

9.2 Flood Risk and Water Management in Warrington

- 9.2.1 Water is a defining feature of Warrington's landscape, from the River Mersey flowing close to the Town Centre, to the man-made Canals and smaller watercourses that drain towards it. Within Warrington, the management of water resources is therefore a necessary part of everyday life.
- 9.2.2 Flooding can threaten life, disrupt the local economy and cause substantial damage to property in both urban and rural communities. Although flooding cannot be wholly prevented, the risk of flooding can be reduced and its impacts can be mitigated through good planning and management.
- 9.2.3 Effective land use management has become one of the most important ways to manage flood risks and improve community resilience. Sustainable development in the right locations can help reduce the quantity of water entering our river and drainage networks, improve water quality within the Borough and provide opportunities to enhance biodiversity, health and recreation.
- 9.2.4 Policy ENV2 Flood Risk and Water Management sets out a clear approach and gives guidance on how development should respond to flood risk and water management issues across the Borough.

Policy ENV2 - Flood Risk and Water Management

General Principles

1. Development should be focused towards areas at the lowest risk of flooding from all sources.
2. Sustainable water management measures must be integrated into developments to reduce flood risk across the Borough and to avoid adverse impacts on water quality and quantity.
3. New development should not result in increased flood risk from any source, or cause other drainage problems, either on the development site or elsewhere.
4. No development should take place within 8m of the top of the bank of a watercourse either culverted or open, or within 8 metres of a raised flood defence, such as a flood wall or a flood embankment, unless this approach is supported by the Environment Agency and Warrington Borough Council as the Lead Local Flood Authority.

Development proposals

5. The Council will only support development proposals where the risk of flooding has been fully assessed, understood and justified, with the implementation of appropriate mitigation measures where necessary.
6. A site specific Flood Risk Assessment is required for:

- a. development proposals of 1 hectare or greater in Flood Zone 1;
- b. any development proposals within Flood Zone 1, which has critical drainage problems (as notified to the Local Planning Authority by the Environment Agency);
- c. all proposals for new development (including minor development and change of use) in Flood Zones 2 & 3; and
- d. development proposals or a change of use to a more vulnerable class that might be susceptible to other sources of flooding.

7. The Flood Risk Assessment should also address, if required, the Sequential and Exceptions tests as set out in National Planning Policy, and should take into account all sources of flooding identified in the Warrington Strategic Flood Risk Assessment (SFRA).

8. The Council will require development proposals to:

- a. provide safe and clear access and egress routes in the event of a flood;
- b. manage surface water runoff to ensure that flood risk is not increased;
- c. use Sustainable Drainage Systems that reflect the principles set out in the adopted Warrington Sustainable Drainage Systems (SuDS) Design and Technical Guidance, unless it can be demonstrated that such techniques are impractical or would present an unacceptable pollution risk;
- d. provide compensatory storage where development is proposed in undefended areas of the floodplain;
- e. ensure that the layout and design of a site is considered to provide the opportunity to provide flood resilience measures and reduce flood risk within the development;
- f. apply a sequential approach at a site level to minimise risk by directing the most vulnerable development to areas of lowest risk;
- g. avoid the use of culverting and building over watercourses and where practical to re-open existing culverts;
- h. ensure that appropriate mitigation is included within the design of the development to make it safe for the future users of the site without adversely affecting others;
- i. ensure that developers have considered the impacts of climate change to ensure that the future users of the development are not put at additional danger of flooding, which may be exacerbated by climate change over the lifetime of the development. Climate Change allowances should be in accordance with the latest Government guidance;
- j. Consider the connectivity and condition of watercourses within the development and make improvements where required;
- k. Make an assessment of downstream watercourse to ensure their suitability and effectiveness; and
- l. have regard to the Sankey Catchment Action Plan when assessing flood risk and any appropriate mitigation measures.

9. In addition, in areas identified by the Council as being at intermediate and high risk of surface water flooding, development proposals that are greater than 0.5 hectares should be supported by a Flood Risk Assessment which considers information in Warrington's Strategic Flood Risk Assessment and Preliminary Flood Risk Assessment to demonstrate that the development:

- a. is not at risk from existing drainage systems or overland flows;
- b. will make a positive contribution to managing or mitigating flood risk; and
- c. will not adversely affect existing flooding conditions.

10. The Council will expect surface water to be discharged in the following order of priority:

- a. An adequate soakaway or some other form of infiltration system.
- b. An attenuated discharge to surface water body.
- c. An attenuated discharge to public surface water sewer, highway drain or another drainage system.
- d. An attenuated discharge to public combined sewer.

11. Applicants wishing to discharge to public sewer will need to submit clear evidence demonstrating why alternative options are not available. The expectation will be for only foul flows to communicate with the public sewer.

12. Applicants will be expected to conform to the following discharge requirements unless site-specific policies indicate otherwise:

- a. On greenfield sites, applicants will be expected to demonstrate that the current natural discharge solution from a site is at least mimicked.
- b. On previously developed land, applicants will also be expected to follow the surface water hierarchy.
- c. Thereafter, any proposal based on a proposed reduction in surface water discharge from a previously developed site should target a reduction to greenfield run-off rate. A reduction of at least 30% will be sought on previously developed land, rising to a minimum of at least 50% in Critical Drainage Areas (as defined in Warrington's Strategic Flood Risk Assessment) or in areas susceptible to intermediate or high risk surface water flooding. In demonstrating a reduction, applicants should include clear evidence of existing positive operational connections from the site with associated calculations on rates of discharge.

13. Development proposals will be expected to incorporate sustainable drainage systems in accordance with the requirements of national planning policy. The preference will be for new development to incorporate infiltration based systems and thereafter surface level sustainable drainage systems with multi-functional benefits as opposed to underground tanked storage systems for the management of surface water. Applicants will need to submit clear evidence where surface level sustainable drainage features are not proposed.

14. Any development proposal which is part of a wider development / allocation should demonstrate how the site delivers foul and surface water drainage as part of a wider strategy having regard to interconnecting phases of development. It will be necessary to ensure the drainage proposals are part of a wider, holistic strategy which coordinates the approach to drainage between phases, between developers, and over a number of years of construction. Applicants will be expected to include details of how the approach to foul and surface water drainage on a phase of development has regard to interconnecting phases within a larger site. Infrastructure should be sized to accommodate flows from interconnecting phases and drainage strategies should ensure a proliferation of pumping

stations is avoided on a phased development. This will ensure a comprehensive approach to drainage and that any early phases of development provide the drainage infrastructure to meet the needs of any later interconnecting phases of development. In delivering drainage as part of a wider strategy, applicants will also be expected to ensure unfettered rights of discharge between the various parcels of development within a wider development to prevent the formation of '*ransom situations*' between separate phases of development.

15. Approved development proposals will be expected to be supplemented by appropriate maintenance and management regimes for surface water drainage schemes.

16. Applicants will need to consider and maximise the contribution landscaping proposals can make to reducing surface water discharge. This should include hard and soft landscaping such as permeable surfaces to reduce the volume and rate of surface water discharge.

Why we have taken this approach

9.2.5 The NPPF (2021) and the accompanying NPPG 'Planning Guidance on Flood Risk and Coastal Change' indicate that development should be directed to areas at the lowest risk of flooding. This sequential approach to the location of development aims to avoid, where possible, flood risk to people and property and to manage any residual risk, taking account of the impacts of climate change. To inform this approach, the Council has prepared a Strategic Flood Risk Assessment (SFRA) to support its Local Plan, drawing on information on all potential sources of flooding from the Environment Agency, the Lead Local Flood Authority for Warrington (WBC) and United Utilities.

9.2.6 Warrington is at risk from many different sources of flooding including, main rivers, ordinary watercourses, surface water runoff, sewer flooding and the residual risks associated with artificial water bodies such as the Bridgewater Canal, the Manchester Ship Canal and reservoirs. The canal effectively provides a floodwater bypass channel for Warrington.

9.2.7 The majority of Warrington is built on the floodplain of the River Mersey, with about three quarters of the urban area lying between 5 and 12 metres above sea level (AOD). The main source of flooding is the River Mersey and its five key tributaries, which flow through the centre of the Borough. The Manchester Ship Canal plays a vital role in managing fluvial flood risk along the Mersey. Although principally a navigation canal, the canal provides a floodwater bypass channel for Warrington, which significantly reduces the incidence of flooding from fluvial flows.

9.2.8 Surface water flooding is also a key flood risk consideration in Warrington. Surface water flooding includes surface water runoff (pluvial flooding), sewer flooding and flooding from groundwater. Whilst pluvial flooding from heavy rain fall can occur anywhere in the Borough, there are certain locations in Warrington where the probability and consequences of these mechanisms are more prominent.

- 9.2.9 As a Local Planning Authority, Warrington Borough Council will use the flood risk evidence collected through the SFRA and the Council's Surface Water Management Plan (SWMP) to avoid inappropriate development in areas at risk of flooding by directing development away from areas at highest risk. Where development is necessary, it should be made safe without increasing flood risk elsewhere. This should be carried out through the planning process, specifically during the development of the Local Plan.
- 9.2.10 Warrington Borough Council is working in partnership with the Environment Agency, Healthy Rivers Trust, Halton and St Helens Council as part of a catchment based approach, to produce the Sankey Catchment Action Plan.
- 9.2.11 This has the aims of reducing the reactive nature of the catchment by "Slowing the Flow" in the rural headwaters and filtering agricultural run-off; improving water quality and wildlife habitat, addressing issues in the urban areas of the catchment such as wrong connections and removing pinch-points that can contribute to poor water quality and localised flooding. Riparian development can make a significant contribution to slowing the flow by temporarily attenuating flood water.

Key Evidence

- National Planning Policy Framework (2021)
- Planning Practice Guidance (PPG)
- WBC SFRA Level 1 & 2 (2018) & Addendum (2021)
- WBC Sustainable Drainage Systems (SuDS) Design and Technical Guidance (2017)
- WBC Preliminary Flood Risk Assessment (2017)
- Sankey Catchment Action Plan (2018)
- Habitat Regulation Assessment: Proposed Submission Version Local Plan (2021)
- Sustainability Appraisal Report: Proposed Submission Version Local Plan (2021)

Council Wide Strategies

- Warrington Means Business (2020)

Delivery Partners

- Private Sector Stakeholders
- Public Sector Stakeholders
- Environment Agency
- United Utilities