
9 Natural Places

9.0.1 The Plan area has international, national, regional and locally designated natural assets. These include the Chilterns Area of Outstanding Natural Beauty (AONB), Burnham Beeches Special Area of Conservation and the Colne Valley Regional Park. In addition, there is a wide range of green spaces such as Local Wildlife Sites, country parks, local parks, children's play spaces, designated Local Green Spaces, historic gardens and functional green spaces (such as floodplain). There are lakes, chalk streams, the rivers Alder Bourne, Chess, Colne, Jubilee, Thames, Misbourne and the Grand Union Canal. These green and blue spaces perform important functions both individually and as part of a wider network:

- Social Functions – contributing to health and wellbeing, leisure and recreation, education, heritage, sense of place and tranquillity
- Environmental Functions – supporting biodiversity, water management, air quality and helping to address the impacts of climate change.
- Economic Functions – supporting tourism and providing an attractive business environment.

9.0.2 The green and blue infrastructure contributes locally to quality of life and also plays an important strategic function offering leisure and recreational opportunities within the wider area and as such is also of strategic importance.

9.0.3 The National Planning Policy Framework (NPPF) requires the planning system to contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity. This Plan has been prepared to positively meet development needs whilst also protecting and enhancing green infrastructure and biodiversity.

9.1 Natural - Chilterns Area of Outstanding Natural Beauty

9.1.1 The Chilterns AONB is a national designation within which great weight should be given to conserving and enhancing landscape and scenic beauty.

9.1.2 AONBs are designated for the purpose of conserving and enhancing the natural beauty of the area, which includes its flora, fauna, and geological and natural physical features. The presumption in favour of sustainable development does not apply in an AONB and the Council has a duty to conserve and enhance its natural beauty.

9.1.3 The Chilterns AONB was designated in 1965 and extended in 1990. It stretches across 13 local authorities which work to safeguard its future through the Chilterns Conservation Board. 43% of the Plan area is covered by the Chilterns AONB: 71% of Chiltern and 3% of South Bucks.

9.1.4 The Chilterns Conservation Board produces a Management Plan for the AONB and updates it every five years. This is a statutory document under the Countryside and Rights of Way Act 2000 and can be a material consideration in making decisions on individual planning applications, where they raise relevant issues.

9.1.5 The Chilterns Management Plan contains a number of broad aims for the management of the Chilterns AONB, as well as detailed policies. It is based on three overarching visions:

- 1 Conserve and enhance natural beauty;
- 2 Increase understanding and enjoyment; and
- 3 Foster social and economic well-being.

9.1.6 The Chilterns Conservation Board has produced the Chilterns Buildings Design Guide (2010). This provides detailed guidance on how to achieve high quality design which respects the natural beauty of the Chilterns and its traditional built character, and reinforces the sense of place and local character.

Policy DM NP1

Natural – Chilterns Area of Outstanding Natural Beauty

Planning permission will be granted for development within the Chilterns Area of Outstanding Natural Beauty (AONB) provided that it:

- 1 conserves and, where possible, enhances the special qualities, distinctive character and natural features which contribute to the natural beauty of the AONB;
- 2 has regard to the AONB Management Plan;
- 3 has regard to the Chilterns Buildings Design Guide and technical notes by being of high-quality design which respects the natural beauty of the Chilterns and its traditional built character, and reinforces the sense of place and local character; and
- 4 avoids adverse impacts from individual proposals and any cumulative effects, unless these can be satisfactorily mitigated.

There is a presumption against major development in the AONB unless it can be demonstrated that there are exceptional circumstances and the development is in the public interest. Whether a development constitutes a 'major development' will be assessed on a site-by-site basis taking account of the nature and scale of the proposal and its relation to the local context and whether it could have a significant adverse impact on the purposes of the AONB designation.

9.2 Natural - Colne Valley Regional Park

9.2.1 The Colne Valley Regional Park covers over 10,000 hectares and straddles many local authority boundaries. It includes the eastern part of the Plan area from the east of Chalfont St Peter and Gerrards Cross, extending southwards to include the areas around the Ivers and Richings Park.

9.2.2 The Colne Valley Regional Park was established in 1967 for recreation and leisure purposes. The Colne Valley Park Community Interest Company was established in 2012 to manage and enhance the landscape, safeguard the countryside, conserve and enhance biodiversity, provide opportunities for countryside recreation, achieve a vibrant and sustainable rural economy and encourage community participation.

Policy DM NP2

Natural – Colne Valley Regional Park

Planning permission will be granted for development in the Colne Valley Regional Park provided that it would make a positive contribution towards:

- 1 maintaining and enhancing the landscape, historic environment and waterscape of the park in terms of its scenic and conservation value and overall amenity;
- 2 conserving and enhancing biodiversity within the Park through the protection and management of its species, habitats and geological features;
- 3 providing opportunities for countryside recreation and ensuring that facilities are accessible to all; and
- 4 seeking to achieve a vibrant and sustainable rural economy within the Park.

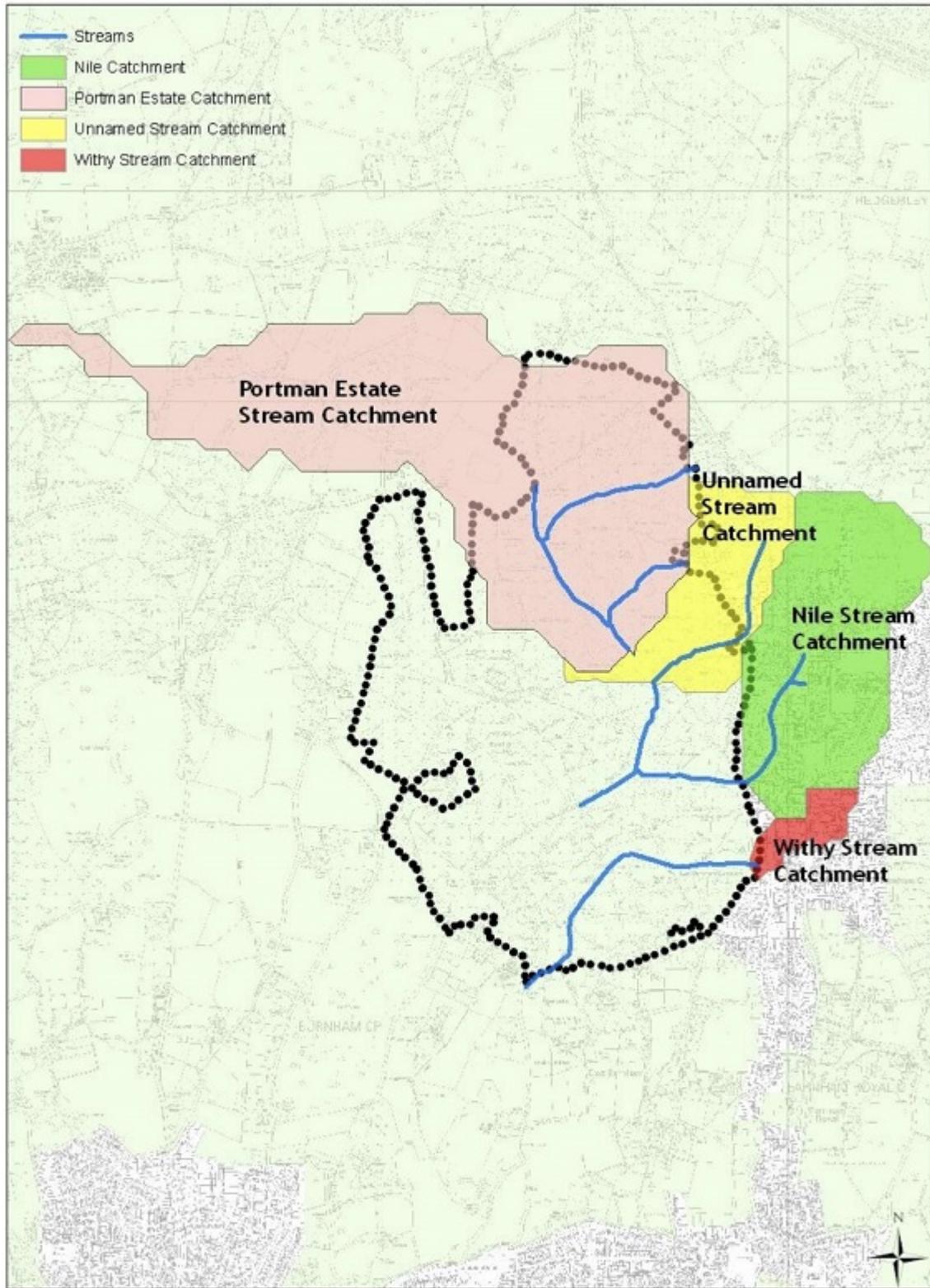
9.3 Natural - Burnham Beeches Special Area of Conservation

9.3.1 Burnham Beeches is a Special Area of Conservation (SAC), a Natura 2000 designation to conserve flora and fauna. It is also a National Nature Reserve (NNR) and a Site of Special Scientific Interest (SSSI). It covers 383 hectares, of which 220 are publicly accessible, and is managed by the City of London Corporation. It is characterised by a diverse mixture of ancient woodland, wood pasture, coppice, ponds and streams, grassland, moor and heathland and is also one of the richest sites for *saproxylic invertebrates* beetles in the UK.

9.3.2 The reasons for designation as a Natura 2000 / European site (i.e. a SAC) are the acid beech forest with its shrub layer, together with some nationally rare invertebrates and epiphytes (plants that live on other plants). These species and habitats are vulnerable to hydrology changes, air pollution and impact from recreational visits and domestic animals.

9.3.3 The Habitats Regulations Assessment shows that without mitigation there are likely to be significant effects on the SAC from increased visitor pressure and a deterioration in air quality due to increased vehicle movements in the locality. Development within the hydrological catchment areas of the SAC, as shown in Image NP1, could particularly impact on the health of the trees by causing changes to the surface and ground water flows as well as changes to water quality. Development proposals within the hydrological catchment areas will therefore need to demonstrate that avoidance measures are incorporated into schemes.

Image NP1: Hydrological Catchment Areas of Burnham Beeches SAC



9.3.4 Recreation within Burnham Beeches has resulted in an adverse impact on the health of the site. Impacts include trampling and soil compaction, climbing damage to trees, dog fouling, the spread of disease and an import of non-native species. Visitor surveys have shown that the majority of visitors to Burnham Beeches live within the surrounding settlements, but that the site also draws visitors from further afield. It is understood that any additional development within 5.6 kilometres of the site is likely to result in a level of additional recreational visits which, without mitigation, would adversely affect the SAC and that recreational pressures from residential development within 400m of the SAC are likely to result in adverse effects which cannot be mitigated. The policy below seeks to avoid these impacts by restricting development within 400 metres of Burnham Beeches.

9.3.5 Development sites outside this area, but within 5.6 kilometres of the SAC, are still likely to result in additional recreational visits. An Access Management and Mitigation Scheme has been agreed with Natural England, the Highway Authority and the City of London Corporation in order to provide on-site mitigation for these additional visits. The effectiveness of this scheme will be monitored and the scheme reviewed if necessary. Development within this wider zone of influence will need to make financial contributions towards this or any subsequently agreed mitigation scheme.

9.3.6 Air quality modelling work has also identified that there is likely to be an exceedance of certain pollutants within the SAC as a result of increasing vehicle movements within the surrounding road network. The Council has worked with Natural England and the City of London Corporation to develop an Air Quality Mitigation Scheme to avoid significant impacts on the SAC due to decreases in air quality. The effectiveness of this scheme will be monitored and the scheme reviewed if necessary.

9.3.7 The policy below ensures that development within the Plan area does not adversely affect the integrity of Burnham Beeches SAC.

Policy DM NP3

Natural – Burnham Beeches Special Area of Conservation

Planning permission will not be granted for development which results in net additional homes within 400 metres from the Burnham Beeches Special Area of Conservation (SAC).

Beyond 400 metres a precautionary approach will be taken for the protection and conservation of the SAC. Planning permission will only be granted provided that the Council is satisfied that this will not give rise to significant adverse effects upon the integrity of the SAC in view of its conservation objectives. A full Habitats Regulations Assessment of the potential impacts of development and, if appropriate, proposed mitigation measures must be submitted prior to the determination of the planning application(s) and suitable mitigation measures, as approved by the Council, will be implemented prior to the completion / occupation of development as appropriate.

Hydrology

Development proposals within the hydrological catchment areas will be required to demonstrate that they would not adversely impact on the SAC, during both construction and operational phases, by meeting the objectives and requirements in the guidance note 'Hydrology in Burnham Beeches' (South Bucks District Council, February 2014), or any subsequent replacement study. Development will not be permitted within 10 metres of the streams in Image NP1.

Open Space Requirements and Mitigation for Recreational Impacts

Major residential developments that would result in a net increase in homes located between 400 metres and 5.6 kilometres from the Burnham Beeches SAC will be required to:

- 1 make financial contributions towards the Burnham Beeches Access Management Scheme, or any subsequent scheme which replaces this; and
- 1 demonstrate that no adverse impacts on the SAC will arise as a result of additional visitors to the SAC from the development. This might require the provision of bespoke mitigation, such as Suitable Alternative Natural Greenspace, as part of the development in order to offset visitor pressure to the SAC. Such mitigation will need to be determined in agreement with Natural England.

Air Quality

Development must contribute towards the Burnham Beeches Air Quality Mitigation Scheme, or any subsequently agreed scheme, unless it can be demonstrated that the development would not result in any adverse impact on air quality at Burnham Beeches either alone or in combination with other development.

The Burnham Beeches Special Area of Conservation, the hydrological catchment area and the zones of influence are defined on the Policies Map.

9.4 Natural - Biodiversity and Geology

Biodiversity

9.4.1 'Biodiversity' is the variety and number of plant, insect and animal species in a particular habitat. The higher the number of species in a given habitat, the greater the biodiversity. Within Chiltern and South Bucks there are several levels of designation to protect sites of particular biodiversity interest. However, biodiversity is not restricted to protected areas; it can be found everywhere. Any reduction in the number or variety of species on a site is a loss of biodiversity.

9.4.2 Sites of national or international importance for biodiversity or geology within the Plan area include 3 Sites of Special Scientific Interest (SSSIs) in Chiltern with a total area of 106 hectares, 16 SSSIs in South Bucks with a total area of 545 hectares, and Burnham Beeches Special Area of Conservation (SAC).

9.4.3 Biodiversity Opportunity Areas (BOAs) have been identified across Buckinghamshire as areas where the greatest opportunities for habitat creation lie, enabling the efficient focusing of resources where they will have the greatest positive effect. BOAs provide a focus for co-ordinated biodiversity action across the county, enabling a more strategic approach to the conservation, enhancement and management of biodiversity networks in Buckinghamshire. BOAs are also protected sites.

9.4.4 Development should conserve and enhance the natural environment and provide an increase in biodiversity. New development should provide links between biodiversity features and the surrounding landscape and existing habitats through green and blue infrastructure, as covered in the Connected Places section.

9.4.5 Consideration must be given to the existing features, habitats and known species and targeted measures introduced to improve habitats, sites of importance for biodiversity and wildlife corridors. For example, appropriate landscaping can help to reduce habitat fragmentation and sensitive lighting can avoid disruption to various species. Sustainable Drainage Systems (SuDS) can support wildlife. Incorporating biodiversity features into buildings, such as living roofs and walls and the use of special bricks / boxes, can provide nesting or roosting sites for bats and birds such as swifts.

9.4.6 Development proposals that are likely to affect biodiversity will be required to provide an appropriate level of ecological survey or report. Further detail on biodiversity and planning is provided in the document 'Biodiversity and Planning in Buckinghamshire' (revised 2014).

Geodiversity

9.4.7 'Geodiversity' is defined as the range of rocks, minerals, fossils, soils and landforms. There are a small number of Local Geological Sites (LGS) in the Plan area, largely comprising active or former quarry workings. SSSIs can be designated for reasons of geological importance, where they comprise or include exposure of important geological features, and several of these exist within the Plan area.

Policy DM NP4

Natural – Biodiversity and Geodiversity

Planning permission will be granted for development proposals affecting designated sites and non-designated sites that include important habitats or species provided that the development:

- 1 provides a net gain in biodiversity, achieved through the long-term management, enhancement, restoration or creation of natural or semi-natural habitats and connected ecological networks to sustain wildlife;
- 2 is supported by an ecological survey that is commensurate with the scale and location of the development and the likely impact on biodiversity and the legal protection of the site; and
- 3 demonstrates how existing site specific factors have been considered and incorporates design features aimed at sustaining and increasing the quality of natural habitats.

Planning permission will be refused where development would result in significant harm to biodiversity and geodiversity which cannot be avoided, adequately mitigated or, as a last resort, compensated for.

The level of protection afforded to sites of importance to biodiversity or geodiversity, and therefore the level of mitigation or compensation required, will be proportionate to the significance of the impact.

Many species are legally protected and the applicant must demonstrate that appropriate investigation has been undertaken. Where a proposal would result in harm to sites of importance for biodiversity or geodiversity the Council will require applicants to demonstrate that no suitable alternative site exists, and that a sufficient level of mitigation and, as a last resort, compensation can be provided such that the proposal will achieve an overall net gain in habitat for the interest feature and a net gain in biodiversity for the site.

9.5 Natural - Trees and Woodlands

9.5.1 Trees and woodlands contribute to the improvement of people's health and wellbeing by modifying microclimates and reducing pollution. They are important in providing visual amenity and opportunities for outdoor recreation and other wellbeing benefits.

9.5.2 Trees provide screening, perspective, focal points, privacy and seclusion. They help define the landscape and create natural linkages within the green Infrastructure network. They provide valuable habitats for a range of wildlife and form a 'carbon sink', helping to absorb and store carbon dioxide. Trees and woodlands are an integral part of the typical wooded landscape of the Chilterns.

9.5.3 The Council will prevent the loss or damage of good quality trees or woodlands, especially those which are protected such as ancient woodlands, or have a high public amenity value. The policy below ensures that trees are not considered in isolation and that they are integral to the overall design of a scheme and contribute to the wider objectives of securing biodiversity and green infrastructure on new developments.

Policy DM NP5

Natural – Trees and Woodlands

Planning permission for development will be granted provided that:

- 1 it includes appropriate mitigation measures to compensate for any loss or damage to protected trees in line with the latest Forestry Commission and Natural England advice;
- 2 good quality trees which contribute to the visual amenity and character of the area are preserved; and
- 3 retained trees and new trees provide integration within the existing green infrastructure network or help to join up areas of existing but separated green infrastructure.

9.6 Natural - River Character and the Water Environment

9.6.1 The main rivers in the Plan area are the Alder Bourne, Chess, Colne, Jubilee, Thames and Misbourne. The Slough branch of the Grand Union Canal also runs through South Bucks.

9.6.2 These rivers and the canal are important habitats. The Misbourne, Chess and Colne provide internationally-rare and important chalk stream habitats that are identified as priority habitats in the Buckinghamshire Biodiversity Action Plan.

9.6.3 Most people who live in the Colne catchment rely on groundwater for their water supply. As the catchment's population increases so does the demand for water, placing immense pressure on the groundwater resource, and causing the Colne's headwaters to suffer increasingly from low flows.

9.6.4 96% of the water used within the catchment is used by households, with the remainder being used by activities such as agriculture, horticulture and quarrying. The average daily water use in households in the Colne catchment is 182 litres per person per day in properties without a water meter, the highest in Europe. This amount is some 32 litres above the national average and 42 litres above the UK Government's target for water use. Reducing per capita demand is key to improving flows in the catchment's chalk streams to ensure their survival for future generations.

9.6.5 Another important feature of rivers, lakes and watercourses is the opportunity they provide for recreation. For instance, Dorney Lake provides opportunities for a variety of events including rowing, triathlon, running and swimming. The Council will look to safeguard the amenity value of rivers, lakes and watercourses.

9.6.6 Proposals adjacent to watercourses should incorporate measures necessary to improve, restore or reach 'good' ecological status / potential, as defined in the Water Framework Directive.

9.6.7 Natural flood and watercourse management methods should be promoted and encouraged.

9.6.8 The Thames River Basin Management Plan contains details of the waterbodies in Chiltern and South Bucks. Developers are advised to consult this document (or subsequent versions) prior to applying for planning permission.

9.6.9 The Council will work with the Environment Agency and its partners to help deliver schemes which improve the water environment. The Jubilee River 25 Year Landscape Management Plan includes advice on landscape enhancements with potential to be incorporated into schemes where appropriate.

Policy DM NP6

Natural – River Character and the Water Environment

To ensure the long-term protection and enhancement of all rivers, river landscape corridors and water environments and to assist in meeting the Water Framework legislation, the Council, in consultation with the Environment Agency and Local Lead Flood Authority will permit development which:

- seeks, through good design, to conserve and enhance the biodiversity and landscape value of any affected watercourse and its corridor;
- seeks to encourage opportunities for recreation where that would not have wider impacts on water quality, the water environment or habitats;
- does not adversely affect the character, flow potential, and water quality of rivers and river banks or adjoining land within 10 metres of the 'top of bank' of the river watercourse; and
- retains the special character, landscape or amenity of any affected river.

Opportunities for de-culverting of water courses should be taken unless it can be demonstrated that it would not be safe or would increase flood risk on or off the site.

For the purposes of this policy the term 'river' includes any adjoining marshland, or other related water feature.

9.7 Natural - Chesham Flood Alleviation

9.7.1 Much of the surface water drainage through Chesham is managed by an underground culvert that runs through the town centre and down to the River Chess. The culvert was built in the 19th century and today has insufficient capacity to carry the town's surface water runoff. The Environment Agency is working in partnership with the Council, the Lead Local Flood Authority and Chesham Town Council to consider options which will manage drainage in a sustainable way into the future.

9.7.2 The Chesham Surface Water Management Plan supports this approach by providing information on site-specific opportunities and measures which could be taken to improve the storage of surface water in Chesham, both within the town itself and on the outskirts.

Policy DM NP7

Natural – Chesham Flood Alleviation

Planning permission will be granted for development within Chesham provided that it improves the management of surface water and reduces the risk of localised flooding, as identified in local strategies such as the Chesham Surface Water Management Plan.

Development which lies across the route of the Vale Brook Culvert or adjoins its route will need to demonstrate that it:

- 1 does not reduce the culvert capacity;
- 2 does not adversely affect the culvert's current flow regime;
- 3 does not affect the structural integrity of the culvert, and
- 4 where possible, provides opportunities for improvements, for example with upstream attenuation or by restoring the natural watercourse.

Criteria a) to d) must be demonstrated by means of a Site-Specific Flood Risk Assessment accompanying the planning application.

9.8 Natural - Flood Protection and SuDS

9.8.1 Three different types of flooding exist: river or fluvial flooding where a river bursts or flows over its banks; groundwater flooding where levels of water in underground aquifers rise to such a degree that they cause flooding; and surface water flooding where the volume of water falling overwhelms the existing natural or man-made drainage systems. All three need to be managed.

9.8.2 Within Chiltern and South Bucks the main sources of flood risk are from rivers, groundwater and surface water but there have been incidences of flooding from sewers.

9.8.3 Requirements for site-specific flood risk assessments on individual applications for planning permission (and certain prior approval applications) are set out in National Planning Practice Guidance. Applicants will be required to submit a site-specific flood risk assessment with any application meeting these criteria and show how they have considered the most up-to-date assessment for flood risk.

Strategic Flood Risk Assessment (SFRA)

9.8.4 Areas at risk of different types of flooding are identified in the Council's Level 1 Strategic Flood Risk Assessment (SFRA) which was prepared in consultation with the Environment Agency and the Lead Local Flood Authority.

9.8.5 The SFRA sets out the areas with a probability of river flooding based on four categories (zones 1, 2, 3a and 3b) with zone 1 being the areas with the lowest fluvial risk and zone 3b (functional flood plain) being the areas with the highest fluvial risk. The SFRA has incorporated the latest Government advice on climate change allowances and provides information on flood risk issues by settlement.

9.8.6 The SFRA also identifies Areas of Critical Drainage (ACDs) which are locations likely to be most at risk of flooding from local sources (such as surface water, groundwater and ordinary watercourses) and where sustainable drainage solutions should be a priority.

9.8.7 A Level 2 SFRA covers the flood risk within the site allocations. Both SFRA's contain detailed development management guidance relating to the types of development and the differing levels of flood risk. The latest advice should be considered as part of the application process.

9.8.8 Applicants are also encouraged to consult the most up to date flood risk maps from the Environment Agency and Lead Local Flood Authority.

Sustainable Drainage Systems (SuDS)

9.8.9 Sustainable Drainage Systems (SuDS) are drainage systems which, through their planning and design, mimic natural drainage. SuDS include (but are not limited to) a variety of measures such as green roofs, rain gardens, retention/attenuation ponds, soakaways and permeable surfaces. SuDS can also provide additional habitat and biodiversity benefits to a development.

9.8.10 The inclusion of SuDS in flood high risk areas is unlikely to overcome the risk of flood inundation, therefore development should not be located in such areas. Development should only be considered appropriate in areas at lower risk of flooding if priority has been given to the use of SuDS that are designed to suit the site.

9.8.11 The Lead Local Flood Authority can advise on the most suitable forms of SuDS. Applicants should look to maximise the use of SuDS at the top of the hierarchy and look to deliver townscape / landscape and green infrastructure improvements through their implementation wherever possible.

9.8.12 Further guidance on SuDS is available from the Lead Local Flood Authority.

Policy DM NP8

Natural – Flood Protection and SuDS

Planning permission for development will be granted provided that it is designed to ensure that flood risk is not increased locally and avoids development on areas of flood risk.

Applicants proposing development requiring a site-specific flood risk assessment are required to demonstrate how flood risk has been considered as part of the development.

All planning applications will need to demonstrate that:

- 1 the development is designed to ensure that flood risk is not increased locally or elsewhere;
- 2 the development passes the Sequential Test and the Exception Test if required in accordance with national policy through a Site-Specific Flood Risk Assessment (FRA);
- 3 within sites that have different areas of flood risk, the more flood vulnerable development is steered towards the areas of lowest flood risk on the site with only appropriate land uses sited in higher-risk flood zones;
- 4 the development will prioritise the use of Sustainable Drainage Systems (SuDS) in order to mitigate flood risk, prioritising SuDS measures that offer multiple benefits;
- 5 the development will include measures to ensure that the design is resilient and resistant in areas of flood risk, e.g. safe access and egress from a site; and
- 6 the development will not impact on proposed or existing flood defences.

The Council will support development which incorporates the safeguarding of land for future flood alleviation schemes.

Areas of Critical Drainage

Areas of Critical Drainage are shown on the Strategic Flood Risk Assessment (SFRA) mapping. In these locations development must not exacerbate localised flooding and will need to include appropriate Sustainable Drainage Systems (SuDS). Where applicants can demonstrate that their proposals will reduce surface water run-off in these locations they will be supported.

Sustainable Drainage Systems (SuDS)

All SuDS must be integrated within the overall design of the development. SuDS should also integrate with existing green infrastructure wherever possible.

Developments incorporating large-scale SuDS must be accompanied by a maintenance and management plan detailing how these will be maintained throughout the lifetime of the development.

Permitted Development and Use of Conditions

In locations at a high risk of flooding the Council will use conditions which withdraw permitted development rights if permitted development would otherwise lead to increased flood risk.

9.9 Natural - Reducing the Risk of Pollution

Pollution

9.9.1 Pollution can come in many forms: air, land, water, light and noise. The Council works closely with landowners and the Environment Agency (EA) to safeguard environmental health and public safety from forms of pollution.

Contaminated Land

9.9.2 There are a number of sites within the Plan area which could potentially be contaminated due to previous land uses. New developments can also produce or increase the risk of contamination unless appropriately controlled and managed. Developers are responsible for ensuring that unacceptable risks from contamination and land instability are not present on site. If necessary, any risks will be successfully addressed through the remediation of contaminated land without environmental impact on groundwater and surrounding land during and following the development.

9.9.3 To ensure that a site is suitable for a proposed new use, the implications of contamination will be considered by the Council when determining planning applications, working alongside and not duplicating other pollution control regimes.

Noise

9.9.4 Noise needs to be considered when new developments may create additional noise and when new developments would be sensitive to the prevailing acoustic environment.

9.9.5 Noise should not be considered in isolation, separately from the economic, social and other environmental dimensions of proposed development, but the Council will endeavour to ensure that appropriate land uses do not conflict with each other and cause undue disturbance.

9.9.6 Noise can have a significant effect on the environment and on quality of life. There are a number of ways of reducing the impact of noise, particularly in residential developments, and these can be taken into account in the overall design and internal layout of new buildings and spaces.

9.9.7 In some areas, such as industrial areas, noise will be inevitable, but the Council will endeavour to ensure that appropriate land uses do not conflict with each other and cause disturbance.

9.9.8 Applicants should take into account existing sources of noise and overall ambient noise levels for both the current exposure and that which may be reasonably expected in the foreseeable future.

Light Pollution

9.9.9 Floodlighting and other forms of artificial lighting can, when poorly designed, have a significant detrimental impact on surrounding areas, amenity and wildlife. Excessive amounts of light can cause distraction. The negative effects of light pollution can be experienced in a number of ways, such as sky glow, light trespass, light glare and light clutter.

Policy DM NP9

Natural – Reducing the Risk of Pollution

Pollution

Planning permission will be granted provided that development:

- 1 does not produce unacceptable levels of pollution; or
- 2 is accompanied by sustainable mitigation measures to control or manage the impact of pollution to an appropriate environmental standard.

The Council will permit development that secures alleviation of existing pollution sources and the remediation of contaminated land. Development proposed on land where contamination may be present will be required to submit appropriate assessments regarding the contaminated condition of the site and any necessary remediation.

Contaminated Land

For development proposals where there is potential for land contamination, or where there are known contaminants, the Council will require evidence as part of any application to show that unacceptable risks from contamination and land instability will be successfully addressed through remediation without environmental impact on groundwater or surrounding land during and following the development. In particular, the developer must carry out an adequate investigation to inform a risk assessment.

Noise and Light Pollution

The Council will restrict or control development which would result in noise or light impacts where these would significantly adversely affect:

- the amenity of residential areas;
- the character of town and local centres;
- protected and notable species and wildlife habitats; or
- the countryside generally, particularly the Chilterns Area of Outstanding Natural Beauty and Burnham Beeches.

When determining the effects of noise the Council will have regard to the cumulative impact of noise arising from the proposed development in conjunction with existing land uses.

When determining the effects of light the Council will have regard to the design of the proposed development, the level of luminance and its effect on the surrounding area.

Planning Conditions and Obligations

The Council may secure appropriate remediation, mitigation or improvement measures through the use of planning conditions or obligations where they are appropriate to make the development acceptable.

9.10 Natural - Air Quality

9.10.1 The main sources of air pollution in the Plan area are motor vehicles. Their emissions include nitrogen oxides (NO_x), in particular nitrogen dioxide (NO₂) and particulate matter.

9.10.2 There are three Air Quality Management Areas (AQMAs) in the Plan area:

- Chesham, encompassing buildings along parts of Broad Street and Berkhamsted Road;
- an area of land encompassing the M4, M40 and M25 motorways; and
- Iver Parish, with specific problems along Iver High Street.

9.10.3 Applicants should check for the latest information about Air Quality Management Areas.

9.10.4 Given the scale of development planned for over the Plan period, it is likely that there will be an increase in the amount of car emissions and other airborne pollutants being produced. Regardless of their scale, all developments can contribute to air pollution through road traffic and may also place more people in areas where there are pollutants present. The Council will require applicants to submit an assessment of air quality as part of applications requiring a Travel Plan or Transport Assessment.

Iver Clean Air Zone

9.10.5 A voluntary Clean Air Zone exists in Iver. Applicants should consider the requirements set out in Government policy and legislation when considering development in the Iver Clean Air Zone, as defined on the Policies Map.

9.10.6 The Clean Air Zone supports: Ultra Low Emission Vehicles (ULEVs) in developments; requirements to support parking and recharging of Clean Air Zone compliant vehicles; and design and support for public transport, walking and cycling accessibility.

Electric Vehicle Charging Points

9.10.7 The Government's UK plan for tackling roadside nitrogen dioxide concentrations includes ending the sale of all new conventional petrol and diesel cars and vans by 2040. As the Plan period is from 2016 to 2036, there will be an increased demand for electric vehicles and therefore an increased requirement for electric vehicle charging provision. As a result, the Council is actively encouraging the provision of electric vehicle charging points in small-scale developments and requiring them in all new major residential developments.

Policy DM NP10

Natural – Air Quality

Within Air Quality Management Zones, developments must minimise any impacts on local air quality during both construction and operation. All developments likely to have an impact on air quality must be accompanied by an Air Quality Impact Assessment.

All developments requiring a Travel Plan or Transport Assessment will also be required to submit an Air Quality Assessment as part of the application (see Appendix NP1). The Assessment should be appropriate to the nature and scale of development and consider local circumstances. Where it is demonstrated that the development will impact on air quality the Council will require measures to mitigate these impacts.

The Council will permit development which seeks to improve air quality, especially within declared Air Quality Management Areas and Clean Air Zones.

Air Quality Management Areas

Development in Air Quality Management Areas defined on the Policies Map must not add to the existing level of emissions and should support the objectives of any adopted Air Quality Action Plan.

Clean Air Zones

Developments within the Iver Clean Air Zone as defined on the Policies Map (and any subsequently declared Clean Air Zones) should contribute to the actions and objectives set out in the relevant implementation strategy or action plan for the Clean Air Zone.

Electric Vehicle Charging Points

In order to meet the expected demand for electric cars by 2040 the Council will:

- 1 support the provision of electric vehicle charging points in all new small-scale residential developments;
- 2 require an electric vehicle charging point for each new home in all major residential developments, unless the development is proposing fewer off-street parking spaces than required under the parking standards, in which case each off-street parking space provided will have an electric vehicle charging point; and
- 3 require major non-residential development to provide electric vehicle charging points equivalent to the number of off-street parking spaces required as part of the development.

For major mixed use developments consisting of residential and non-residential elements, the required number of electric vehicle charging points will be equivalent to the requirement of each element.

The Council will require development in the declared AQMAs and the Iver Clean Air Zone (and any subsequently declared Clean Air Zones) to provide an electric vehicle charging point for each parking space required, regardless of the development's scale.

For the purpose of this policy an 'electric vehicle charging point' is considered as a plug-in, charging pad or other technology used to charge an electric car or van.

9.11 Appendix NP1 - Air Quality Assessments

9.11.1 Air Quality Assessments

9.11.2 There are three levels of development classification which are used to determine: whether an assessment will be required; the likely impact of development; and the level of mitigation required when considering the site-specific circumstances.

9.11.3 Air Quality Assessments should be proportionate to the nature and scale of development proposed. They should also assess the likely impact of the development on air quality and address the site-specific and cumulative impacts of air pollution arising from development. The assessment should follow a three-staged approach:

- 1 Development Classification – as above;
- 2 Impact Assessment – depending on the development scale (small, medium or large) and location, to identify whether there will be impacts on air quality when considering the local circumstances;
- 3 Mitigation and Compensation – depending on the impact, appropriate measures must be incorporated.

9.11.4 Applicants are encouraged to consult the Council's Environmental Health Service, especially when identifying the baseline air quality in a specific area.

Development Classifications for Medium-Scale and Large-Scale Developments

Criteria for Medium-Scale Development		
Proposed Use	Description	Assessment Required
Food Retail (A1)	Retail sale of food goods to the public – supermarkets, superstores, convenience food stores	>800 square metres
Non-Food Retail (A1)	Retail sale of non-food goods to the public; includes sandwich bars or other cold food purchased and consumed off-site	>1,500 square metres
Financial and Professional Services (A2)	Banks, building societies and bureaux de change, professional services, estate agents, employment agencies, betting shops	>2,500 square metres
Restaurants and Cafes (A3)	Use for the sale of food for consumption on the premises.	>2,500 square metres
Drinking Establishments (A4)	Use as a public house, wine-bar or other drinking establishment for consumption on or off the premises.	>600 square metres
Hot Food Takeaways (A5)	Use for the sale of hot food for consumption on or off the premises	>500 square metres
Business (B1)	(a) Offices other than in use within Class A2 (b) Research & development – laboratories, studios (c) Light industry	>2,500 square metres
General Industrial (B2)	General industry (other than B1)	>4,000 square metres
Storage and Distribution (B8)	Storage or distribution centres – wholesale warehouses, distribution centres & repositories	>5,000 square metres
Hotels (C1)	Hotels, boarding houses and guest houses	>100 bedrooms

Residential Institutions (C2) – Care Accommodation	Hospitals, nursing homes used for residential accommodation and care	>50 beds
Residential Institutions (C2) – Education	Boarding schools and training centres	>150 students
Residential Institutions (C2) – Other	Institutional hostels, homeless centres	>400 residents
Homes (C3)	Homes for individuals, families or not more than six people in a single household	>50 homes
Non-Residential Institutions (D1)	Medical & health services, museums, public libraries, art galleries, non-residential education, places of worship and church halls	>1,000 square metres
Assembly and Leisure (D2)	Cinemas, dance & concert halls, sports halls, swimming, skating, gym, bingo, and other facilities not involving motorised vehicles or firearms	>1,500 square metres

Other Criteria for Medium-Scale Developments

1. Any development generating 30 or more two-way vehicle movements in any hour.
2. Any development generating 100 or more two-way vehicle movements per day.
3. Any development proposing 100 or more parking spaces.
4. Any relevant development proposed in a location where the local transport infrastructure is inadequate.
5. Any relevant development proposed in a location adjacent to an Air Quality Management Area (AQMA).

Criteria for Large-Scale Development (in addition to above)

- Where the proposed development falls within the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011 and includes air quality or transport as a specific likely impact.
- Proposals located within an Air Quality Management Area (AQMA).
- Proposals that could increase the existing traffic flow on roads of >10,000 Average Annual Daily Traffic (AADT) by 5% or more.
- Proposals that increase traffic by 5% on road canyons with >5,000 AADT.
- Proposals that could introduce or significantly alter congestion (DfT Congestion) and include the introduction of substantial road infrastructure changes.
- Proposals that reduce average speeds by more than 10kph.
- Proposals that include additional HGV movements of more than 10% of total trips.
- Where significant demolition and construction works are proposed.