requirements established in our NPDES Permit #PAG138337 for over three-dozen Municipal Separate Storm Sewer System (MS4) outfalls to Breakneck Creek and its local tributaries. In the eyes of the Commonwealth, Breakneck Creek is considered a Category 5 receiving water – i.e, impaired for aquatic life use due to sediment load (i.e., soil erosion and other solids). *As yet Pennsylvania DEP has not established a Total Maximum Daily Load (TMDL) of solids for Breakneck Creek.* The five (5) unnamed tributaries to Breakneck Creek that meander through and along the edges of the Borough are considered Category 2, meaning available data indicates the water quality is supportive of aquatic life.

Enhancing environmental stewardship and improving surface water quality through implementation of the SWMP are primary goals of the Evans City Borough Council. This will be accomplished using six (6) Minimum Control Measures (MCM), and their associated Best Management Practices (BMPs), established in the Borough's NPDES Permit.

MCM #3 involves developing and implementing procedures for:

- Identification of Priority Areas;
- Screening of Stormwater Outfalls;
- Illegal Substance Source Identification;
- Illegal Discharge Elimination;

Assessment of Sewage Systems (Public and Private) and Storm Systems Interaction; and

- Gaining Access to Private Lands for Outfall Inspection and Illicit Discharge Correction

An illicit discharge is defined as any discharge that is not composed entirely of stormwater, unless specifically authorized under Chapter 152, Section 152-61D of the Evans City Ordinances. Prohibited illicit discharges can be hazardous to public health, harmful to aquatic life in receiving waters, and detrimental to overall water quality. In addition, this Illicit Discharge Detection and Elimination Plan (IDD&EP) specifies an electronic method for public reporting of known or suspected illicit discharges. This IDD&EP has been developed to comply with Special Condition I-B-3(a) of the NPDES Permit. It is to be reviewed and revised annually by the Stormwater Management Committee.

Identification of Priority Areas

Two outfall screenings in 2023 revealed six (6) outfalls that experience minimal dry-weather flow. One (1) outfall is the outlet of UNT 35025 that crosses under Route 68 via large diameter drainage pipe; several catch basins along Route 68 tie into this pipe prior to discharging to Breakneck Creek. The other five (5) outfalls are suspected to be picking up small amounts of natural spring water that emerge from the hillsides within Borough limits (many local homes are known to collect spring water or groundwater via basement sumps and transfer it to the storm collection network). There were no signs of illicit discharges at any of the dry-weather flow outfalls, but these must be priority locations for annual inspection:

- Outfall 05-EC Trickle; clear; likely collection of spring water off hillside.
- Outfall 08-PA UNT 35025 outlet; perennial flow; clear.
- Outfall 10-PA Trickle down face of abutment.
- Outfall 21-PA Trickle.
- Outfall 31-PA Trickle; Known spring at 402 Jefferson routed to storm.

Screening of Stormwater Outfalls

Dry-weather screening is required by the NPDES permit to be done twice during the permit term. However, because Evans City has identified several outfalls that experience dry-weather flow, this activity will be performed annually. A minimum of 72 hours of precipitation free weather is required ahead of the screening event. July and August are typically best for dry-weather screening.

Illegal Substance Source Identification

If foaming, discoloration, high solids content, or any other evidence of contamination are visually recognized during the dry weather screening, the MS4 network branch shall be traced back to attempt to identify the source. This may involve pulling upstream catch basin grates and/or doing camera work to identify an illicit underground connection and/or a legal connection into which a polluting substance may have been dumped. In addition, analytical sampling of the impacted outfall(s), on a case-by-case basis, may be conducted to attempt to identify the illicit substance.

Illegal Discharge Elimination

The Borough maintains a good relationship with the Evans City Water and Sewer Authority. When illicit connections are discovered, the Authority is alerted and has been responsive in providing the labor, equipment, and materials necessary to correct such illicit discharge scenarios – at their expense. Three (3) illicit discharges were eliminated in 2025. In some instances, the Borough’s Roads Department may be able to provide additional labor and equipment to help facilitate elimination of illicit discharges.

Assessment of Sewage Systems

Through a 2024 Butler County Municipal Infrastructure Program (MIP) grant award, Evans City was allotted monies for storm sewer condition assessment (remote camera work and engineer’s priority rating). However, that project was only partially completed as funding for the “Phase I - Stormwater Conveyance Improvements” project (i.e., Elizabeth Avenue storm sewer replacement) was projected to come in significantly overbudget. As such, about 60% of the condition assessment funding was re-directed to the construction project. Since that time, Evans City has been assessing storm sewers as-needed ahead of replacement work. To date, condition assessments have been made along other corridors in the targeted low-end of town area (Martin Alley and Stewart Alley). Additional camera assessment work has been funded for Dunbar Avenue and Sarah Alley in 2026.

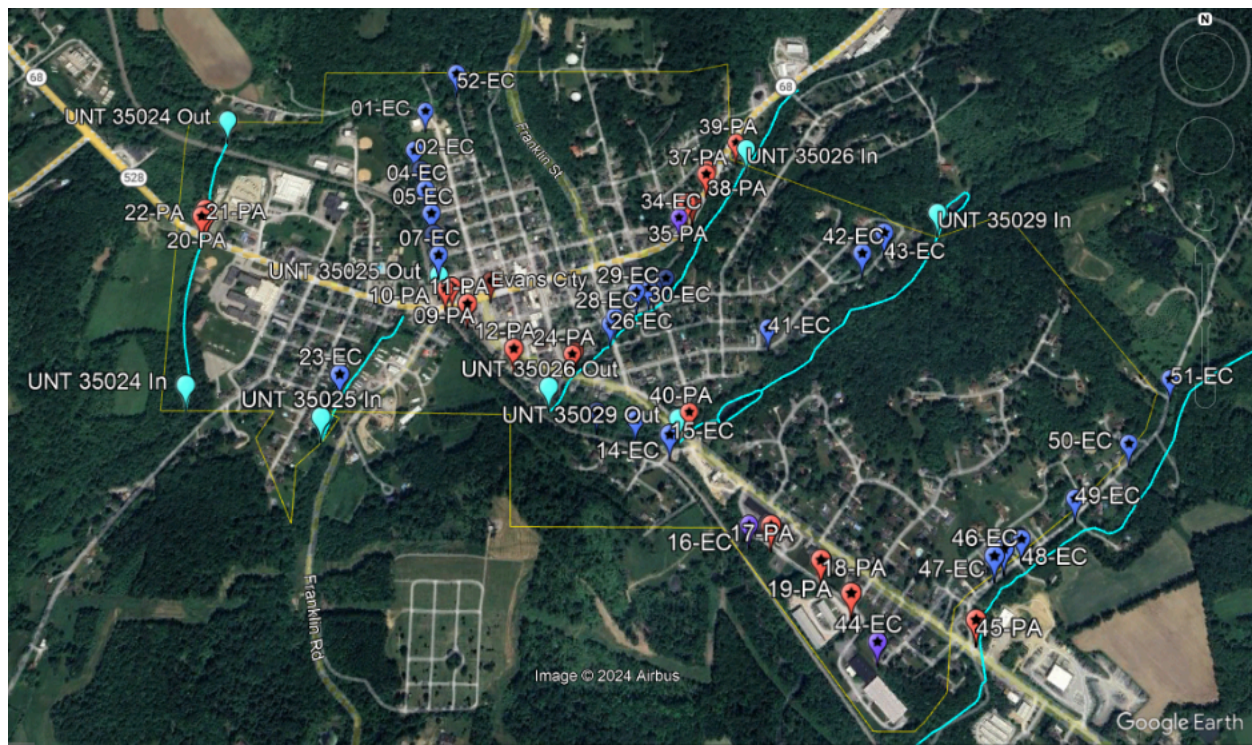
Easements and Access

Most of the outfalls within Evans City Borough are accessible for inspection purposes. Easements are still advised for access to several (e.g., railroad side outfalls) and for catch basin replacement or significant pipe work on

most. While the current details of specific easements with existing property owners is uncertain, easement issues are investigated by Evans City Borough's engineer - as planned work necessitates.

MS4 outfall identifiers are organized by the receiving water body, furthest downstream to furthest upstream:

- Outfalls 01 through 19: Breakneck Creek
- Outfalls 20 through 22: Unnamed Tributary 035024 (Elementary School)
- Outfalls 23: Unnamed Tributary 035025 (to Outfall 008)
- Outfall 24 through 39: Unnamed Tributary 035026
- Outfall 40 through 43: Unnamed Tributary 035029 (Van Buren Street)
- Outfall 44 through 51: Unnamed Tributary 035030 (May Lane)
- Outfall 52: Ephemeral Channel, Outlet at Top of Center Alley



Outfall 001 is at the north end of N. Washington Street, just beyond the VFW-owned field and before you reach the 5 Son's Garage (on the left). Stormwater discharges to a privately-owned, natural wetland area prior to making its way to Breakneck Creek via

natural surface channels. While this area needs to be addressed to better effect drainage, it is our lowest-elevation MS4 outfall (furthest downstream). It is difficult to monitor; the Borough typically utilizes a dilapidated catch basin on the east side of N. Washington Street as an observation point. The Borough should establish easements with both the VFW and 5 Son's to be able to maintain Outfall 001 as a drainage point. It is the last area from which flood waters recede and it plugs easily with silt, sticks, and other materials.

Outfall 002 is at the southwest corner of the aforementioned VFW field; the extension of Dunbar Avenue to this point has never been developed by the Borough. You will find exposed sanitary sewer infrastructure in this vicinity as well, which makes its exact location a little confusing. But it presents as a metal culvert projecting from the streambank. Again, an easement with the VFW property, if not already in place, is warranted for future work on this section of MS4 infrastructure.

Outfalls 003 through 007 fall at the ends of various Borough streets (Sarah Alley, Elizabeth Avenue, Martin Alley, Wahl Avenue, and Stewart Alley), rights-of-way that abut Breakneck Creek and for which easements should not be necessary. The storm system along Elizabeth Avenue and associated Outfall 004 is the subject of a 2024 replacement project. The Wahl Avenue outfall is not a pipe or culvert – there is an earthen channel that helps to drain stormwater here.

Outfalls 008, 009 and 010 are at the Main Street (Route 68) bridge that crosses Breakneck Creek. These are all observable from the bridge and do not require easements. Maintenance of these MS4 system components must be coordinated with PennDOT, as they drain portions of the state road. Replacement of storm pipes and catch basins here would require design plans and specifications suitable for obtaining a Highway Occupancy Permit (HOP); such repairs are beyond the capabilities of the Evans City Borough roads department alone.

Outfall 011 is on Boylan Funeral Home property – there are two smaller diameter pipes that discharge at this location and it is currently unclear what upstream infrastructure along Harmony Alley is attached to each (one line is probably private from the Boylan parking lot). The other is believed to run on the south side of the Uni-Express building and drain stormwater from S. Washington Street (Mars-Evans City Road) and Harmony Alley. Outfall 012 emerges at Breakneck Creek behind the homes across from the old trolley station – also on private property. Outfalls

013 and 014 are large diameter culverts located on the west side of Breakneck Creek, routed under the railroad track. These both help drain properties and Borough roads on the west side of the Maple Avenue bridge. Easements for future maintenance of each of these MS4 branches need to be in place.

Outfall 015 is in transition in 2023-2024 during the Maple Avenue bridge reconstruction.

Outfalls 016 through 019 are located along an unnamed, unpaved alleyway north of Fibercon and the electrical substation. Each outfall is inspectable from the alleyway. However, portions of this infrastructure appear to be on and through private properties where easements would be required for substantial maintenance efforts.

Outfalls 20, 21 and 22 are all at the State Route 68 bridge over Unnamed Tributary 35024, just west of the old Elementary School. These are within the right-of-way and do not require easements. However, repair and replacement of storm pipes and catch basins along any of these lines here would require design plans and specifications suitable for obtaining a Highway Occupancy Permit (HOP); such repairs are beyond the capabilities of the Evans City Borough roads department alone.

Outfall 23 is the only known storm pipe to Unnamed tributary 35025, stretching from a trench drain across Belle Street through a private property – requiring an easement to perform inspections and complete work on. (The tributary itself discharges to Breakneck Creek at Outfall 08.)

Unnamed tributary 35026 runs through the middle of the Borough. Outfalls 24 through 39 discharge along here, along multiple state roads (Route 68 and S. Washington Street), as well as several Evans City Borough Roads (Jefferson Street, Harrison Street). Generally, no easements are required here as infrastructure is off private property. Again, for outfalls along state roads, a HOP is required from PennDOT (Outfalls 24, 25, and 35-39) to make repairs. The single catch basin and very short transfer line to Outfall 24 is slated to be replaced under a 2024 stormwater project.

Outfall 40 to Unnamed Tributary 35029 primarily discharges stormwater captured along S. Washington Street (from 1st Street northwest to South Street). Easements are not required, but again, repair/replacement work on associated catch basins and major pipelines will require PennDOT HOP permission. Other outfalls along this

tributary (Outfalls 41, 42, and 43) are along Van Buren Street (and its extension) and discharge to private property; easements are warranted for future outfall structure rehabilitation work.

Outfall 44 is unique in that it essentially is sheet flow off Washington Avenue pavement toward property owned and maintained by Pittsburgh Plug Plant 2. This stormwater flows into a ditch behind the plant (east side) to their industrial stormwater outfall. This is an inspection-only compliance point for Evans City Borough and requires no easement.

Outfall 45 to Unnamed Tributary 35030 is similar to Outfall 40 - primarily discharging stormwater captured along S. Washington Street (from Washington Avenue southeast to May Lane). Easements are not required; however, PennDOT authorizations are necessary to do catch basin and piping work. Most of this infrastructure is new, circa 2022 with PennDOT completing bridge replacement work over the tributary and addressing stormwater at the associated intersection.

Outfalls 46 through 51 are all along May Lane, at the southeast edge of the Borough. On this side of S. Washington Street, Unnamed Tributary 35030 actually flows outside the Borough limits. As such, stormwater is discharging to various private properties in Forward Township. Easements should be established with these property owners to be able to address future outfall repairs. Catch basins and storm pipes along May Lane and a Charles Lane are in the right-of-way, such that easements with are not required with residents on the Evans City Side of the municipal boundary.

Finally, Outfall 52 routes stormwater from a roadside ditch under Center Alley. It is basically a culvert under the pavement which allows stormwater to cascade down the hillside to an ephemeral stream channel. It is unlikely an easement would be required to replace this simple cross-under structure.