



BRIEFING NOTE ENVIRONMENT, CLIMATE EMERGENCY AND TRANSPORT COMMITTEE

DATE: 17.03.2025

SUBJECT:	DRAINAGE STRATEGY: MOVING TO A RISK-BASED CLEANSING MODEL
REPORT OF:	SENIOR HIGHWAYS MAINTENANCE & STREET LIGHTING MANAGER

REASON FOR BRIEFING

Highways Services propose to transform our current approach to gully cleansing and move to a risk-based model. The goal is to clean the right gullies at the right time, based on data and evidence. At present, we have:

- One crew and one gully tanker (which is beyond its service life).
- An ad-hoc program impacted by blockages and flooding reports.
- Rising complaints from residents and local councillors due to visible surface flooding.

It is important to note that local surface water flooding has many causes, such as combined sewer capacity issues (Wirral has a high percentage of combined sewer systems) and an increase in paved surfaces (e.g., sealed driveways). Improving gully cleansing addresses only part of the problem, but it is still a critical factor in preventing and reducing local flood risk.

The service has five years of data from our asset management system (Symology Insight). Key findings include:

- **Cyclical Cleansing**
 - Highways Services manages approx. 60k gully assets.
 - Over 107,000 gully cleanses from March 2020–February 2025.
 - Around 49,700 unique gullies cleansed in that period.
 - Annual average: ~21,000 gullies.
 - Daily average: ~143 gullies.
- **Reactive Cleansing**
 - 4,578 reactive cleanses between January 2022–February 2025.
 - 471 gullies cleansed reactively twice.
 - 159 gullies cleansed reactively three or more times.

- **Customer Requests**

- 3,246 “blocked gully” requests since April 2021 (58% come in September–January).
- 616 “misc. flooding” requests in the same period (63% come in September–January).
- Requests peak during autumn and winter and are lowest in spring and early summer.

PROPOSAL

The preferred approach is to track silt levels in gullies. As gullies fill at different rates, focusing on silt depth allows us to:

- **Target Cleansing:** Clean gullies that fill quickly more often.
- **Use Resources Efficiently:** Avoid unnecessary cleans where silt is low.
- **Be Proactive:** Prevent flooding by clearing gullies before they block.
- **Base Decisions on Evidence:** Rely on real silt data for scheduling.
- **Spot Trends:** Accumulate and analyse data over time to forecast future needs.

In addition, coordinating our gully cleansing with street cleansing schedules, especially during heavy leaf-fall, will help keep gullies free of debris.

Proposed implementation:

1. **Short-Term (Two Years):**

- a. Outsource a short-term, two-year cleansing contract to cleanse every gully in Year 1 and repeat in Year 2.
- b. Record annual silt levels to develop a reliable risk-based program by Year 3.
- c. Establish a borough-wide “clean slate,” capturing all gullies under the same baseline.

2. **Long-Term:**

- a. In-house crews will keep recording silt levels in Symology Insight.
- b. Use historical silt data to schedule cleans based on need.
- c. Align with other areas (e.g., street cleansing) where possible.

3. **Asset Recording:**

- a. Identify and log any unregistered drainage assets.
- b. Keep photographs and silt measurements to build an accurate record.

WARDS AFFECTED (if applicable)

All.

RISKS AND IMPLICATIONS (FINANCIAL, EQUALITY, ENVIRONMENT, COMMUNITY WEALTH BUILDING, HR, LEGAL ETC)

Legal considerations:

Highways Act 1980:

We are required to maintain the highway, including drainage systems on vehicular highways.

Flood and Water Management Act 2010:

As the Lead Local Flood Authority (LLFA), we have a role in managing local flood risks.

Proper gully maintenance helps meet these statutory duties and reduces the likelihood of legal or reputational risks associated with flooding.

Financial considerations:

- **Two-Year Outsourced Contract:**
 - Funded through City Region Sustainable Transport Settlement (CRSTS) capital.
 - Soft-market testing will refine cost estimates before procurement.
 - The current in-house crew will maintain an investigatory and reactive cleansing role during this period.
- **Increasing Operational Capacity:**
 - Acquire two new gully tankers (cost: £520k) using capital approved by the Policy and Resources Committee.
 - These new vehicles will reduce downtime from breakdowns and repairs, lowering the need for costly rentals.
 - Appoint a second cleansing team (funded by CRSTS) to focus on investigations and reactive work, while the first team handles routine cyclical tasks.
- **Interim Measures:**
 - Our existing gully tanker has been condemned; we are currently hiring a replacement at £1,400 per week.
 - We may purchase a second-hand tanker to cut rental costs until new vehicles arrive.
 - The approved capital for new tankers cannot be redirected to a second-hand purchase, so the service will need a separate funding source or arrangement.

NEXT STEPS

1. **Soft Market Test:** Identify potential cleansing firms and cost estimates.
2. **Procurement:** Proceed with a formal tender process based on market feedback.
3. **Fleet Acquisition:** Purchase two new gully tankers and possibly an interim second-hand vehicle.
4. **Operational Planning:** Finalise plans for adding a second crew and explore alignment with street cleansing schedules.
5. **Data Capture & Analysis:** Maintain detailed silt-level records in Symology Insight to refine and sustain a risk-based model.

BACKGROUND AND HISTORY

Requested by Environment, Climate Emergency and Transport Committee.

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