



Flooding, Water Management and Sustainable Urban Drainage Systems (SuDS)

**Supplementary Planning
Document (Scoping)**

For Consultation

9th June 2022 - 7th July 2022

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Consultation information

This document has been produced by the Council as part of the preparation of a Supplementary Planning Document (SPD) on Flooding, Surface Water Management and Sustainable Urban Drainage Systems (SuDS). Councils are required to consult when preparing an SPD (Regulation 12 of the Town and Country Planning (Local Planning) (England) Regulations 2012). The Council must then prepare a summary of the main issues raised and how those issues have been addressed in the SPD.

This consultation therefore invites representations on what the SPD should contain. The representations received will be considered and will inform the content of the draft SPD. The draft SPD will then be subject to a further consultation (under Regulation 12b and 13 of the Town and Country Planning (Local Planning) (England) Regulations 2012).

How to Respond

Responses should address the questions in each section of the document. The Council's preference is for responses to be sent by email to PlanningPolicy@fylde.gov.uk. Alternatively, they may be sent by post to Planning Policy, Fylde Council, Town Hall, St Annes Road West, Lytham St Annes, Lancashire FY8 1LW.

Vision

To develop a long term and sustainable approach to water management across the Borough. This will address the flooding and water quality risks associated with a changing climate and ensure resilience to flooding and coastal change now and into the future.

All development in Fylde will manage surface water runoff using Sustainable Drainage Systems (SuDS) as close to the water source as possible. SuDS will be fully integrated into development sites and the built environment ensuring good quality design and effective water management. SuDS will be designed not only for water drainage, but to provide multiple additional benefits such as enhancing biodiversity, improving public amenity, increasing recreational opportunities and thus having a positive effect on the health and wellbeing of the residents of Fylde.

1. Introduction

- 1.1 Flood risk and water management are key issues that need to be addressed in Fylde for both existing and future developments. Given the coastal, low-lying geographical location of Fylde, it is at high risk of experiencing future flood events from all sources. Flooding has consequences for both the population and property, for the economy, tourism, environment and biodiversity and for social, health and well-being. Increasingly extreme weather events and other climatic changes, especially rainfall intensity and sea level rise, are likely to increase the risk of fluvial, tidal and surface water flooding in Fylde and the challenge of managing it effectively.
- 1.2 The integration of surface water and flood risk management measures will influence the design of all development proposals. They will help to alleviate surface water, reduce flooding levels as well as being as resilient as possible to the impact of flooding. Planning policy is also clear that sustainable drainage is important and should be provided in all major, new developments, unless there is clear evidence that this would be inappropriate, and that it should be given priority in new developments in flood risk areas (gov.uk, 2021).
- 1.3 Supplementary Planning Documents (SPDs) provide further detail and guidance in relation to policies and proposals within the Development Plan, in this case the Fylde Local Plan to 2032 (incorporating Partial Review) which was adopted by the Council on 6th December 2021. The main objective of this document is to provide practical guidance and advice for developers, planners, designers and consultants on what is expected of them as they bring sites forward across Fylde in relation to surface water management and the implementation of Sustainable Drainage Systems (SuDS). The scope of this SPD is limited to the legislative remit of Fylde Council as the Local Planning Authority.
- 1.4 This SPD Scoping Report is intended to describe the proposed scope/content of the SPD. It includes questions about the proposed content and options for dealing with particular issues. Any responses made in relation to this SPD scoping report will be investigated and the evidence will be assessed before a decision is made by the Council regarding its inclusion in the final SPD.

Q1. Do you agree that the Council should produce an SPD to provide detailed guidance on water management and sustainable drainage?

2. Local Context

2.1 Flood risk in Fylde occurs from a variety of sources. These include:

- Coastal
- Main rivers
- Ordinary watercourses
- Surface water run-off
- Pluvial Flooding
- Groundwater flooding (high water table)
- The sewerage network (sewers, rising mains etc)

2.2 Fylde is a low-lying coastal area at the lower end of the two river catchments, the Ribble & the Wyre. Surface water flooding happens when rain from heavy storms overwhelms local drainage capacity. It is a significant risk affecting more than 3 million properties in England. Like all flooding it causes significant disruption to people's lives and livelihoods, damaging homes and businesses, causing stress and anxiety and closing roads, railways, schools and hospitals. It can also cause environmental impacts.

2.3 Surface water flooding is a growing challenge with climate change bringing more frequent heavy storms, new developments increasing the need for drainage, and our ageing sewerage infrastructure which is costly to maintain and upgrade. The risks are greatest in large urban areas. Managing surface water risks means making sure that water drains effectively from existing homes and gardens, roads, fields, businesses and public spaces. New development risks reducing the capacity of the land to provide natural drainage and has the potential to increase surface water run-off. So, it is important to ensure that new properties have effective ways of managing run-off which also requires that drainage systems old and new are well maintained so that they perform to their intended capacity and that drainage networks of sewers, ditches and underground culverts function effectively.

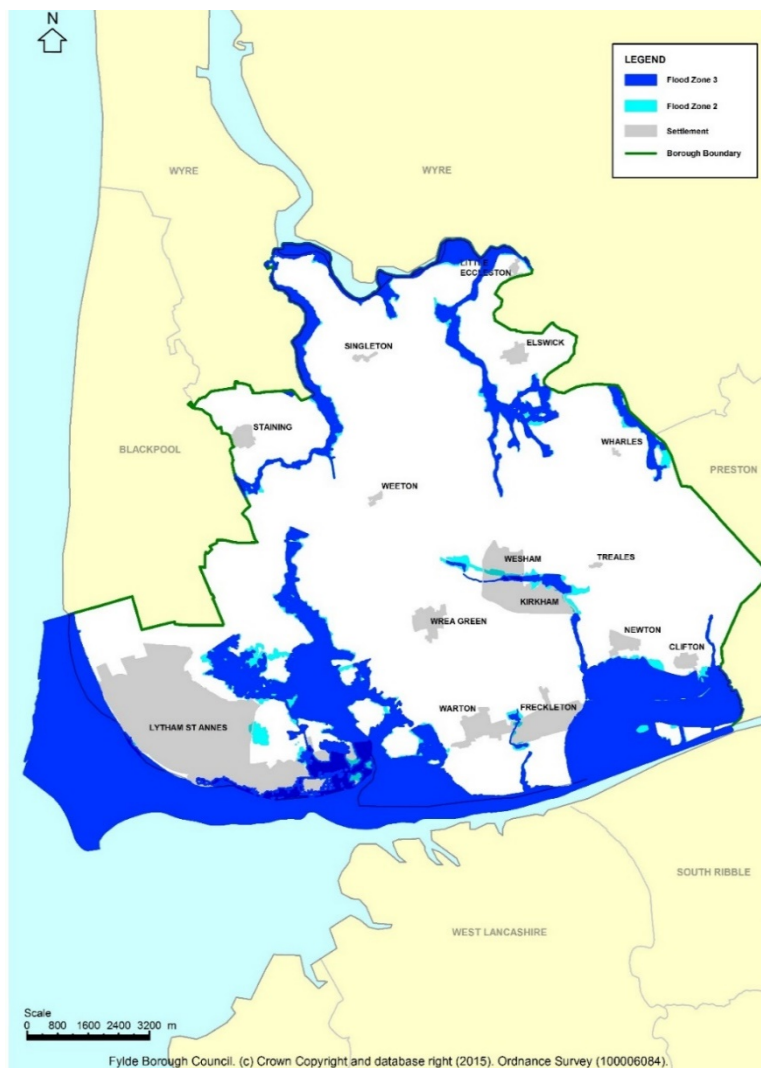
2.4 Surface water management needs coordinated action by all those with responsibilities for managing land, rivers and drainage systems, including national and local government, water companies, landowners and businesses.

2.5 Map 1 shows that Fylde has significant areas in Flood Zone 2 (medium risk of flooding and Flood Zone 3 (high risk of flooding).

2.6 The main areas with a relatively high risk of flooding (Zone 3) are:

- On the coastline in the south of the Borough.
- The river Wyre and its tributaries in the north of the Borough.
- Lytham and area to the north.
- The area east of Freckleton.

Map 1: Flood Zones 2 and 3 in Fylde Borough



3. Issues and Objectives

3.1 Issues

- Flooding issues caused downstream of the proposed development
- Surface water assets (e.g., SuDs/balancing ponds) are installed by developers, with no guarantee of long-term management and maintenance.
- Pollution issues resulting from leaching
- Fylde already relies on pumping stations at times of high tides, sea level rise will exacerbate the situation
- Farmland being affected by standing water at certain times of the year, preventing crops from being planted
- Combined surface water/sewage system means at times of high rainfall the volume of water needing treatment increases and there are permitted spillages into the sea, this can impact on bathing water quality
- Cutting off access to watercourses for maintenance by riparian owners
- Badly maintained downstream watercourses coupled with poorly constructed outfall details to watercourses leading to scour and surcharging
- Effects development has on existing neighbouring property – e.g. the influence of imported material and raising ground levels, the cumulative effect of runoff to neighbours requires perimeter flood mitigation measures
- Influence of development on existing ground water – large areas of the Fylde are at risk of groundwater flooding – groundwater monitoring required (ideal min. data for Nov to May)
Figure 1 shows 1km squares of groundwater flood risk, colour coded as, light green <25%; light blue >25% but <50%; darker blue >50% but <75%; purple >75% groundwater flood risk, reports from farmers, trial holes, British Geological Society borehole records etc suggest groundwater levels are rising.

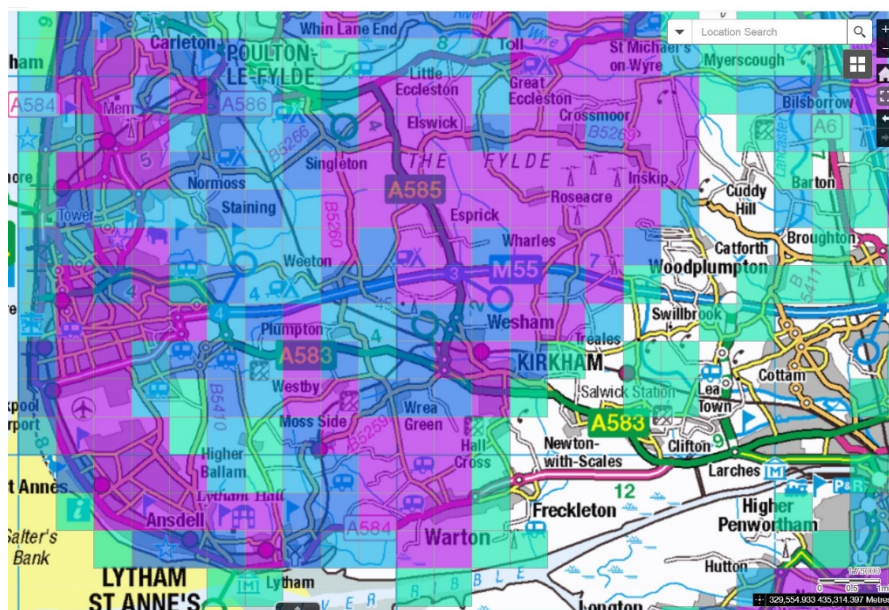


Figure 1: Groundwater Flood Risk (Mapzone, 2022)

Objectives

- To steer new development to areas with the lowest probability of flooding.
- Encourage the use of water efficient and recycling devices within new developments.
- To provide safe and accessible drainage discharge points.
- To ensure that new development does not increase the risk of flooding either on a site or cumulatively elsewhere.
- To ensure watercourses are accessible for maintenance.
- To ensure that development incorporates appropriate water management techniques which improves the existing hydrological conditions and maximises the opportunities and benefits to enhance water quality and quantity, biodiversity and amenity.
- The addition of SuDS including permeable paving, planted roofs, filter drains, swales, basins and ponds wherever appropriate.
- To ensure the provision of long-term maintenance of SuDS and surface water assets, in order to sustainably mitigate the risk of flooding.
- To promote the use of porous materials to reduce surface water run-off in new developments and applications for changes of use.
- To encourage biodiversity net gain through the appropriate implantation of SuDS.
- To maximise the potential of existing SuDS in the Borough and promote their implementation in new developments.
- To ensure comprehensive engagement with the Lead Local Flood Authority, the Environment Agency, other Local Planning Authorities and other interested bodies including the local community.

Q2. Do you agree with that the SPD should consider the issues above?

Q3. Are there any issues that you feel are missing from the list?

Q4. Do you agree with the objectives as stated? Do any need amending or removing completely?

Q5. Are there any additional objectives that the SPD should consider?

4. Legislative and Policy Review

European Legislation

EU Water Framework Directive 2000

- 4.1 The Directive commits member states to protect, enhance and restore water bodies to ‘good’ status for all ground and surface waters (rivers, lakes, transitional and coastal waters) in the EU. Local planning authorities must, in exercising their functions, have regard to the river basin management plans on the Environment Agency website that implement the Water Framework Directive.

The EU Floods Directive 2007

- 4.2 This Directive requires member states to assess if all water courses and coast lines are at risk from flooding, to map the flood extent and assets and humans at risk in these areas and to take adequate and coordinated measures to reduce this flood risk. It also reinforces the rights of the public to access this information and to have a say in the planning process.

National Legislation

The National Planning Policy Framework (NPPF)

- 4.3 The NPPF was published in July 2021 and sets out the Government’s planning policies for England and how these are expected to be applied.
- 4.4 Paragraphs 20-23 are concerned with strategic policies. Paragraph 20 contains criterion b. This states that strategic policies should set out an overall strategy for the pattern, scale and design of places, and make sufficient provision for: infrastructure for transport, telecommunications, security, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat).
- 4.5 Chapter 14 is entitled “Meeting the challenge of climate change, flooding and coastal change”. In summary, Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. Planning policies should also support appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.
- 4.6 Chapter 14 also contains a section on Coastal Change which highlights the importance of taking into account the UK Marine Policy Statement and Marine Plans. Any area likely to be affected by physical changes to the coast should be identified as a Coastal Change Management Area.

Planning Practice Guidance (PPG)

- 4.7 The PPG advises how to take account of and address the risks associated with flooding and coastal change in the planning process. Based on the content of the NPPF, it sets out the main steps to be followed to ensure that if there are better sites in terms of flood risk, or a proposed development cannot be made safe, it should not be permitted.

The Fylde Local Plan to 2032 (incorporating Partial Review)

- 4.8 The Fylde Local Plan to 2032 (Incorporating Partial Review), adopted December 2021, together with the Joint Lancashire Minerals and Waste Core Strategy DPD 2009 and the Joint Lancashire Minerals and Waste Local Plan Site Allocations and Development Management Policies DPD form the statutory Development Plan for Fylde.

Local Plan Objectives

- 4.9 Strategic Objective 2: To maintain, improve and enhance the environment by:
The following sub objectives are relevant:
- Protecting, restoring and enhancing the quality, character and distinctiveness of the biodiversity, landscape and countryside of Fylde
 - Expanding biodiversity resources, including improving habitat connectivity, particularly away from the coastal edge.
 - Improving access to the natural environment.
 - Minimising the risk of surface water flooding, coastal and pluvial flooding and groundwater flooding, to existing and new development and to agricultural land, and improving bathing water quality.
 - Protecting best and most versatile agricultural land.
 - Supporting the delivery of actions identified in the Coastal Strategy.
 - Ensuring that infrastructure is available to enable new development, whilst protecting and enhancing the natural and built environment.
 - Working with the Marine Management Organisation to ensure clean, healthy, safe, productive and biologically diverse seas

Fylde Local Plan to 2032 (incorporating Partial Review) Relevant Policies

- 4.10** Strategic Policy M1 Masterplanning the Strategic Locations for Development in particular criteria o, p, u and w which outline requirements for the retention and integration of important features including water bodies, development in Flood Zones 2 and 3 and wastewater infrastructure upgrades.
- 4.11** Strategic Policy GD7 Achieving Good Design in Development in particular criterion t, u and z which outlines requirements for mitigating the effects of and adapting to climate change, and inappropriate development in Flood Zones 2 and 3.

- 4.12** Strategic Policy HW1 Health and Wellbeing criteria e, f and g, outline encouraging provision of allotments and garden plots to produce locally grown, healthy food, improving healthy lifestyles and reducing health inequalities and promoting initiatives to facilitate healthier lifestyles where they can be delivered through the planning system.
- 4.13 Strategic Policy INF1 Service Accessibility and Infrastructure - criterion c proposes to mitigate any environmental impacts of new development, whilst criteria e and g concern improvements to existing and provision of new infrastructure whilst ensuring a coordinated and holistic approach to infrastructure delivery.
- 4.14 Non-strategic Policy INF2 Developer Contributions – Subject to viability, development will normally be expected to contribute towards the mitigation of its impact on the environment. This includes criterion c which covers flood risk management and coastal defences (including strategic flood defence measures and local flood risk management measures) and sustainable drainage measures (both on site and borough wide, including the retrofitting of sustainable drainage systems – SuDS). Criterion h covers climate change and energy initiatives.
- 4.15 Strategic Policy CL1 Flood Alleviation, Water Quality and Water Efficiency – the entire policy is highly relevant and focusses on the fact all new development is required to minimise flood risk impacts on the environment, retain water quality and water efficiency, and mitigate against the likely effects of climate change on present and future generations. Criterion b supports the retrofitting of SuDS (Sustainable Urban Drainage Systems), in locations that generate surface water runoff. Critically, Criterion d ensures that new development is directed away from areas at high risk of flooding and incorporates appropriate mitigation against flooding in areas of lower risk. Developer contributions will be required for the provision and maintenance of SuDS where they are not provided as part of the development. They will also be required for the repair or replacement of the sea defences, coastal protection measures and the maintenance of the sand dunes system.
- 4.16 Strategic Policy CL2 Surface Water Run-Off and Sustainable Drainage contains a number of criteria specifying the incorporation of a number of sequential attenuation measures. The policy also references the SuDS hierarchy in priority order as well as the importance of utilising SuDS wherever practical. Proposals may also be required to provide a feasibility assessment for the use of SuDS including consideration of the potential design of any scheme and ongoing maintenance arrangements.
- 4.17 Strategic Policy ENV1 Landscape criterion d requires suitable landscape planting of native species, appropriate to its context should be incorporated within or, where appropriate, close to new development. Measures should be put in place for the management of such landscaping. Specific consideration should be given to how landscaping schemes will minimise the rate of surface water run-off. Details of the ongoing maintenance of all landscaping areas will be presented for approval by the Council.
- 4.18 In the Coastal Change Management Areas development will only be permitted where it meets all of the criteria. Criterion 3 states that development must not adversely affect the nature conservation assets of the coastline, predominantly the Ribble and Alt Estuaries SPA/Ramsar. Project specific Habitats Regulations Assessments (HRAs) will be required for any tourism and coastal defence developments near to the Ribble and Alt Estuaries SPA/Ramsar. The HRAs will

need to demonstrate that there will be no significant effect upon the European Sites before the tourism and coastal developments can be granted consent. Where development does occur in these areas, developer contributions will be sought for the conservation, management and enhancement of important wildlife habitats and the creation of new habitats.

- 4.19 Strategic Policy ENV3 Protecting Existing Open Space (part of the Green Infrastructure Network), protects existing areas of public open space which are identified on the Policies Map from inappropriate development. This includes sports and playing pitches, parks, other areas of public open space, open spaces that make a positive contribution to the historic environment, allotments and Fylde's Public Rights of Way. Criterion d states that these existing areas of open space will be protected unless it can be demonstrated that any proposal will not have adverse effects contrary to the landscape, biodiversity and water management requirements of the Local Plan and the requirements set out in the other criteria in this policy are met.

Neighbouring Local Plans

- 4.20 The Wyre Local Plan 2011-2031 (adopted 28th Feb 2019) and the Blackpool Local Plan Part 1 Core Strategy (adopted 20th Jan 2016) and Part 2 (under examination), are important considerations in this SPD. Flooding is not contained within Borough boundaries, and therefore any development allocations in neighbouring areas could have an impact on the situation in Fylde, and vice versa.

Neighbourhood Plans

Bryning with Warton Neighbourhood Development Plan

- 4.21 To minimise the risk of flooding, reduce pollution to watercourses and to minimise surface run-off, Policy BWNE3 supports the provision of SuDS and the sustainable design of buildings. It specifies that areas of hard standing such as driveways and parking areas should be minimised, and porous materials used where possible.

Saint Anne's on the Sea Neighbourhood Development Plan

- 4.22 The Saint Anne's on the Sea Neighbourhood Plan highlights the following sustainability issues:
- Adapting to climate change
 - Reducing surface water flooding
- 4.23 The policies include Policy SU1 Incorporate sustainable urban drainage into new development which requires that new developments must incorporate SuDS to the maximum stipulated in DEFRA's Non-Statutory Technical Standards for SuDS unless agreed otherwise with Fylde Council. It suggests that sustainable urban drainage may include features such as ponds, swales, and permeable paving.

Strategic Flood Risk Assessment (SFRA) (2011)

- 4.24 The SFRA was prepared by Wyre Borough Council on behalf of Fylde Council. The aim of the document is to influence the spatial planning process in the context of sustainable developments and to provide sufficient and robust evidence to allow the Sequential Test to be applied in the site allocation process. The SFRA also identifies the level of detail required for site-specific Flood Risk Assessments in particular locations, and enables them to determine the acceptability of flood risk in relation to emergency planning capability.

The Flood and Water Management Act 2010

- 4.25 This relates to the management of the risk concerning flooding and coastal erosion. The Act claims to reduce the flood risk associated with extreme weather, intensified by climate change. It established Lead Local Flood Authorities (LLFAs).

A Review of Flood Risk and Surface Water Management in Fylde Borough

- 4.26 This report was approved by the Environment, Health and Housing Committee and provides the findings from several meetings of a working group established at Fylde Council in 2020/21 to look at the impacts of flooding and how matters could be improved.
- 4.27 The review covers the history and legislation of drainage, the roles of the Risk Management Authorities (RMAs) along with the different statutory and enabling roles the Council plays. The working group identified several issues of concern which led to a proposal of 30 recommendations directed to the Council, other RMAs and partnership groups for change. Central to this is Fylde Council taking on a greater role to act as community leader on flooding and surface water management in Fylde, including adoption of natural flood management techniques

North West Inshore and North West Offshore Marine Plan

- 4.28 Policies in the North West Marine Plan encourage enhancement and provide protection for vulnerable habitats and species, maintenance of natural defences against climate change and flooding, and will improve the well-being of coastal communities and support a strong marine economy. Policy NW -CC-2 of the North West Marine Plan states that: "proposals in the north west marine plan areas should demonstrate for the lifetime of the project that they are resilient to the impacts of climate change and coastal change". The aim of this policy recognises that the effects of climate change are wide-ranging and can include coastal flooding.

Fylde Council Coastal Strategy 2015-2032

- 4.29 The Fylde Council Coastal Strategy recognises that the Fylde Coastline is at risk from coastal erosion and flooding. There are 10 objectives with two being related to water management. These are:

- to safeguard the coast from flooding, coastal erosion, and the effects of climate change, and:
- to improve the quality of our bathing water and beaches.

4.30 Theme 2 is Coastal Protection. The key actions are:

- Prepare a study, analysing all the options to replace the land sea defence.
- Prepare a bid for funding through the Environment Agency medium term plans to replace the land sea defences.
- Develop a funding strategy for the sea defences.
- Secure funding to replace the land sea defences at Church Scar and Fairhaven Lake Sea Wall.
- Engage with key stakeholders, organisations and the community

4.31 Theme 3 is Water Quality. The key actions are:

- Implement the new Bathing Water Directive.
- Support the implementation of the Fylde Peninsula Water Management Group 10 point Action Plan.
- Develop and implement the Beach Management Plan for the Fylde coastline.

CIRIA C753 The Sustainable Urban Drainage Systems (SuDS) Manual

4.32 The CIRIA SuDS Manual provides best practice guidance on the construction of SuDS to ensure effective delivery. The guidance covers the planning, design, construction and maintenance of SuDS to assist their successful implementation within new and existing developments. It looks at how to maximise amenity and biodiversity benefits and deliver the key objectives of managing flood risk and water quality. A principal element of the manual is to ensure that SuDS can be designed confidently, in a way that can maximise the opportunities and benefits that can be secured from surface water management. It highlights that through engagement and collaboration, SuDS can be integrated into the design of urban areas, to create high quality places for future generations.

Q6: Are there other documents that the SPD should refer to, or that should inform the content of the SPD?

5 Flood Risk and Location of Development

- 5.1 Flood risk is the expression of the combination of the probability of flooding and the magnitude of the potential consequences of the flooding event.
- 5.2 It is necessary to identify how vulnerable a proposed development is using the classification in Table 2 of the PPG's guidance on Flood Risk and Coastal Change (will be provided in the appendices). This classification shows that the more vulnerable the development type is, the more important it is to locate it in areas with the lowest possible flood risk.
- 5.3 The Environment Agency has identified different Flood Zones which covers areas that are different level of flood risk:
- Flood Zone 1 (low probability)
 - Flood Zone 2 (medium probability)
 - Flood Zone 3 (high probability)
 - Flood Zone 3a (functional floodplain)
- 5.4 Paragraph 159 of the NPPF states that *"inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere."* To achieve this, it sets out a number of requirements for Local Planning Authorities, including:
- preparation of Strategic Flood Risk Assessments to inform local planning decisions and provide a starting point for site-specific Flood Risk Assessments;
 - application of a Sequential Test to planning applications to ensure that new development is located in areas at lowest flood risk now and in the future, from any source, as far as possible; and
 - application of an Exception Test for certain planning applications where development is proposed in a higher flood risk area (e.g. where alternative sites are not available in a lower flood risk area), in order to demonstrate that the development is justified and can be made safe.

Sequential Test

- 5.5 Development should not be approved if there are reasonably available sites in areas with a lower probability of flooding. The Sequential Test is used to ensure that areas at little or no risk of flooding are developed in preference to areas of higher risk, as per Policy CL1 of the Local Plan.
- 5.6 Where there are no reasonably available sites in Flood Zone 1, the Council will take into account the flood risk vulnerability of land uses and consider reasonably available sites in Flood Zone 2, applying the Exceptions Test if required. Only where there are no reasonably available sites in Flood Zones 1 or 2 should the suitability of sites in Flood Zone 3 be considered, taking into account the flood risk vulnerability of land uses and applying the Exception Test if required. The document could assess local expectations for the scope of the sequential test.

- 5.7 Flood Zone data from the Environment Agency would routinely be the starting point for the Sequential Test: [Flood map for planning - GOV.UK \(flood-map-for-planning.service.gov.uk\)](https://www.gov.uk/flood-map-for-planning).

Exception Test

- 5.8 Development should be directed to Flood Zone 1. If it is not possible for the development to be located in zones with a lower probability of flooding, the exception test can be applied if appropriate. The exception test should be informed by a strategic or site-specific flood risk assessment.
- 5.9 To pass the exception test it should be demonstrated that:
- a) The development would provide wider sustainability benefits to the community that outweigh the flood risk; and*
 - b) The development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, reduce flood risk overall (NPPF, 21)*

Site-Specific Flood Risk Assessments

- 5.10 A Site-specific Flood Risk Assessment (FRA) is carried out by, or on behalf of the applicant to assess flood risk to and from a proposed development site. It must demonstrate that the development remains safe throughout its lifetime whilst accounting for climate change and proving that flood risk elsewhere will not increase.
- 5.11 Footnote 55 of the NPPF also requires the production of a site specific Flood Risk Assessment (FRA) to be submitted with all applications that meet any of the following criteria:
- Are in Flood Zones 2 and 3
 - Flood Zone 1 if the development site is 1 hectare or more
 - Land that has been identified by the Environment Agency as having critical drainage problems
 - On land identified in the SFRA as being at future risk of flooding; or
 - On land that may be subject to other sources of flooding, where it's development would introduce a more vulnerable use.
- 5.12 The Environment Agency provide advice and guidance on how to produce and submit a FRA at: [Preparing a flood risk assessment: standing advice - GOV.UK \(www.gov.uk\)](https://www.gov.uk/preparing-a-flood-risk-assessment)

Pre-Application Advice

- 5.13 Pre-application advice can be provided for a fee by Lancashire County Council as Lead Local Flood Authority on surface water drainage management, SuDS and drainage strategies for developments within the Borough.

- 5.14 Pre-application advice can help developers and applicants understand the flood risk and water management issues relating to their proposal in advance of a planning application being submitted. It can indicate whether a drainage proposal would be acceptable, reduce time spent by advisers on developing a drainage strategy, help to ensure that the drainage submission is complete and identify whether specialist input is required.
- 5.15 Validation requirements could also be covered in the SPD.
- 5.16 Further information on pre-application advice can be found at: [LLFA pre-application advice for surface water and sustainable drainage systems - Lancashire County Council](#)

Householder Development

- 5.17 A simple drainage statement should accompany a householder planning application for all applications involving increases in floor area that are located in areas designated as Flood Zone 2 or 3. This should identify how the surface water drainage arrangements are to be dealt with, including any attenuation and the outfall which may be through connecting to a water course or a piped sewer. If it is highlighted that there may be capacity issues in the area the statement will need to consider simple measures to reduce the quantity and flow rate of water discharged.
- 5.18 Advice on flood resilience measures can be found here <https://www.floodguidance.co.uk/flood-guidance/flood-resilience-measures/>

Q7: Do you think that this section is appropriate to remain in the SPD?

Q8: What detail would you like to see here?

- 5.19 The results of the consultation will be used to inform detailed recommendations which will be included in the draft SPD.

6 Managing and Mitigating Flood Risk

- 6.1 This section will cover ways of controlling or managing flood risk through site design to ensure that all developments are safe and do not contribute to local flooding, or flooding further down the course. Firstly, the information in this section is intended for use after it has been demonstrated that the location of development is appropriate for this type of development. It should be noted that Policy GD7 and Policy CL1 of the Local Plan does not support inappropriate development in Flood Zones 2 or 3.
- 6.2 Prevention and resilience measure can be designed on both a site level and property level to stop water entering a property. These measures can include and will be expected to be taken into account in new development where appropriate:

Site Layout

- 6.3 The layout of development should ensure that buildings, infrastructure and gardens are not at flood risk from all sources at the time of development and from risks which may arise in the future due to climate change. The site layout should take into account areas of flood risk present on a site. This will guide the placement of different elements of the proposed development. If, following the application of the sequential test, areas of flood risk cannot be avoided then the more vulnerable elements of the development should be placed in areas of lowest flood risk.
- 6.4 The design and layout of a proposed development should take into account the exceedance conditions. Exceedance conditions is when the rate of runoff from whatever source exceeds the inlet capacity of the drain resulting in above ground flood flow. Without good design flood flow will follow default flood pathways which can lead to flooding of properties. Flow paths can be affected by landscaping, the location and levels of buildings and boundary treatments. Identifying and designing in above ground flood routes can help avoid this.
- 6.5 The conveyance capacity of flood pathways should be designed so they can transfer the whole of the exceedance flow. This could be done by simply revising the detail of drop kerbs or lowering the highway surface. The design should ensure that water is channelled away from infrastructure into SuDS components.
- 6.6 Development should not inhibit the function of flood flow routes.
- 6.7 There are proactive approaches to flood management by which the layout of a site can also aid the surrounding area and accommodate flood water that might contribute to flooding downstream. Holding back flood flow within the site in a green corridor is one method for this. This can be explored in greater detail within the draft document.

Floor levels in residential and non-residential development

- 6.8 Floor levels for habitable rooms should be set above¹ the flood level predicted for the 1:100 flood event. Levels should be higher than adjacent land, highways and gardens to minimise the likelihood of runoff flowing into properties.

Sustainable Urban Drainage Systems (SuDS)

- 6.9 SuDS are designed to manage flood risk and have the potential to bring about multiple benefits. Please see chapter 7 for more information.

Culverting

- 6.10 The culverting of watercourses should be resisted, and existing culverts should be opened up where possible.

Flood resilient construction materials

- 6.11 This should be used in combination with other resilience measures but where appropriate new development should be built with flood resistant materials and construction methods to minimise the amount of water that can enter a building.

Safe access and egress routes

- 6.12 Layouts should ensure that properties have safe access and egress in the event of flooding in the surrounding area. Vehicular access should also be achievable when taking into account extreme events.

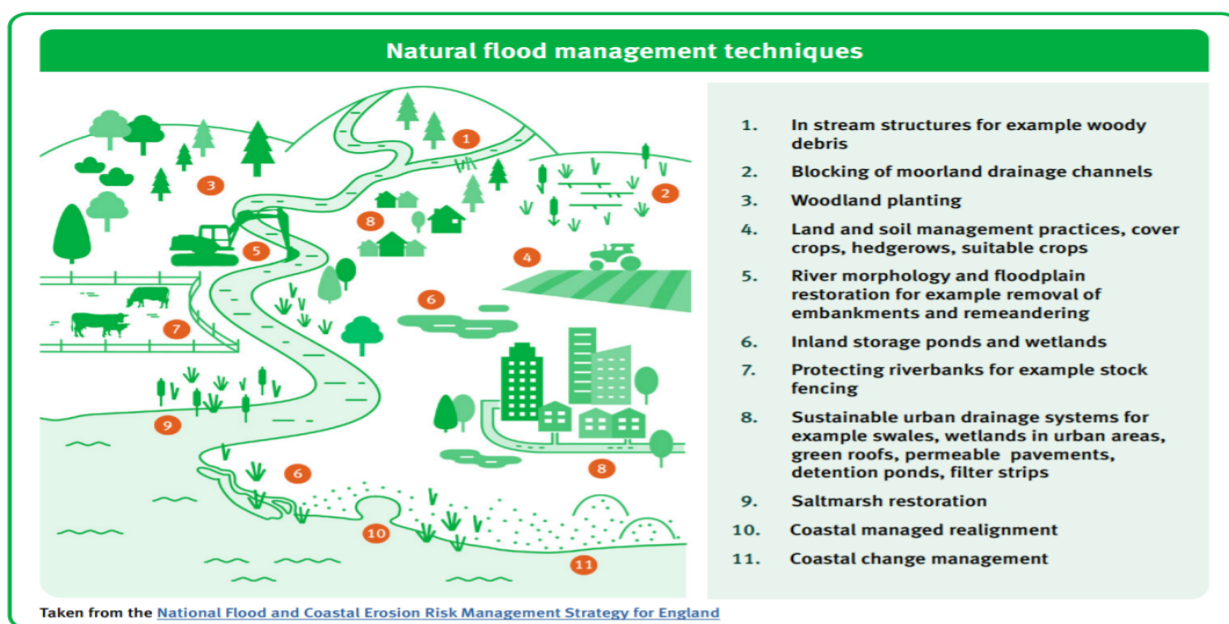
Green Infrastructure and Natural Flood Management (NFM)

- 6.13 The inclusion of high-quality green infrastructure within a proposed development has the potential to maximise a number of benefits. It can provide flood conveyance, storage, as well as recreation, amenity and environmental benefits, which can in turn result in a net gain in biodiversity (see Fylde Biodiversity SPD) and aid health and wellbeing.

6.14

¹ Specific figures will be provided on agreement of inclusion in the draft SPD

Natural Flood Management involves implementing measures that help to protect, restore and emulate the natural functions of catchments, floodplains, rivers and the coast (catchmentbasedapproach.org). Figure 2 provides examples of natural flood management



opportunities.

Figure 2: Natural Flood Management Techniques

6.15 Natural Flood Management should be integrated into the green and blue infrastructure within the development site at every opportunity.

Q9: Do you think detailed guidance should be provided on the measures discussed above?

Q10: Have any been missed or are any not needed?

6.16 Property level measures can be implemented with the aim of keeping damage caused by flooding at a minimum. These can include raised sockets, water resistant insulation and resilient floor finishes. More information on flood resilient measures can be found by following the link in paragraph 5.14.

7.

7. Sustainable Drainage Systems (SuDS)

- 7.1 The National Planning Practice Guidance sets out The Hierarchy of Drainage to promote the use of Sustainable Drainage Systems, by aligning modern drainage systems with natural water processes. The aim of Hierarchy of Drainage is to drain surface water run-off in as sustainable away, as is reasonably practicable.
- 7.2 The increase in infrastructure and the use of traditional drainage networks (pipes and culverts) along with combined systems for surface water and sewage, are resulting in downstream flooding and a deterioration in water quality of controlled waters, due to foul sewer overflow. Therefore, sustainable drainage systems aim to alleviate these problems by storing or re-using surface water at the source. This decreases the flow rates to watercourses and improves water quality.
- 7.3 All surface water runoff should aim to be discharged as high up the following hierarchy as possible:
- Discharge into the ground (infiltration), or where not reasonably practicable;
 - Discharge to a surface water body, or where not reasonably practicable;
 - Discharge to a surface water sewer, highway drain or another drainage system, or where not reasonably practicable;
 - Discharge to a combined sewer.
- 7.4 As specified by Strategic Policy CL1 and CL2 of the Local Plan, it will be necessary to attenuate any discharge of surface water through the incorporation of SuDS following the SuDS hierarchy. The different elements of the hierarchy may be used in combination and to varying degrees depending on the characteristics of the development site. The hierarchy should be followed in priority order. The aim should be to slow down and store as much water as possible using the elements at the top of the hierarchy. Where the higher priorities cannot fully manage the water, the use of components lower down in the hierarchy should be kept to a minimum and only used where necessary to achieve the minimum run-off rates and to reduce flood risk on and off the site. The applicant should provide evidence to justify the use of components lower in the hierarchy.

What are SuDS?

- 7.5 SuDS are features that are designed and built into the landscape to slow, store, divert, filter and improve the quality of surface water. They are designed to manage the flood and pollution risks resulting from urban runoff and contribute where possible to environment, amenity and social enhancement. By mimicking natural drainage, they increase the capacity and potential of the land to regulate water, reducing demand on the underground drainage network.
- 7.6 The list below summarises the considerations which should be made when designing SuDS:
- Plan SuDS at start of development proposal,

- Enhance landscape through SuDS design,
- Ensure access and maintenance is feasible,
- Promote and encourage biodiversity,
- Reduce waste produced from SuDS,
- Replicate natural drainage and avoid pipes / pumps,
- Promote water re-use,
- Maximise benefits and multi-use features,
- Future proof the design of SuDS with respect to climate change.

Q11: are there any more considerations which should be added, or any you feel need to be removed?

SuDS Management Train

- 7.7 SuDS for all areas should follow a management train to try to best reinforce the pattern of natural drainage.
- 7.8 The SuDS Management Train is fundamental to designing a successful SuDS scheme and uses a logical sequence of SuDS facilities to allow run-off to pass through several different SuDS before reaching the receiving watercourse or water bodies or having an adverse impact on surrounding land.
- 7.9 The SuDS Management Train follows a hierarchy of techniques:
- Prevention – Prevention seeks to prevent or minimise runoff and pollution through good site design; effectively to stop water entering the drainage system and prevent pollution.
 - Source control – control of run-off at, or very near, its source
 - Site control – management of run-off within the site
 - Regional control – management of run-off in the locality

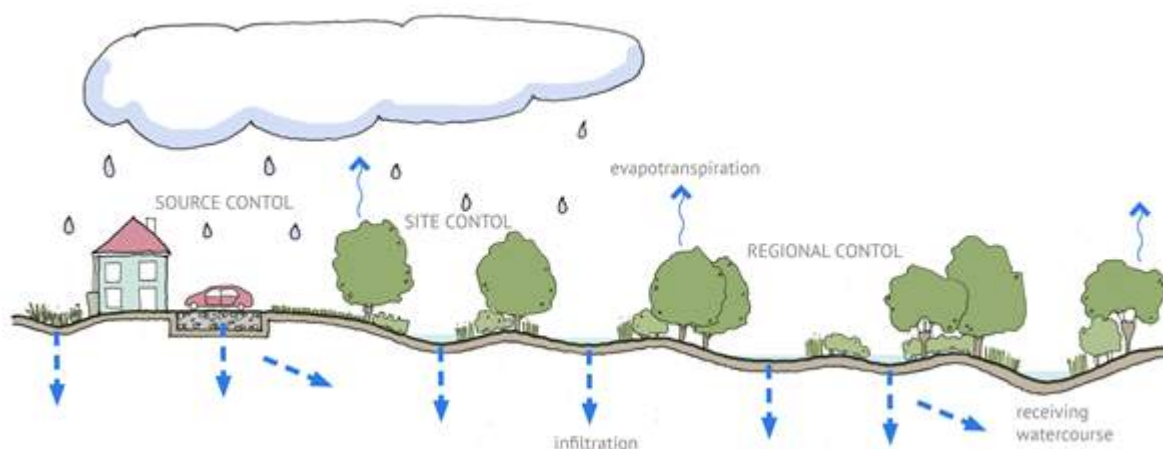


Figure 3: The Management Train (susdrain, 2022)

- 7.10 The requirements for drainage should be considered whilst determining the overall layout of the development because the site's natural features, such as topography and soil type will dictate some aspects of the drainage system design. All proposals should give priority to the prevention stage to reduce the need to move further down the drainage hierarchy.

Benefits of SuDS

- 7.11 In 2015, CIRIA launched the SuDS manual, which stated that the overarching principle of SuDS design should be that surface water run off should be used for maximum benefit. The diagram below shows the 4 main benefits and how these benefits can be delivered:

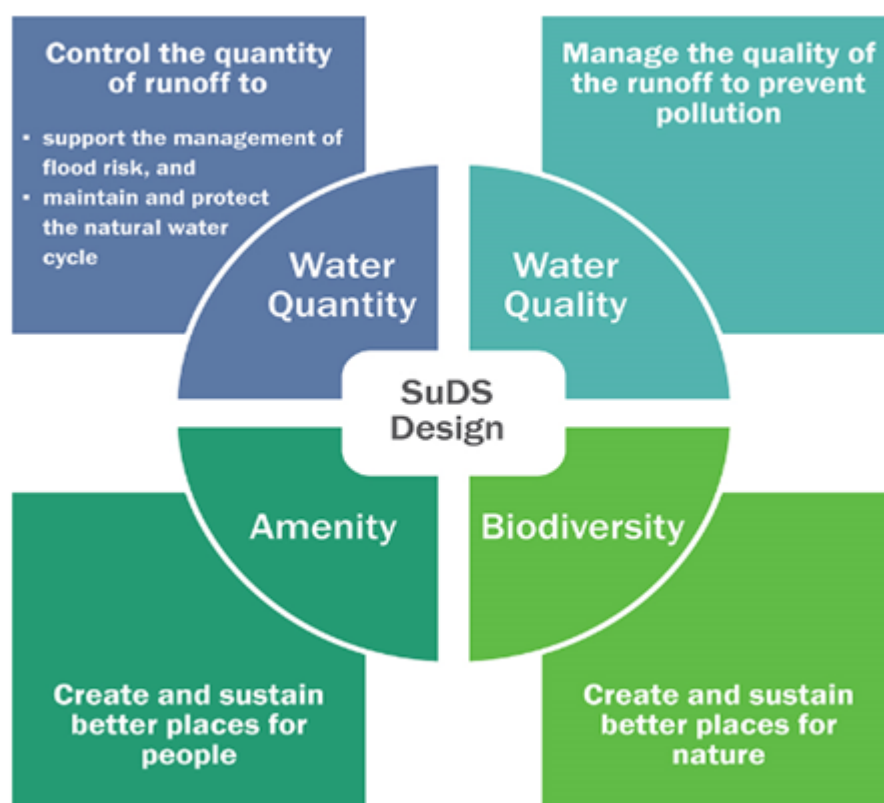






















Figure 4: The Four Pillars of SuDS – CIRIA The SuDS Manual C753

- 7.12 SuDS have the potential to deliver multiple social, economic and environmental benefits, most of which fit broadly into one of the 4 pillars above. In addition to managing the flows and volume of water and diffusing pollution some SuDS can positively impact on air quality, carbon reduction, recreation, education and other elements of health and wellbeing. Table 1 below provides an overview of potential benefits.

Table 1: SuDS Benefits

Benefit category	What it covers
 Flood risk management	Impact on people and property
 Water quality management	Surface water quality improvements to aesthetics, health, biodiversity, etc
 Biodiversity and ecology	Sites of ecological value
 Amenity	Attractiveness and desirability of an area
 Air quality	Impact on health from air pollution
 Building temperature	Thermal comfort, it cooling (summer) or insulation (winter).
 Carbon reduction and sequestration	Operational and embodied carbon reduction together with sequestration (planting)
 Crime	Crimes against people or property
 Economic growth	Business, jobs and productivity
 Education	Enhanced educational opportunities
 Enabling development	Water infrastructure capacity (headroom) for housing/other growth
 Flexible infrastructure/ climate change adaptation	Improved ability to make incremental changes and adapt infrastructure (no regrets)
 Groundwater recharge	Improved water availability or quality
 Health and wellbeing	Physical, emotional, mental health benefits from recreation and aesthetics
 Pumping wastewater	Reduced flows of wastewater to treatment works
 Rainwater harvesting	Reduced flows in sewers, pollution or dependence on potable (mains) water
 Recreation	Involvement in specific recreational activities
 Tourism	Attractiveness of tourist sites
 Traffic calming	Reducing the risk of road accidents or increasing street-based recreation opportunities
 Treating wastewater	Reduced volume of wastewater to treat from combined drainage systems

(susdrain, 2022)

- 7.13 The consideration of these potential benefits and opportunities should form the SuDS proposal and will help to ensure that the outcome is both successful and cost effective.
- 7.14 The best way to achieve benefits is for SuDS to be provided in above ground components. Underground storage cannot provide the 4 pillars and are not easily visible for the purposes of maintenance. However, it is recognised that a combination of above and under ground components may be necessary to achieve the required rates. Therefore, above ground SuDS are preferred, following the drainage hierarchy, with underground SuDS supported when they

are provided as part of a wider SuDS scheme.

Design Principles and SuDS techniques

Design Principles

7.15 A clear vision, along with a design principles ensures that the SuDS scheme or any components are not secondary to other requirements on the development site. An integrated approach can reduce the amount of land used whilst increasing the multifunctional benefits that SuDS can provide. The design principles should encompass the four pillars in Figure** and relate to flood risk management (water quantity), water quality and the provision of biodiversity and amenity.

7.16 The following design principles could be included:

- Maximising multi-functionality
- Supporting and protecting natural local habitats and species.
- Contributing to habitat connectivity and to the delivery of local biodiversity objectives
- Mitigation of pollution
- Keep surface water on the surface
- Mimic natural drainage
- Appropriate safety measures
- Accessibility
- Landscape and amenity enhancement
- Future proofing from climate change

Q12: Should the design principles be included within the SPD, either in the main body or as an appendix?

Q13: If so, what other design principles do you think should be included within the SPD?

SuDS Techniques

7.17 The suitability of each SuDS approach will depend on a variety of different factors including the type of scheme, the catchment and the local geology and hydrology. An example of SuDS techniques can be found below:

7.18 Source Control

- Rainwater harvesting
- Permeable surfaces (a link to the Parking SPD will be provided in future iterations of the document)
- Green roofs

7.19 Site Control

- Swales and filter strips
- Attenuation basins
- Underground storage

7.20 Regional Control

- Detention ponds

Q14: Should the SPD include a comprehensive list of SuDS techniques with information on implementation methods?

SuDS Pro-forma

7.21 The SuDS pro-forma and accompanying guidance has been sponsored and endorsed by the North West Regional Flood and Coastal Committee. It has been developed by a task force of representatives from United Utilities, North West Local Authorities, all of whom may need to be consulted on surface water drainage matters. Providing the correct evidence and information required in the SuDS Pro-Forma will minimise the potential for delays arising from inadequate information.

7.22 Guidance to support the completion of the SuDS Pro-Forma can be found on the Flood Hub website: <https://thefloodhub.co.uk/planning-development/#section-5>

Q15: Do you agree that the use of the SuDS pro-forma should be supported?

Maintenance

7.23 When designing SuDS or any surface water drainage scheme, it is essential to consider at all stages of the planning, design and construction process, how features will be maintained and accessed, who is responsible for the lifetime of the development and the likely costs. It should be shown where necessary that an agreement has been made with those in charge of the maintenance. When systems are properly designed, operated, and maintained, SuDS performance can be easily monitored against the expected functioning.

7.24 The maintenance requirements and frequency shown within Part D of the **CIRIA SuDS Manual C753** are a good example of what should be provided.

7.25 The maintenance and management of SuDS should be documented within a SuDS management plan, which should form part of the information submitted by the applicant at planning application stage.

7.26 An example of a SuDS Maintenance Plan by Susdrain can be found by following the link: [paper_rp992_23_example_suds_maintenance_plan.pdf \(susdrain.org\)](https://www.susdrain.org/paper_rp992_23_example_suds_maintenance_plan.pdf)

- 7.27** Compliance with the proposed maintenance strategy for a site will typically be required by planning condition. Additionally, the LPA request that yearly logs are maintained and are made available upon request.
- 7.28** Education through interaction with local residents and future homeowners is a valuable way to ensure that features are maintained. If those benefiting from the features understand what the SuDS are there for and how they work, they may be more inclined to ensure that they are kept clean and in a good working order.

Adoption

- 7.29** In order to meet the adoption criteria by United Utilities, the SuDS must be constructed to an adoptable standard taking into consideration DEFRA Technical Standards for SuDS and CIRIA The SuDS Manual C753 (or updates or replacement guidance or legislation).
- 7.30** The following examples are of systems, components or features which may be adoptable as a public surface water sewer:
- Detention basins,
 - Swales,
 - Rills,
 - Under-drained swales,
 - Ponds/wetlands; and,
 - Infiltration basins and soakaways
- 7.31** In all these cases, the system carries away surface water from buildings and surrounding land, such as hardstanding around a house, and, via a defined channel, returns it to the ground or to another body of water such as a stream or river (water.org.uk, 2020).
- 7.32** Early engagement with the Lead Local Flood Authority, the LPA and United Utilities is essential early on to explore mechanisms for adoption. United. United Utilities has a pre-development service team to assist with this: [Planning - United Utilities](#)
- 7.33** If the SuDS are not suitable for adoption by a water or sewage company, a condition should be added to any planning approval to ensure long term maintenance by the developer.
- 7.34** More information on the adoption of SuDS can be found here: [Sustainable drainage - United Utilities](#)

Q16: Do you agree that guidance on the adoption and maintenance of SuDS should be included within the SPD? If so, is there anything that has been missed/should be included here?

8 Water Quality and Pollution Control

8.1 LPA's have a general responsibility as part of the decision making on planning applications, not to compromise the aims of the Water Framework Directive (WFD). Water quality improvements and a healthy water environment also brings about numerous benefits, including aesthetic, health (eg reduced risk of infection from bathing) or enhanced recreation, and opportunities for wildlife and biodiversity. Water quality objectives are therefore contained within the WFD to ensure that development, individually and cumulatively, does not have a detrimental impact on water quality by tackling pollution at the source.

8.2 Strategic Policy CL1 of the Fylde Local Plan to 2032 (incorporating Partial Review) states that all new development is required to retain water quality. Therefore, applicants must anticipate any likely negative effects of proposals on water resources and incorporate adequate mitigation measures where necessary. There should be a need for applicants to:

1. Identify if a proposed application is near a watercourse

8.3 The Environment Agency's mapping system will assist applicants in identifying any watercourses in the proximity of a development.

2. Assess whether the proposed development will have any negative effects on the watercourse

8.4 The location and type of development can result in water quality issues for a number of direct reasons including physical modifications to a water body such as dredging, removing natural barriers and new culverts for example. Indirect impacts include land contamination from previously developed sites, wastewater treatment or leaching from farms. Small scale developments can result in water pollution from toxic substances entering soil, water via drains or directly into water bodies, the inappropriate disposal of site waste or the inappropriate treatment of wastewater during construction.

3. Set out any mitigation measures that might be necessary to mitigate any identified negative impacts on the watercourse

8.5 If it is concluded that a proposed development would have any negative impacts on a watercourse, an applicant would need to show what mitigation measures are proposed. Examples of mitigation measures at construction stage could include:

- all construction waste materials being stored within the confines of the site prior to removal to a permitted waste facility
- all materials used for the construction of the site not coming into contact with any water body at any stage
- appropriate construction to avoid leaching in certain cases (manure stores on farms)
- the incorporation of sustainable urban drainage systems to minimise pollution risk.

8.6 Other methods that could help to reduce pollution could include:

- Infiltration trenches
- Basin ponds,
- Wetlands
- Filter drains
- Permeable paving

Q17: Do you think guidance to maintain and enhance water quality and reduce pollution is appropriate?

Q18: Do any other mitigation measures need to be included?

A comprehensive Bibliography and Glossary will be included at a later stage.

Appendices

Suggestions for appendices are as follows:

- PPG's guidance on Flood Risk and Coastal Change
- Who is responsible for managing flood risk?
- Good practice case studies
- Detailed guidance on SuDS and mitigation measures

Q19: Is there anything else you feel would be appropriate or useful to be added as an appendix



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