



Wycombe District Local Plan (Regulation 19) Publication version

Topic Paper 8: The Water Environment

October 2017

Contents

1.0	Introduction	3
2.0	Legal and Policy Context	3
	International and National Legislation.....	4
	National Planning Policy	5
	National Planning Practice Guidance (PPG).....	8
	Local Strategic Policy.....	12
3.0	How did the strategy evolve?	14
	Evolution of the flood risk strategy.....	14
	Evolution of the water quality strategy	16
	Plan policies	19
4.0	Evidence	22
	Sustainability Appraisal.....	22
	Strategic Flood Risk Assessment Level 1.....	23
	Level 2 Strategic Flood Risk Assessment.....	24
	Princes Risborough groundwater study.....	25
	Flood Risk Sequential Test Report	25
	Princes Risborough and Little Marlow Wastewater Treatment Works Assessment.....	25
5.0	Consultation	28
	Duty to Cooperate and other key stakeholders.....	28
	Main Consultation stages.....	28
6.0	Key issues	32
	Flood risk.....	32
	Plan policies	35
7.0	Conclusions	38

1.0 Introduction

1.1 This topic paper is one in a series, the subject of this topic paper is how we have developed the key water environment strategy within the Wycombe District Local Plan (Regulation 19) Publication Version (October 2017). Each topic paper will look at the relevant national and local guidance that informs the Publication Draft Local Plan. Topic papers explain how the strategy has developed and the information, evidence and feedback that has informed the choices made in formulating the policies and also sets out what we foresee as the key issues and how these have been resolved.

1.2 This topic paper covers three main areas:

- To show that the Plan sets out the right approach for managing flood risk from all sources both in terms of the sequential approach to the location of development including site allocations sequential testing, and development management policies;
- To show that the Plan will not result in compromising Water Framework Directive objectives at both Princes Risborough and Little Marlow Sewage Treatment Works and that there is sufficient environmental capacity in the receiving watercourses of Horsenden Stream, River Thames and River Wye.
- To show that the planned growth does not lead to a deterioration of groundwater quality across the District, notably the Chalk Aquifer and Source Protection Zones.

2.0 Legal and Policy Context

2.1 This section sets out the key international and national legislation, key national policy and guidance, and local strategic policies relevant to the water environment in Wycombe District.

International and National Legislation

Climate Change

Climate Change Act 2008

2.2 This sets out the Government's commitment to adapt to and mitigate climate change.

Flood Risk

The Pitt Review

2.3 This review followed the floods of summer 2007. One of the key recommendations from the review was that a more coordinated approach to flood risk management was needed. The review findings were taken forward into the Flood and Water Management Act 2010.

The Flood and Water Management Act 2010

2.4 This Act covers a number of key elements including:

- giving the Environment Agency (EA) an overview of flood and coastal erosion risk management, and County Councils (and unitary) the lead in managing the risk of all local floods
- encouraging the uptake of sustainable drainage systems by removing automatic right to connect to sewers and providing for County (and unitary) Councils to adopt SuDS for new developments and redevelopments

2.5 This enables local authorities to lead on local flood risk management, empowering county councils to act as lead local flood authorities responsible for local flood risk assessment, mapping and planning in relation to ordinary watercourses, surface run-off and groundwater. They also lead on the production of local surface water management plans and associated programme of work.

Water quality

The European Water Framework Directive (WFD)

- 2.6 The European Water Framework Directive applies to surface waters (including some coastal waters) and groundwater (water in underground rock). It requires member states, among other things, to prevent deterioration of aquatic ecosystems and protect, enhance and restore water bodies to 'good' status. 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. These plans contain the main issues for the water environment and the actions needed to tackle them.

National Planning Policy

- 2.7 The National Planning Policy Framework (NPPF) sets out the governments overarching planning policy framework. It is supported by National Planning Practice Guidance (PPG) which provides more detailed guidance than is contained in the NPPF.
- 2.8 The National Planning Policy Framework sets out detailed requirements for managing the water environment through local plans.

Water Environment

- 2.9 Para 156 of the NPPF says that local plans should set strategic policies for the provision of infrastructure for water supply, wastewater, flood risk and coastal change management.
- 2.10 Para 157 says that the plan needs to identify land where development would be inappropriate for instance because of its environmental significance.
- 2.11 Para 162 requires LPAs to work with other authorities and providers to assess the quality and capacity of infrastructure, including for water supply, wastewater and its treatment, flood risk and coastal change management, and its ability to meet forecast demands.

- 2.12 Para 166 says that local plans may require Strategic Flood Risk Assessments.
- 2.13 Para 167 says these assessments should be proportionate, and the process of preparing them should start early in the plan making process and key stakeholders should be consulted in identifying the issues that the assessment must cover.

Climate change

- 2.14 The issue of climate change is clearly set out as a key challenge to address for planners and decision makers in the NPPF.
- 2.15 Para 94 says that LPAs should adopt proactive strategies to mitigate and adapt to climate change, taking full account of flood risk, coastal change and water supply and demand considerations.
- 2.16 Para 99 advocates a long term approach to considering climate change, including in relation to flood risk, coastal change and water supply but also changes to biodiversity and landscape. New development should be planned to avoid increasing vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure.

Flood risk

- 2.17 The NPPF provides comprehensive guidance to local planning authorities on mitigating flood risk.
- 2.18 Para 100 states that “ Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere”.
- 2.19 It requires local planning authorities to develop policies to manage flood risk from all sources and apply a sequential, risk-based approach to the

location of development to avoid where possible flood risk to people and property and manage any residual risk, taking account of climate change by:

- applying the Sequential Test
- if necessary, applying the Exception Test
- safeguarding land from development that is required for current and future flood management
- using opportunities offered by new development to reduce the causes and impacts of flooding
- where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long-term, seeking opportunities to facilitate the relocation of development, including housing, to more sustainable locations

2.20 Para 101 says that the aim of the Sequential Test is to steer new development to areas with the lowest probability of flooding. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower probability of flooding. The Strategic Flood Risk Assessment will provide the basis for applying this test. A sequential approach should be used in areas known to be at risk from any form of flooding.

2.21 Para 102 says that if, following application of the Sequential Test, it is not possible, consistent with wider sustainability objectives, for the development to be located in zones with a lower probability of flooding, the Exception Test can be applied if appropriate. For the Exception Test to be passed:

- it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk,

informed by a Strategic Flood Risk Assessment where one has been prepared.

- a site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

2.22 Both elements of the test will have to be passed for development to be allocated or permitted.

Written Ministerial Statement

2.23 In addition to the above, a Written Ministerial Statement issued in December 2014¹ stated that sustainable drainage systems for management of surface water run off should be incorporated into all major developments, unless demonstrated to be inappropriate.

Water Quality

2.24 Para 165 of the NPPF refers to the need for planning policies to be based on up to date information including from River Basin Management Plans.

Planning Practice Guidance (PPG)

2.25 Planning Practice Guidance (PPG) gives advice on:

- climate change
- flood risk and coastal change
- water supply, wastewater and water quality

¹ House of Commons: Written Statement (HCWS161) December 2014

PPG on climate change

2.26 The PPG sets out that plans need to adapt to climate change, for example² by:

- considering future climate risks when allocating development sites to ensure risks are understood over the development's lifetime
- Considering the impact of and promoting design responses to flood risk for the lifetime of the development
- Design responses to protect water quality

PPG on flood risk and coastal change

2.27 This sets out definitions for flood risk and the need to and how to undertake a strategic flood risk assessment, taking account of the impacts of climate change, to fully understand the flood risk in the area to inform local plan preparation.

2.28 In terms of avoiding flood risk, in plan-making, local planning authorities need to apply a sequential approach to site selection so that development is, as far as reasonably possible, located where the risk of flooding (from all sources) is lowest, taking account of climate change and the vulnerability of future uses to flood risk. In plan-making this involves applying the 'Sequential Test' to Local Plans and, if needed, the 'Exception Test'.

2.29 The PPG sets out guidance on how to apply the Sequential and Exception Test.

2.30 Paragraph: 018 Reference ID: 7-018-20140306 states that according to the information available, other forms of flooding should be treated consistently with river flooding in mapping probability and assessing vulnerability to apply the sequential approach across all flood zones.

² Paragraph: 003 Reference ID: 6-003-20140612

- 2.31 Paragraph: 019 Reference ID: 7-019-20140306 sets out the following key points in relation to the Sequential Test. The flood zones as refined in the Strategic Flood Risk Assessment for the area provide the basis for applying the Test. The aim is to steer new development to Flood Zone 1 (areas with a low probability of river or sea flooding). Where there are no reasonably available sites in Flood Zone 1, local planning authorities in their decision making should take into account the flood risk vulnerability of land uses and consider reasonably available sites in Flood Zone 2 (areas with a medium probability of river or sea flooding), applying the Exception 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 (areas with a high probability of river or sea flooding) be considered, taking into account the flood risk vulnerability of land uses and applying the Exception Test if required. Within each flood zone, surface water and other sources of flooding also need to be taken into account in applying the sequential approach to the location of development.
- 2.32 The PPG defines the flood zones, flood risk vulnerability and flood zone compatibility.
- 2.33 The PPG also gives guidance on Sustainable Drainage Systems, why they are important, when they should be considered and what type, and considerations regarding maintenance.

PPG on water supply, wastewater and water quality

- 2.34 In relation to water quality, Paragraph: 001 Reference ID: 34-001-20161116 of the PPG says: 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. These plans contain the main issues for the water environment and the actions needed to tackle them.

Cross-boundary concerns

2.35 Paragraph: 008 Reference ID: 34-008-20140306 states that plan-making may need to consider water supply and water quality concerns on a catchment basis. Liaison between local planning authorities, the Environmentt Agency, catchment partnerships and water and sewerage companies from the outset (at the plan scoping and evidence gathering stages of plan-making) will help to identify water supply and quality issues, the need for new water and wastewater infrastructure to fully account for proposed growth and other relevant issues such as flood risk. The duty to cooperate across boundaries applies to water supply and quality issues.

PPG on water cycle studies

2.36 The PPG states that water cycle studies are voluntary studies which help organisations work together to plan for sustainable growth. It uses water and planning evidence and the expertise of partners to understand environmental and infrastructure capacity. It can identify joined up and cost effective solutions, that are resilient to climate change for the lifetime of the development. In addition to this the EA has produced further guidance³.

National Guidance on Climate Change

2.37 In February 2016, DEFRA and the Environment Agency published new guidance⁴ on how to assess the impacts of climate change in relation to fluvial, pluvial and coastal flooding⁵. Making an allowance for climate change in flood risk assessment will help to minimise vulnerability and provide resilience to flooding and coastal change in the future. The climate change allowances are predictions of anticipated change for peak river flow by river basin district and peak rainfall intensity. These

³ Water Cycle Study Guidance (EA Product Code GEO0109BPFF-E-E)

⁴ Flood risk assessments: climate change allowances (EA 2016; updated 2017)

⁵ Coastal does not apply to Wycombe District.

allowances vary subject to the location (in the UK⁶), timescale (design-life) to be considered and the vulnerability classification (see Table 2 Paragraph 66 of the PPG) of the proposed development.

Local Strategic Policy

Flood Risk

Buckinghamshire Surface Water Management Plans

2.38 Surface Water Management Plan (SWMP) outline Buckinghamshire County Council preferred surface water⁷ management strategy in a given location. The purpose of SWMPs is to identify sustainable responses to manage surface water flooding and to prepare action plans for the areas concerned. The action plans will provide evidence upon which future decisions and funding applications for putting the recommendations into practice can be developed.

2.39 Relevant SWMPs to Wycombe District:

- A joint SWMP for Chesham and High Wycombe was written in 2011.
- The first phase of a SWMP for Marlow was produced in 2013, with the second phase report due to be completed during FY 2015/6.

Buckinghamshire Local Flood Risk Management Strategy (LFRMS) (2015)

2.40 The initial LFRMS in 2013 set out how Buckinghamshire County Council and other agencies should work together to improve management of local flood risk. The extensive flood events during winter 2013/14 and the new statutory role as Lead Local Flood Authority gained by the County Council meant that during 2015 the Strategic Flood Management Committee took the decision to revise the Strategy. The

⁶ Flood risk assessments: river basin district maps (EA 2016; updated 2017)

⁷ This includes flooding from sewers, drains, groundwater, and runoff from land, small water courses and ditches that occurs as a result of heavy rainfall. As such, SWMPs deal with all local sources of flooding.

LFRRMS seeks to explain the current understanding of flood risk across the county and identifies 8 principles which the Strategic Flood Management team will work to over the next 5 years.

Water Quality

Thames River Basin Management Plan

2.41 River basin management plans describe the river basin district and the pressures that the water environment faces. For the purposes of river basin management, the water environment is divided into units called water bodies. These can be sections of rivers and canals, lakes and reservoirs, estuaries, coastal waters and groundwater. The plans show long term objectives, what these mean for the current state of the water environment and how organisations and communities will work together to improve the water environment. There are 8 river basin management plans covering England. They are produced by the Environment Agency and approved by the Secretary of State for Environment, Food and Rural Affairs. Wycombe District falls within the Thames River Basin Management Plan.

Delivery and Site Allocations Plan for Town Centre and Managing Development DPD

2.42 Policy DM15 in the Delivery and Site Allocations Plan sets out the Council's approach for the protection and enhancement of river and stream corridors around the District. This includes support for deculverting watercourses.

Wastewater Management

Asset Management Plans

2.43 Thames Water and Affinity Water each produce a 5 year plan which looks at what upgrades will be necessary over the next 5 years to accommodate an increase in flows due to population growth.

3.0 How did the strategy evolve?

- 3.1 The overall strategy for the management of the water environment has sought to meet the objectives set out in the National Planning Policy Framework and other relevant international, national and local strategic policy and guidance.
- 3.2 The Strategy has evolved over time, as engagement was undertaken with statutory bodies and providers and has been informed by these discussions and the findings of the evidence base studies.
- 3.3 The nature of this strategy has been adjusted to reflect input from stakeholders, particularly key stakeholders under the duty to cooperate such as the Environment Agency and the Lead Local Flood Authority as well as water infrastructure providers⁸.

Evolution of the flood risk strategy

- 3.4 Flood events are becoming more frequent⁹ in the UK and therefore managing flood risk is an increasingly important issue in planning for development and assessing planning applications. In Wycombe District, different forms of flood may occur linked to local topography and watercourses.
- 3.5 Effective management of these risks can be achieved through locational choices, and where necessary appropriate mitigation measures put in place to protect new development and existing properties.
- 3.6 Wycombe District Council recognises that full consideration of flood risk from all sources is an integral part of delivering a sustainable pattern of development for the District over the Local Plan period.

⁸ See also the Infrastructure, Built and Natural Environment and Princes Risborough Topic Papers (WDC September 2017)

⁹ Thames River Basin Management Plan (EA 2009; updated 2016)

Sequential approach to allocating sites

- 3.7 The Council has sought to steer development to areas at least risk of flooding from all sources. Where risks exist, this has been balanced against other sustainability objectives and the need to provide for housing in particular.
- 3.8 The Council has sought to follow national policy and guidance on taking a sequential approach to the location of development. For Local Plan making this usually includes sequentially testing proposed site allocations using a Strategic Flood Risk Assessment (SFRA) level 1 first, and then if required that they are assessed through a Level 2 SFRA for sites in higher risk areas.
- 3.9 Wycombe District Council had produced a Strategic Flood Risk Assessment Level 1 for the Delivery and Site Allocations Plan. An update of this Level 1 was produced in November 2014, and informed the emerging HELAA and broad suitability of sites.
- 3.10 However, due to changes to national guidance on assessing climate change allowances in relation to fluvial flood risk in February 2016, and in dialogue with the Environment Agency and Buckinghamshire County Council, the Council has, prior to completing the Sequential Test, undertaken a Level 2 SFRA for all the sites it proposed to allocate to ensure:
- An updated understanding of the risks to sites in relation to the extent of the future flood zone 3a including climate change allowances (see sections 4 and 5)
 - An updated understanding of other sources of flood risk (including groundwater mapping)
 - The provision of recommendations for future site specific flood risk assessments
 - Updates to the level 1 SFRA in relation to flood risk management and SuDS.

- 3.11 Having completed the level 2 SFRA, the Council undertook a Sequential Assessment of development sites which takes account of climate change and includes assessment of the Exception Test where necessary.

Evolution of the water quality strategy

- 3.12 The strategy for water quality has evolved through close engagement with the Environment Agency both in terms of the need for a policy protecting water quality to replace policy CS18 of the core strategy, but also in terms of the need to assess the impacts of growth at the receiving watercourses of the Wastewater treatment works in the District, in line with the Water Framework Directive objectives.

Princes Risborough and Little Marlow Wastewater Treatment Works environmental capacity assessment

- 3.13 The Council aims to protect the water environment across the District, both in terms of freshwater supply through protecting groundwater resources and in terms of protecting watercourses from pollution.
- 3.14 One of the strategic issues that arose as part of the plan preparation has been the need to ensure that the receiving watercourses of the Princes Risborough and Little Marlow Sewage Treatment Works maintain their environmental capacity. The environmental capacity of a watercourse relates to the required water quality to protect aquatic and wildlife environments e.g. water quality standards required to protect wildlife, Wastewater Treatment Works consents and storm discharge consents.
- 3.15 The strategy evolved through close engagement with the Environment Agency. In the early stages of the plan making process, the Council consulted infrastructure providers to ensure there would be sufficient infrastructure capacity at the District's two Wastewater Treatment Works at Princes Risborough and Little Marlow. Thames Water responded that, with upgrades, the growth could be accommodated. As

a result, and in light of the work already undertaken on the SFRA level 1, the Council did not consider that a Water Cycle Study¹⁰ was required.

- 3.16 In response to Environment Agency concerns in relation to the environmental capacity of the receiving watercourses of the District's Wastewater Treatment Works, the Council undertook a water quality study for Princes Risborough based on a Wastewater Treatment Works Assessment in October 2015. The study was completed in February 2016, informing the draft Princes Risborough Town Plan.
- 3.17 In June 2016, following the draft PRTP further modelling was undertaken in relation to EA queries about the deterioration of final effluent quality. In response to the draft Local Plan in August 2016, the Council undertook a similar assessment of the Little Marlow Sewage Treatment works¹¹, to determine the environmental capacity of the rivers Wye and Thames.
- 3.18 The assessment was added to the Princes Risborough assessment report and the results of the study fed into the Infrastructure Delivery Plan (see also Infrastructure Topic Paper).

Final strategy for the water environment

- 3.19 The final strategy for the water environment reflects national policy and guidance but also draws from the evidence base outputs which are specific to Wycombe District.
- 3.20 The Council's strategy in relation to the plan policy on water quality has arisen from consultation with the Environment Agency who have raised the need to carry forward protection given by the soon to be replaced Core Strategy (policy CS18).

¹⁰ These studies are not mandatory pieces of evidence but if undertaken, should be tailored to the issue considered.

¹¹ Princes Risborough and Little Marlow Wastewater Treatment Work Assessments (WDC / AMEC 2017)

Strategic objectives

3.21 The water environment fits within three wider strategic objectives set out in the plan:

- To “strengthen the sense of place throughout Wycombe District by protecting and enhancing the District’s natural and built environment including landscape, biodiversity, green and blue infrastructure, historic and cultural assets;
- To “Facilitate local infrastructure: Facilitate timely improvements to local infrastructure by focused investments and by securing appropriate benefits from new development.
- Mitigating climate change, through avoiding and mitigating flood risk and protecting water quality.

3.22 The strategic objectives of the Plan are delivered through core policies, site specific policies, and development management policies.

Core policies

3.23 *Policy CP7 Delivering the Infrastructure to support growth* sets out the key infrastructure requirements necessary to support growth. This includes requirements to provide green infrastructure such as biodiversity improvements and flood management measures including sustainable drainage systems and provision for their long term management and maintenance. Further details of the Council’s commitment to delivering timely and appropriate infrastructure is set out in the Infrastructure Delivery Plan which accompanies the Publication Version of the Local Plan.

3.24 *Policy CP9 Sense of Place* reiterates the aim to conserve and enhance the natural environment and implementing measures for their enhancement; it is about “making sure the place makes sense for the past, and the future, for humans, and for other species (para 4.100)”.

3.25 *Policy CP10 Green infrastructure and the natural environment* provides a strong commitment to work in partnership with the Environment Agency, Natural England and the water companies to protect, manage and improve water quality in the District, particularly the quality of water bodies which are currently failing to meet the Water Framework Directive (WFD) requirements as set out in the Thames River Basin Management Plan (RBMP). This will positively impact the biodiversity value of rivers and streams and their corridors, as highlighted in the Thames River Basin Management Plan. This is reiterated in policy DM15 of the Delivery and Site allocations Plan which seeks to restore ecosystems in and around these water bodies.

3.26 *Policy CP12 Mitigating climate change* sets out how the council will mitigate and adapt to climate change in relation to the water environment through:

- Ensuring allocations in this plan have taken account of climate change allowances using the information provided by the Strategic Flood Risk Assessment level 1 and 2 and through the sequential testing of sites, and ensuring through detailed development management policy that applications fully factor in climate change in their flood risk assessments;
- Integrating blue and green infrastructure into the design of new development, including the use of Sustainable Drainage Systems (SuDS); and
- Adopting higher water efficiency standards to contribute to alleviating water stress across the District. (see infrastructure topic paper).

Plan policies

Site specific allocations

3.27 Flooding has been raised as an issue across a number of sites by consultees; the Council has looked at whether to incorporate within

each policy some detailed requirements – however most sites are adequately covered by DM39 so this was not generally pursued. Where there are significant flood risk concerns affecting a specific site allocation, the individual site allocation policy includes specific measures aimed at managing flood risk.

- 3.28 Any development of allocated sites should refer to the flood risk evidence reports when undertaking site-specific flood risk assessments, and this was sign-posted in the plan under each site specific policy where required.
- 3.29 One exception is Princes Risborough expansion. The scale of the expansion merits that a strategic approach is taken when considering flood risk across this area, in particular in relation to local sources of flooding (ordinary watercourse, surface water and groundwater).
- 3.30 The Council has agreed with the Lead Local Flood authority that whilst not necessary to support the allocation of the expansion area a strategic drainage strategy should be produced (see PR7 of the plan and supporting text) to support the more detailed delivery and capacity work that will support the delivery of the expansion area. The Council has agreed to produce this jointly with the Lead Local Flood authority.
- 3.31 Other sites which contain some site specific recommendations include HW13 Bassetsbury Allotments, HW15 Land to the rear of Hughenden Road, PR10 Land north of Lower Icknield Way, PR11 Land to the rear of Poppy Road, BE1 Slate Meadow and BE2 Hollands Farm. Plan policy on water quality.

Development management policies

- 3.32 Whilst the plan directs development away from the highest areas of flood risk some infrastructure provision will still be required to mitigate against flood risk. This will include sustainable drainage systems to mitigate the impacts of surface and groundwater flooding. A whole catchment approach will be required working closely with Buckinghamshire County Council and the Environment Agency and

having regard to their most recent strategic approaches Policy DM39 sets out our approach for managing flood risk and sustainable drainage systems.

DM39 Flood risk and SuDS

- 3.33 The Council strategy on managing flood risk and SuDS stems from the need to replace DM17 of the Delivery and Site Allocations Plan¹² as the PPG has introduced the need to consider all forms of flooding¹³ when dealing with flood risk. Policy DM39 in the new Local Plan addresses this and also reflects the national commitment towards implementing Sustainable Drainage Systems (SuDS) in new developments whenever feasible. The Strategic Flood Risk Assessment Level 1 and 2 provide further detailed recommendations on managing flood risk and implementing SuDS. SuDS can have multiple benefits in terms of managing the water environment as they can act as pollution filters, contributing to protecting water quality, as well as contribute to controlling and managing rainfall to avoid/manage flood.
- 3.34 The Council also developed a development management policy on water quality and supply (DM38) as well as policy setting out water efficiency standards (DM41) (see also the infrastructure topic paper).
- 3.35 Other policies in our Development Plan provide protection of watercourses through the implementation of natural buffers / corridors.

¹² This included a standard of 105 litre per head per day for new developments.

4.0 Evidence

4.1 The evidence base for the council's strategy on managing the water environment has been strongly informed by ongoing dialogue with the Environment Agency, Buckinghamshire County Council, Thames Water, as well as close working with external technical consultants (AMEC, AECOM, Jacobs). The evidence base in relation to the water environment consists of the following documents:

- Sustainability Appraisal –September 2017 – Wycombe District Council
- SFRA level 1 Update – November 2014 – Jacobs
- Level 2 SFRA– September 2017 – Jacobs
- Princes Risborough Flood Risk Mapping – Princes Risborough Groundwater Flooding Phase 1 – March 2017 - Jacobs for Buckinghamshire County Council
- Sequential Test report – September 2017 – Wycombe District Council
- Princes Risborough and Little Marlow Wastewater Treatment Works Assessments – May 2017 - AMEC

Sustainability Appraisal

4.2 The Sustainability Appraisal ensures that potential environmental effects are given full consideration alongside social and economic issues. This includes consideration of the water environment.

4.3 Under the topic Natural Resources and Climate Change, one of the SA objective (objective 4) is “to maintain and enhance the quality and quantity of the District's water sources, achieve sustainable water resources management and reduce the risk of flooding”

4.4 The Sustainability Appraisal has taken into account flood risk in relation to site allocations proposed and reasonable alternatives.

- 4.5 Under the topic Biodiversity and Geodiversity, one of the SA objectives is to “conserve and enhance biodiversity”. The Council’s Princes Risborough and Little Marlow Wastewater treatment works assessment ensures that the growth proposed will not have an adverse impact on the water quality of the receiving watercourses, which is vital for the preservation of these rivers’ biodiversity. Policy DM38 also contributes to the protection of groundwater quality.
- 4.6 The SA has also considered how the strategic policies in the plan score against the objectives.

Strategic Flood Risk Assessment Level 1

- 4.7 The Council updated the SFRA Level 1 in November 2014. This updated report assessed and identified the risk of flooding from rivers and other sources of flooding, assessed the impacts of climate change on flood risk and makes recommendations for protecting against flooding, reducing the risks where possible.
- 4.8 One of the new areas assessed in the update was around areas of critical drainage, where surface and often groundwater flooding are a particular issue, especially in urban areas. The EA has the ability to define critical drainage areas nationally but has not done so in Wycombe District. As a result the SFRA level 1 defined “Wycombe Critical Drainage Areas” which are delineated as these areas at risk of medium surface water flood risk (1 in 100 AEP¹⁴ event). The Lead Local Flood Authority confirmed that they support this definition of areas of critical drainage in the SFRA level 1 and recommendations in terms of plan making.
- 4.9 Whilst providing information that is still relevant to the plan preparation, the guidance contained in the SFRA level 1 became partly out of date due to the national guidance on Climate Change Allowances published in February 2016.

¹⁴ Annual Exceedence Probability

Level 2 Strategic Flood Risk Assessment

- 4.10 In February 2016, DEFRA published new national guidance on Climate Change Allowances. In order to assess the effect of the new allowances it was agreed with the EA that they could be assessed as part of a Level 2 SFRA.
- 4.11 The approach that the Council took was to make no changes to the level 1 SFRA, but based on the flood risk zones in that document, to initially sift the sites proposed for allocation in the plan and see which fall within flood zones 2 or 3. These sites were then subject to a Level 2 SFRA and would incorporate the new climate change allowances, providing appropriate evidence in relation to the Exception Test (if required) and to inform a sequential test report for the new local plan. This approach and the draft brief were agreed by the EA in August and September 2016.
- 4.12 The Level 2 SFRA expands on the guidance contained in the Level 1 with regards to considering all sources of flood risk in the District, and set out current considerations of climate change allowances. It provides an assessment of all the sites proposed for allocation in the plan, including in relation to:
- Fluvial flood risk
 - Other local sources of flooding
 - Betterment opportunities
 - Sequential and Exception testing
 - Site specific assessment requirements
- 4.13 The report also makes further recommendations in relation to sustainable flood risk management.

- 4.14 The report has provided a sound basis for completing the Sequential Test and where required the Exception Test for allocating sites in the Local Plan.

Princes Risborough groundwater study

- 4.15 Buckinghamshire County Council have produced a report independent of our own strategic flood risk assessment work which analyses the contribution of groundwater to flooding in Princes Risborough. This has been done by carrying out hydraulic modelling of the flood risk from groundwater in the Princes Risborough area for 1 in 100, 1 in 30 and 1 in 10 annual exceedance probability groundwater flood events. This information has been fed into the Level 2 Strategic Flood Risk Assessment in relation to the sites proposed for allocation at Princes Risborough.

Flood Risk Sequential Test Report

- 4.16 The Flood Risk Sequential Test Report demonstrates whether the allocations considered to be proposed in the Local Plan comply with the Sequential Test and Exception Test, and makes recommendations for allocating sites based on this. This report shows that the majority of the sites allocated for development in the new local plan have been proposed in those areas of lowest possible flood risk, and that where sites have to be allocated in higher flood risk areas that they pass the sequential test, and where appropriate, the exception test.

Princes Risborough and Little Marlow Wastewater Treatment Works Assessment

- 4.17 In November 2015, the Council established in consultation with the Environment Agency the need for a study the purpose of which would be to ascertain the environmental capacity of the receiving waterbody and the ability of the Princes Risborough Wastewater Treatment Works to deal with the growth proposed without adverse impacts on Water Framework Directive objectives.

- 4.18 A brief was written by Wycombe District Council and shared for agreement with Thames Water and the Environment Agency; AMEC Foster Wheeler was appointed to conduct the study.
- 4.19 An update to the study to assess further modelling scenario (50% deterioration in final effluent) was undertaken in June 2016 at the Environment Agency's request.
- 4.20 In August 2016 the EA stated that Wycombe District Council had yet to demonstrate that there is sufficient environmental capacity in the River Thames and River Wye as a result of growth; Wycombe District Council had discussed with Thames Water whether they thought there would be sufficient capacity at the works and Thames Water had issued a positive response, but this only addressed the infrastructure capacity at the works, and not the environmental capacity of the receiving water bodies.
- 4.21 As a result the Council decided to expand the study to include an assessment of Little Marlow Wastewater Treatment Works, to inform the refining of the plan.
- 4.22 The report was completed in May 2017 and came to the following conclusions:
- The Princes Risborough and Little Marlow Wastewater Treatment Works Assessment report¹⁵ showed that the growth proposed in the Local Plan will not result in a significant deterioration of water quality at the Horsenden Stream and river Wye and Thames respectively;
 - There will be minor deterioration in water quality downstream of Princes Risborough Wastewater Treatment Works because of future growth (i.e. less than 10%);

¹⁵ Princes Risborough and Little Marlow Wastewater Treatment Works Assessment (May 2017 – AMEC)

- There will be minor deterioration in water quality downstream of Little Marlow Wastewater Treatment Works because of future growth (i.e. less than 10%);
- Greater than 10% deterioration could be seen in Rivers Thames and Wye and the Kingsey Cuttle Brook downstream of the discharges if the final quality of effluent were to deteriorate, although this is related to the current Environmental Permits not being tight enough rather than specifically due to increased loading from housing growth;
- Future growth will not cause a deterioration in WFD class of phosphates at Princes Risborough and there is only a risk of class deterioration at Little Marlow;
- Future growth will not inhibit the WFD water bodies from aiming for their water bodies objectives set in the 2015 Thames River Basin Management Plan; and
- With some upgrades, Princes Risborough Wastewater Treatment Works will be able to cope with increased sewage from the planned growth. The report sets out indicative permits for Princes Risborough Wastewater Treatment Works, designed to prevent either 10% or class deterioration. It was not necessary to model indicative permit limits for Little Marlow Wastewater Treatment works.

4.23 The EA has agreed with the conclusions of the report, provided that Thames Water is confident that they can maintain the effluent quality and not cause a 50% deterioration nor operate to their more generous permit limits. Thames Water has confirmed that they are confident they can maintain the works performance in the foreseeable future and that they will not operate to their more generous permit limits / will be able to maintain current effluent quality with upgrades.

5.0 Consultation

5.1 There have been a number of consultation stages in the preparation of Wycombe District Council Local Plan. Further information is available in the Council's Statement of Consultation¹⁶. This section of the topic paper identifies key stakeholders, the consultation stages to date and summarises the main issues arising from each stage in relation to the water environment.

Duty to Cooperate and other key stakeholders

5.2 As part of the duty to cooperate and the consideration of strategic matters for the local plan, the Council has engagement with the Environment Agency and Buckinghamshire County Council as the Lead Local Flood Authority throughout the Local Plan process in relation to all areas of the water environment.

5.3 The Council has also liaised with Natural England on the particular issue of likely significant effects on water quality as part of the Habitats Regulations Assessment screening report.

5.4 Consultation with these stakeholders has greatly informed the strategy and the development of the evidence base.

Main Consultation stages

5.5 The water environment has been considered through the various stages of consultation, with the focus on particular issues differing depending on the stakeholders involved.

Winter 2012 Launch and Community Conversations 2013

5.6 The initial stages of the Reg 18 process revealed that flood risk was a key concern for members of the public across the District. It was strongly felt that the plan ought to not exacerbate these issues, if not

¹⁶ Wycombe District Local Plan Statement of Consultation – September 2017

contribute to address them. Climate change was seen as a key challenge for the plan.

- 5.7 Regular dialogue was put in place with the Environment Agency and Buckinghamshire County Council as Lead Local Flood Authority. Records were sought of recent flooding events such as the 2013/2014 winter flooding events.
- 5.8 The Council updated its SFRA level 1 which included recommendations in relation to climate change.
- 5.9 It was noted that as the Local Plan process was to move forward further work would be undertaken to ascertain more exact infrastructure requirements for the preferred growth options.

Options Consultation February 2014

- 5.10 A range of environmental concerns were raised during this consultation, notably with regards to flood risk. These issues have been addressed through the emerging sustainability appraisal¹⁷ and other specific evidence such as the Level 2 SFRA and flood risk sequential test report.
- 5.11 The consultation raised concerns with regards to the major expansion at Princes Risborough in relation to groundwater and surface water flooding in particular, and the need to implement SuDS in a comprehensive way. This issue was addressed through the draft PRTP (see below).
- 5.12 Flood risk concerns were also raised in particular with regards to the Slate Meadow reserve site; this issue has been picked up through the Slate Meadow Liaison Group and Reserve Site Infrastructure roundtable and informed a Reserve Sites IDP in (February 2016).

¹⁷ Initial Sustainability Appraisal of Strategic Options (WDC 2014)

Draft Princes Risborough Town Plan – February to March 2016

- 5.13 The option to expand the town significantly was first considered in the main Wycombe District Local Plan Options consultation in February 2014 when it was becoming clear that it would be necessary to plan for a much higher level of housing growth in the District than had previously been required. A high number of responses to this consultation drew out a range of issues over the expansion of the town. These issues were taken forward through the establishment of a Steering Group and Agents Panel and further technical evidence. More information can be found in the draft Princes Risborough topic paper (October 2017).
- 5.14 The consultation draft set out proposals for the management of flood risk and use of SuDS for each site allocation in the PRTP¹⁸, and in particular in the expansion area. The Concept Plan illustrates how the ordinary watercourses crossing the expansion area are integrated into an overall landscape, ecology and green and blue infrastructure strategy for the expansion area, which will provide areas for flood risk mitigation.
- 5.15 The Environment Agency required further flooding analysis of the sites, notably in relation to climate change.

Draft Local Plan – June to August 2016

- 5.16 The draft Local Plan included core policies in relation to the water environment through its policies on sense of place, natural environment and climate change. It also included development management policies on flood risk and SuDS and water supply and water quality.
- 5.17 The consultation raised concerns with regards to the lack of completion of the sequential test and the subsequent allocation of certain sites. Objectors to particular sites had concerns with regards to the level of

¹⁸ This was informed by a draft Sequential Test report for the PRTP and draft Strategic Flood Risk Assessment Level 2 for the railway station site.

risk on these sites and objected the proposed site allocations, where flood risk was still an unknown.

- 5.18 Consultees were also concerned at the lack of detail provided in relation to flood management measures. The Strategic Flood Risk Assessment Level 1 and Level 2, and the Sequential Test reports have now been completed and provide appropriate and proportionate assessment of the level of risks to the proposed allocations and how this can be avoided / mitigated. Sites over 1 ha or in an area at risk of flooding will require site specific assessments at planning application stage.
- 5.19 There were also concerns over allocating land in flood risk areas in relation to new sites as well as increased risk to existing properties. The SFRA level 1 and 2 and the flood risk Sequential Test report provide evidence that the new sites will not result in an increase of flood risk and that any flood risk can be mitigated. DM39 of the local plan sets out further requirements which will be addressed at planning application stage.
- 5.20 Other concern related to the need for SuDS to be integral to new developments to manage surface water run-offs close to sources and aim for Greenfield runoff rates. Policy DM39 sets out SuDS requirements and further guidance is provided in the SFRA level 1 and 2.
- 5.21 Consultees also raised the point that waterbodies contribute to the sense of place of the District and need policy protection. The Council response to this is threefold:
- Policy DM15 of the Delivery and Site Allocations already covers the protection of rivers and streams.
 - The water quality study has demonstrated that, provided that Thames Water can maintain current performance, the growth will not result in water quality deterioration at the receiving waterbodies (Horsenden stream, River Thames and River Wye).

- Policy DM38 of the plan sets out a policy to protect water quality and supply, notably in relation to groundwater.

6.0 Key issues

6.1 The approach set out above raises a number of remaining issues/questions in terms of the Council's strategic approach and these are set out and addressed below.

Flood risk

Sequencing and allocating process

- 6.2 **Issue 1: The fact that there is a discrepancy between EA published flood map and Jacobs modelling, and whether the Council is right to rely on Jacobs' modelling considering the discrepancy between their modelling of the 1 in 100 Annual Exceedence Probability Event and the Published EA flood map for Flood Zone 3.**
- 6.3 The draft Level 2 identified discrepancies between the extents of the EA published flood zone 3, and the 1 in 100 AEP event equivalent modelled by Jacobs (which equates to flood zone 3)¹⁹.
- 6.4 To help with understanding the discrepancies between the EA published flood zone 3 and the 1 in 100 event modelled by Jacobs, Jacobs shared with the EA modelling team a Hydrologic Modelling Technical Note explaining how they had estimated climate change using the existing models and LIDAR data. This was updated to reflect the EA's concerns raised in March 2017.
- 6.5 In April 2017, Wycombe District Council, Jacobs, the EA and BCC discussed the availability of recent survey data obtained for the EA's own remodelling of the River Wye. It was suggested that this be used to improve the model accuracy by adding this data to the Jacobs modelling. This consists of adding data at several cross sections of the

¹⁹ One site, Slate Meadow, has been modelled by the applicant – this showed a very similar (but not identical) discrepancy to the published EA flood zone 3.

River Wye. Jacobs put forward the view that running the different climate change allowances in effect amounted to a form of sensitivity testing that countered this and therefore this was not pursued.

- 6.6 Jacobs have produced a hydraulic note appendix C of the Level 2 SFRA which explains why the modelling has resulted in a discrepancy between the EA published flood zone and theirs. The Council considers it right to rely on the most up to date modelling as done by Jacobs.
- 6.7 ***Issue 2: How climate change has been taken into account where no fluvial modelling exists or for surface water flooding.***
- 6.8 Taking into account comments from the EA and BCC with regards to assessing climate change allowances in relation to surface water flooding and in areas where no EA modelling exists, the Level 2 SFRA report was updated to make some assumptions of climate change extents looking at the extent of flood zone 2, intersecting surface water flow paths and the particulars of each site in terms of topography.
- 6.9 The EA and BCC accepted that no further modelling can be undertaken by Wycombe District Council on surface water due to resources and plan timetable.
- 6.10 ***Issue 3: Whether the overall approach to sequential testing has been sound, considering other sources of flooding***
- 6.11 The overall approach to sequential testing has aimed to ensure that the sites at least risk of flooding from all sources now but also when taking climate change into account were allocated first. The Flood Risk Sequential Test report sets out the reasons for allocating sites in flood zones 2 then 3.
- 6.12 The Council had two options with regards to taking climate change guidance into account when assessing flood risk to sites in the local plan.
- 6.13 The SFRA level 1 update which took account of climate change having been produced in November 2014, the Council did not feel it was

proportionate to undertake a whole SFRA again to include the new climate change allowances published in February 2016.

- 6.14 Instead the option put forward to the Environment Agency was to assess climate change as part of the Level 2 SFRA, looking at proposed site allocations currently within flood zones 2 and 3 as well as those within 50 metres of flood zone 2. Once this had been undertaken the Council would complete the Sequential Test for all sites.
- 6.15 This approach is deemed justified by the Council in light of the need to take the 2016 climate change guidance into account. Taking this approach ensures consistency across the Plan area, means that the approach is rigorous and ensures that we are using the most up to date data.
- 6.16 ***Issue 4: Whether completing the Sequential Test after the Level 2 SFRA has potentially resulted in changes to HELAA sites conclusions***
- 6.17 The difference between the Jacobs modelling and published EA map in relation to zone 3a meant that in some places some sites which were categorised as zone 3a in the emerging HELAA are not in the more recent modelling and some which weren't are.
- 6.18 A cross check was undertaken to see if the overall sites conclusions in the final HELAA changed as a result of the discrepancy between the modelled 1 in 100 AEP event done by Jacobs and the published EA maps.
- 6.19 ***Issue 5: Whether the approach to employment areas designations is right i.e. How have we justified not sequentially testing existing employment sites, nor sought to relocate them away from flood risk areas to lower risk areas***
- 6.20 In relation to the site allocations and designations that the plan is looking to make, the EA queried how the employment sites would be sequentially tested. Wycombe District Council confirmed that new

employment sites would be submitted to the sequential test (and go through the Level 2 SFRA if needed), but that existing employment sites, which are occupied, will not be retested as they are existing employment areas and designations and there are no proposals to extend them. This was accepted by the Environment Agency in August 2016. Any proposed extensions to an existing employment site or proposed change to a more vulnerable use will be assessed against the new flood risk policy in the new local plan.

Plan policies

DM39 Flood risk and SuDS

6.21 The key issues in relation to this policy are :

- Whether the policy sets out the correct threshold for requiring Sequential testing and exception testing;
- Whether the policy has considered all sources of flood risk; and
- Whether the policy is justified, proportionate and effective.

6.22 The final policy is in line with the NPPF and PPG. The Environment Agency and Buckinghamshire County Council were consulted in winter 2013 and in February 2014 on the issues they thought the plan ought to address. It was deemed necessary to replace the flood risk policy to take into account of latest guidance and to replace the water quality policy.

6.23 The new policies were shared with The Environment Agency and Buckinghamshire County Council in advance of finalising the new Local Plan for the Wycombe District, and they submitted their comments on the policies. These comments were taken into account to produce a sound and robust policy approach to managing flood risk and providing SuDS in line with the NPPF and PPG.

Specific site policies

6.24 The key issues in relation site specific policies are :

- Whether site policies include the appropriate level of detail on flood risk considering the level of evidence contained in the SFRA level 1 and level 2 and the sequential test report and in light of the requirements of policy DM39 which applies to all new development.

6.25 The Council has generally not sought to repeat in site specific policies requirements which apply to all allocations. This applies here for flood risk.

6.26 Where specific recommendations were required in light of the water evidence, these have been incorporated in the relevant site policies.

Water quality

Princes Risborough and Little Marlow Wastewater Treatment Works Assessment - environmental capacity assessment

6.27 The key issues in relation to the Wastewater Treatment Works assessment are:

6.28 ***Issue 1: Whether the growth proposed in the plan will result in any deterioration of the environmental capacity of the Princes Risborough and Little Marlow Wastewater Treatment Works (WwTW) receiving watercourses***

6.29 There will be minor deterioration (less than 10%) at Princes Risborough and Little Marlow due to growth. Indicative²⁰ tighter environmental permits have been set out in the water quality study for the EA to consider.

²⁰ Due to the fact that what is considered at the point of discharge or the sampling point for the study is different from the diluted element over the whole length of the waterbody.

6.30 ***Issue 2: Whether the proposed growth will result in significant environmental impacts on the receiving watercourses of the Princes Risborough and Little Marlow wastewater treatment works.***

6.31 The further modelling requested by the EA of worst case scenarios for both Princes Risborough and Little Marlow show that there could be significant impact on the environmental capacity of the watercourse if the final effluent quality deteriorated significantly (assuming a 50% deterioration in effluent quality), or operated to its permits limits instead of current performance (set before WFD). If these scenario were to be more likely, growth figures may need to be revised.

6.32 The Council received however confirmation from Thames Water that they will continue to operate to current performance, and with planned upgrades can maintain effluent quality. We can therefore conclude that the growth will not have a detrimental impact on water quality

6.33 ***Issue 3: Whether the growth proposed in the plan will result in these watercourses not meeting their WFD targets by 2027.***

6.34 As set out in the Princes Risborough and Little Marlow Wastewater Treatment Works assessment (also known as water quality study), not all components will be able to meet their WFD targets by 2027. For phosphates, this is due to the permits required being beyond current best available technologies, which is a national issues affecting many watercourses. As such the growth will have no bearing on the receiving watercourses to meet their WFD targets of reaching Good Ecological Status.

6.35 ***Issue 4: Whether the evidence should consider the emerging proposals in the Chiltern and South Bucks Local Plan which feed into the Little Marlow Wastewater Treatment Works.***

6.36 The Environment Agency confirmed that the scope of the Princes Risborough and Little Marlow Wastewater Treatment Works study should only consider the growth proposed in the Wycombe District

Local Plan and indicated that any growth from an adjacent District falling within the same catchment should be assessed separately²¹.

Plan policy on water quality

6.37 The key issue in relation to the plan policy on water quality is:

6.38 **Issue 1: Whether the policy on water quality and supply in the plan gives sufficient protection to water quality across the district.**

6.39 The wording of this policy was formulated in consultation with the Environment Agency.

7.0 Conclusions

7.1 As a result of strategic cooperation between the strategic partners, the scope of relevant studies necessary to inform the plan's policies were successfully identified and the studies were completed to provide a proportionate evidence base for the plan; they supported the quantum of development proposed and informed its sequential location.

7.2 The Level 2 SFRA and Sequential Test report have informed the location of development taking account all risks of flooding and where applicable other sustainability requirements, and give an understanding of climate change effects onto the sites. This ensures that the allocations in the plan are robust and provides guidance for developers for future site specific flood risk assessments.

7.3 The DM39 policy ensures that all development coming forward will address flood risk and SuDS requirements. The sites specific recommendations ensure that where there is a higher risk, measures can be identified and implemented.

7.4 The Princes Risborough and Little Marlow Wastewater Treatment Works Assessment report²² showed that the growth proposed in the

²¹ This was confirmed by the Environment Agency at a meeting with Wycombe District Council and Thames Water on 11 August 2016.

²² Princes Risborough and Little Marlow Wastewater Treatment Works Assessment (May 2017 – AMEC)

Local Plan will not result in a deterioration of water quality at the Horsenden Stream and river Wye and Thames respectively provided that Thames Water is confident that they can maintain the effluent quality and not cause a 50% deterioration, nor operate to their more generous permit limits. Thames Water has confirmed that they are confident they can maintain the works performance in the foreseeable future: that they will not operate to their more generous permit limits / will be able to maintain current effluent quality with upgrades.

7.5 Wycombe District Council is committed to protecting the District's water environment whilst delivering new homes and jobs in a sustainable and timely manner:

- Core policy CP7 *Delivering the infrastructure to support growth* sets out key requirements for green and blue infrastructure to deliver biodiversity improvements and flood management measures including sustainable drainage systems and provision for their long term management and maintenance. Further details are set out in the Infrastructure Delivery Plan.
- Core policy CP9 *Sense of Place* reiterates the aim to conserve and enhance the natural environment and implementing measures for their enhancement.
- Core Policy CP10 *Green infrastructure and the natural environment* provides a strong commitment to work in partnership with the Environment Agency, Natural England and the water companies to protect, manage and improve water quality in the District.
- Core Policy CP12 *Mitigating climate change* sets out how the council will mitigate and adapt to climate change in relation to the water environment.

7.6 In relation to site policies, the Council's sequential approach to the location of development across the District seeks to avoid flood risk first;

where this is not possible due to other sustainability factors, the plan consider both a sequential approach within the sites themselves and site-specific flood assessment and management measures including the implementation of Sustainable Drainage Systems.

- 7.7 Development management policies have been developed with the Environment Agency and the Lead Local Flood authority.
- Policy DM38 sets out requirements to protect the District's water quality and supply, notably the Chalk Aquifer and Groundwater Source Protection Zones.
 - Policy DM39 sets out requirements in relation to managing flood risk and providing Sustainable Drainage Systems. The policy requires a site specific FRA for all sites within the Wycombe Critical Drainage Areas and for sites over 1 ha which will mean that flood risk is fully addressed at site-specific level.