PLACE SCRUTINY PANEL
FLOOD RISK MANAGEMENT – UPDATE

16th February 2026

Flood Risk - Context

- The Middlesbrough drainage system is extensive and complex in nature comprising open and culverted watercourses and a surface water/combined sewerage system.

- Flooding can come from a variety of sources including surface water run off, ordinary watercourses, surcharging sewers and from road gullies.

- Surface water flooding occurs when intense rainfall, often of short duration, is unable to permeate into the ground or enter drainage systems quickly enough, resulting in ponding or overland flows. It can cause considerable problems in urban areas.

- During periods of heavy rainfall standing water may accumulate even if the road gullies are in good working order. Some gullies just cannot drain the water away fast enough and therefore will surcharge during periods of intense rain fall. These intense periods of rain fall often don't last for long and once over, the gully will usually drain away the water without needing any attention.

Flood Zones & Surface Water Flood Maps

- The Environment Agency updated their long-term flood risk information, as part of the National Flood Risk Assessment (NaFRA2) at the end of January 2025 with further map updates during 2025.

- An initial assessment of the new maps covering Middlesbrough appears to show an increase in the extent of flooding.

- We are currently undertaking a desktop assessment of the new maps to identify those areas which may be a risk of flooding and require further investigation or modelling.

Strategic Flood Risk Assessments

- A Strategic Flood Risk Assessment (SFRA) gives an overview of areas that may be susceptible to flooding.
- It provides a comprehensive overview of all flood sources (river, surface water, groundwater, etc) across Middlesbrough, now and in the future, including the impact of climate change.
- The SFRA is a two-level process used by the planning authority to assess flood risk from all sources.
- Level 1 – provides a high-level overview to apply the Sequential Test
- Level 2 – offers detailed, site-specific assessments if development is necessary in high-risk areas, incorporating climate change impacts, flood depths and velocity.

Strategic Flood Risk Assessment

- Original SFRA was published in 2018
- Level 1 SFRA update in 2024
- Level 1 SFRA Finalised in Mar 2025
- Level 2 SFRA covering Middlehaven undertaken in Early 2025
- Level 2 SFRA Finalised in 2025
- Review of Level 1 & 2 following updates of EA Flood Risk Data 2025/2026

Management of Flood Risk

NWL Integrated Drainage Studies

- The Strategic Studies highlight and prioritise the areas of greatest risk from combined flooding within each of the catchment areas.
- Middlesbrough is covered by several catchment Areas.
- Each area will have a Stage 1 and Stage 2 study undertaken.
- Stage 1 focuses on the collection, collation, analysis and prioritisation of information to identify areas of High Risk from Flooding
- Stage 2 focuses on identifying opportunities within the top 3 or 4 High Risk areas to reduce or prevent flooding

Flood Defence Grant in Aid (FDGiA)

The Environment Agency 'Medium term plan' is a rolling list of schemes which are refreshed yearly and are funded from Government funding allocation. The funding process is going through a review / change and so currently the programme is only over 2 year's and the current funding runs from 26/27 – 27/28

Following a recent refresh of the EA's Medium Term Plan. The following potential scheme areas were included:

- Shevington Grove, Marton 24/25 (105 Properties)
- Connaught Road, Nunthorpe 27/28 (27 properties)
- Gresham Road, Newport 27/28 (40 properties)
- NIDP Study - Thornfield Road 26/27 assessment

Completed Scheme

- Saltersgill / Beechwood fields Scheme was completed in 2021 and better protects around 306 properties.

- Marton West Beck Scheme was completed in 2022 and better protect 500 properties.

- Ormesby Beck Restoration Scheme was completed in 2022/2023

- Cornwall Close was completed in 2024 and better protects around 5 properties.

Other Flood Risk Prevention Improvements

Highway Drainage

- We continue to investigate the highway drainage system, which has not been previously recorded or mapped, thereby increasing our knowledge of the system and the interactions with sewers and watercourses. We are then able to repair and cleanse the system where required.

Developments

- We continue to work with developers to ensure that Sustainable Drainage (SuDS) techniques are a part of all major developments.

Gully Smart Asset management Software

- The Software ‘Gully SMART’ was purchased in January 2022 to enable an improved proactive and reactive response to managing the Highway drainage network and reduce flooding from gullies and the impacts this can have.