

The Habitats Regulations and Atmospheric Pollution

Nicky Linihan BA (Hons) DMS MRTPI

NJL-Solutions Ltd

nickylinihan@virginmedia.com

Overview

The Habitats Regulations 2107 (as amended) relate to land subject to international protection for its biodiversity value. These sites are designated Special Areas of Conservations (SAC's – primarily flora) and Special Protection Areas (SPA's – primarily fauna).

SAC's and SPA's are also designated as Sites of Special Scientific Interest but their boundaries may be smaller.

The main impact pathways relevant to Local Plans (and planning applications) have tended to related to:

- Urbanisation (primarily from recreational pressures arising from new homes but can also include from risk of fires and flytipping)
- Air pollution (primarily as a result of increased traffic)
- Water quality (level of nitrates and phosphates)

Some legal context



The Habitats Regulations

The Habitats Regulations (the Regulations) are “EU derived domestic legislation” for the purposes of the European Union (Withdrawal) Act 2018 (as amended) (“the EUWA 2018”) and will continue to have effect both during the implementation period and afterwards until otherwise amended. Therefore despite having left the EU nothing has changed.

The implementation of the Regulations is the responsibility of the competent authority:

(1) For the purposes of these Regulations, “competent authority” includes (a) any Minister of the Crown (as defined in the Ministers of the Crown Act 1975 F1), government department, statutory undertaker, public body of any description or person holding a public office;

(3) In paragraph (1)— “public body” includes—

(a) the Broads Authority ;

(b) a joint planning board within the meaning of section 2 of the TCPA 1990 (joint planning boards) ;

(c) a joint committee appointed under section 102(1)(b) of the Local Government Act 1972 (appointment of committees) ;

(d) a National Park authority; or

(e) a local authority, which in this regulation means—

(i) in relation to England, a county council, a district council, a parish council, a London borough council, the Common Council of the City of London, the sub-treasurer of the Inner Temple or the under treasurer of the Middle Temple;

<http://www.legislation.gov.uk/ukxi/2017/1012/regulation/7/made>

63.—(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which—
(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and
(b) is not directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications of the plan or project for that site in view of that site’s conservation objectives.

(2) A person applying for any such consent, permission or other authorisation must provide such information as the competent authority may reasonably require for the purposes of the assessment or to enable it to determine whether an appropriate assessment is required.

(3) The competent authority must for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority specifies.

(4) It must also, if it considers it appropriate, take the opinion of the general public, and if it does so, it must take such steps for that purpose as it considers appropriate.

(continuation of Regulation 63)

(5) In the light of the conclusions of the assessment, and subject to regulation 64, the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).

(6) In considering whether a plan or project will adversely affect the integrity of the site, the competent authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which it proposes that the consent, permission or other authorisation should be given.

Considerations of overriding public interest

64.—(1) If the competent authority is satisfied that, there being no alternative solutions, the plan or project must be carried out for imperative reasons of overriding public interest (which, subject to paragraph (2), may be of a social or economic nature), it may agree to the plan or project notwithstanding a negative assessment of the implications for the European site or the European offshore marine site (as the case may be).

Environment Act 2021

[The Environment Act 2021](#) establishes a legally binding duty on government to bring forward at least two new air quality targets in secondary legislation by 31 October 2022. This duty sits within the environmental targets framework outlined in the Environment Act (Part 1).

The [UK-Air](#) part of Defra's website indicates that the first air quality targets will be focused on Particulate Matter. These relate to human health rather than ecological health.

2017 Wealden Judgement: The ‘in-combination’ test

<http://www.bailii.org/ew/cases/EWHC/Admin/2017/351.html>

The principal issue - whether LDC and the SDNPA had acted unlawfully in concluding, on advice from Natural England, that the Lewes District Joint Core Strategy would not be likely to have a significant effect on the Ashdown Forest Special Area of Conservation, in combination with the Wealden Core Strategy, pursuant to the Habitats Regulations. The environmental effect in question was the impact from vehicle emissions on nitrogen deposition in the heathland within the SAC.

The judge said: “The principal point raised by this application...is whether [Lewes] and [the park authority] acted unlawfully in concluding, on advice, that the joint core strategy would not likely have a significant effect on the SAC in combination with the Wealden Core Strategy.”

He added: “The essential contention made is that if relevant data and findings are properly amalgamated, as they should be, the effects of increased traffic flows near the SAC would not have been ignored at the first screening or scoping stage of the process.”

The local planning authority as a 'competent authority'

A Council, as a competent authority, has a duty to ensure that plans and projects which it has a responsibility for consenting will not have an adverse effect on integrity, such as by interfering with the restoration of such sites to favourable conservation status within the context of their conservation objectives. Where development plans or projects will have an adverse effect on the integrity of these sites, either alone or in combination with other plans and projects, the Council must assess the implications of such effects, and secure any avoidance and mitigation measures necessary to prevent an adverse effect on the integrity of the site.

Atmospheric pollution



Some general air quality facts

In 2012, road traffic in the UK was ten times higher than in 1949. Total distance walked each year decreased by 30% between 1995 and 2013.

Growth in pollution has not always been as fast as growth in traffic, thanks to tighter exhaust controls. Modern cars produce very little carbon monoxide and hydrocarbons, and the sulphur and lead in diesel and petrol must meet tight regulations. **However** Nitrogen dioxide and particulates from diesel engines have been poorly controlled and remain a problem. In the UK today, c. half of cars run on diesel - is a trend across Europe, but not in USA or Japan. Nearly all buses, vans and lorries, forms of water transport, and many trains, use diesel in the UK, along with construction and farm machinery.

Each year, inhaling particulates causes around 29,000 deaths in the UK, which, on recent evidence, may rise to around 40,000 deaths when also considering nitrogen dioxide exposure.

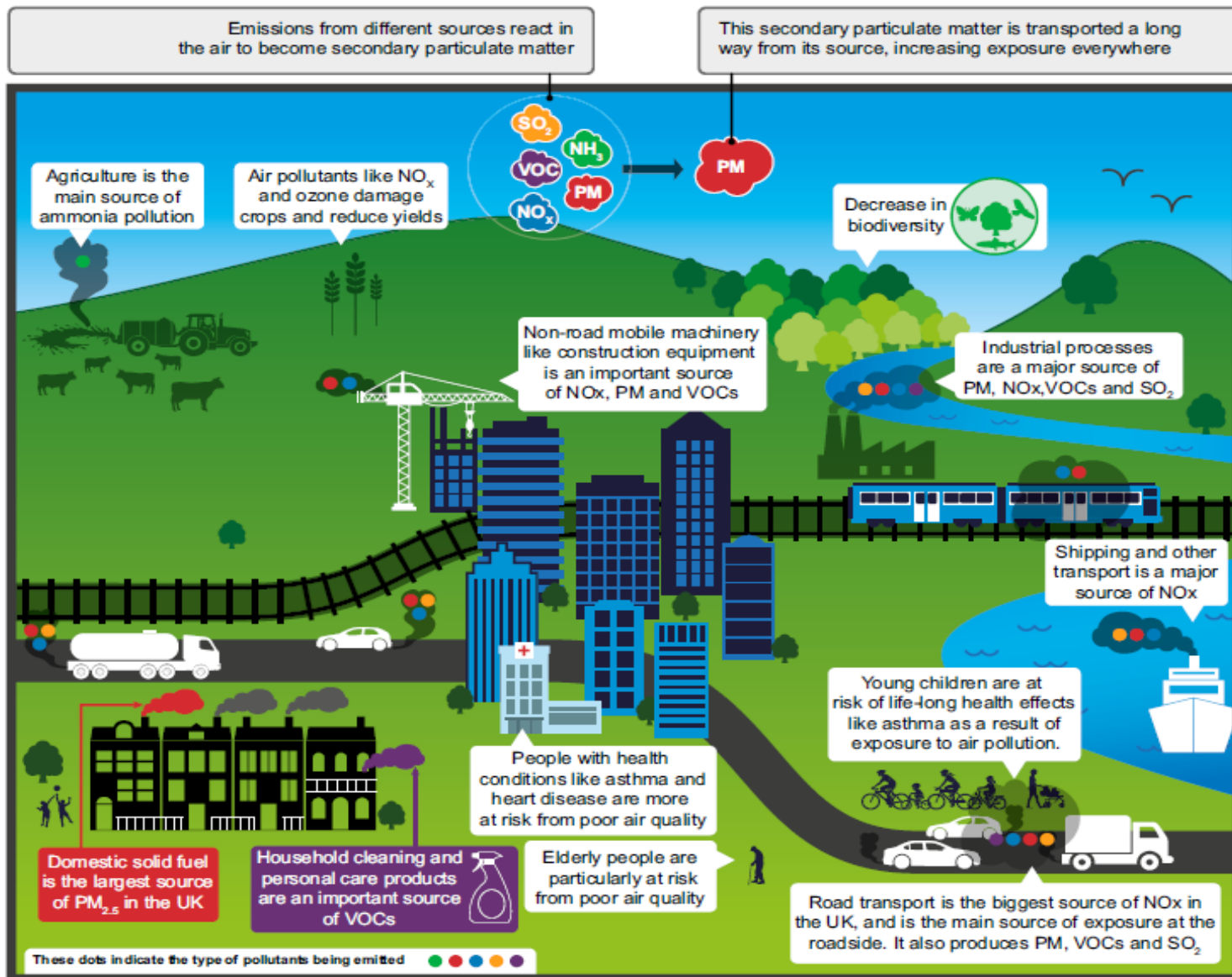
Home heating has changed compared with coal fires, modern gas boilers produce very little particle pollution – but they do give off nitrogen dioxide. Cooking, especially with gas, is also an important source of nitrogen dioxide and particles.

Air pollution can stay around for days or weeks after it's created. One type of chemical may interact with others in the atmosphere, to cause even more pollution. Air pollution also crosses cities, counties and even countries, so local action is not enough on its own.

Source: Every breath we take: the lifelong impact of air pollution'. Report by RCP/RCPC

<https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution>

The sources of air pollutants and their effects



Types of pollution

Nitrogen oxides (NO _x)	Ammonia (NH ₃)	Primary Particulate Matter (PM _{2.5})
	Sulphur dioxide (SO ₂)	Volatile organic compounds (NMVOCs)

National Planning Policy Framework 2021

Paragraph 104:

Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains;

Paragraph 180 b:

development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

Paragraph 185:

Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.

Paragraph 186: *Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.*

Paragraph 182: *The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.*

Planning Practice Guidance

Air Quality

- **What is the role of plan-making with regard to air quality?**
- All development plans can influence air quality in a number of ways, for example through what development is proposed and where, and the provision made for sustainable transport. Consideration of air quality issues at the plan-making stage can ensure a strategic approach to air quality and help secure net improvements in overall air quality where possible.
- It is important to take into account [air quality management areas](#), [Clean Air Zones](#) and other areas including sensitive habitats or designated sites of importance for biodiversity where there could be specific requirements or limitations on new development because of air quality. Air quality is also an important consideration in **habitats assessment**, [strategic environmental assessment and sustainability appraisal](#) which can be used to shape an appropriate strategy, including through establishing the ‘baseline’, appropriate objectives for the assessment of impacts and proposed monitoring.

Even though not explicit the guidance on planning applications in the PPG on air quality can be pertinent to plan-making.

Considerations that may be relevant to determining a planning application include whether the development would:

- Lead to changes (including any potential reductions) in vehicle-related emissions in the immediate vicinity of the proposed development or further afield. This could be through the provision of electric vehicle charging infrastructure; altering the level of traffic congestion; significantly changing traffic volumes, vehicle speeds or both; or significantly altering the traffic composition on local roads. Other matters to consider include whether the proposal involves the development of a bus station, coach or lorry park; could add to turnover in a large car park; or involve construction sites that would generate large Heavy Goods Vehicle flows over a period of a year or more;*
- Introduce new point sources of air pollution. This could include furnaces which require prior notification to local authorities; biomass boilers or biomass-fuelled Combined Heat and Power plant; centralised boilers or plant burning other fuels within or close to an air quality management area or introduce relevant combustion within a Smoke Control Area;*

Evidence Gathering – collecting information on relevant European sites, their conservation objectives and characteristics and other plans or projects.



HRA Task 1: Likely significant effects ('screening') – identifying whether a plan is 'likely to have a significant effect' on a European site



HRA Task 2: Ascertaining the effect on site integrity – assessing the effects of the plan on the conservation objectives of any European sites 'screened in' during HRA Task 1



HRA Task 3: Mitigation measures and alternative solutions – where adverse effects are identified at HRA Task 2, the plan should be altered until adverse effects are cancelled out fully

Four Stage Approach to Habitats Regulations Assessment. Source CLG, 2006.

The 'Dutch Nitrogen' cases

Article 6(3) of the Habitats Directive must be interpreted as not precluding national programmatic legislation which allows the competent authorities to authorise projects on the basis of an 'appropriate assessment' within the meaning of that provision, carried out in advance and in which a specific overall amount of nitrogen deposition has been deemed compatible with that legislation's objectives of protection. That is so, however, only in so far as a thorough and in-depth examination of the scientific soundness of that assessment makes it possible to ensure that there is no reasonable scientific doubt as to the absence of adverse effects of each plan or project on the integrity of the site concerned, which it is for the national court to ascertain.

Article 6(3) of Directive 92/43 must be interpreted as meaning that an 'appropriate assessment' within the meaning of that provision may not take into account the existence of 'conservation measures' within the meaning of paragraph 1 of that article, 'preventive measures' within the meaning of paragraph 2 of that article, measures specifically adopted for a programme such as that at issue in the main proceedings or 'autonomous' measures, in so far as those measures are not part of that programme, if the expected benefits of those measures are not certain at the time of that assessment.

Planning Practice Guidance – Appropriate Assessment

Appropriate Assessment:

All plans and projects (including planning applications) which are not directly connected with, or necessary for, the conservation management of a habitat site, require consideration of whether the plan or project is likely to have significant effects on that site. This consideration – typically referred to as the ‘Habitats Regulations Assessment screening’ – should take into account the potential effects both of the plan/project itself and in combination with other plans or projects. Where the potential for likely significant effects cannot be excluded, a competent authority must make an appropriate assessment of the implications of the plan or project for that site, in view the site’s conservation objectives. The competent authority may agree to the plan or project only after having ruled out adverse effects on the integrity of the habitats site. Where an adverse effect on the site’s integrity cannot be ruled out, and where there are no alternative solutions, the plan or project can only proceed if there are imperative reasons of over-riding public interest and if the necessary compensatory measures can be secured.

Paragraph: 001 Reference ID: 65-001-20190722 Revision date: 22 07 2019

When may appropriate assessments be required in the planning process?

- If a proposed plan or project is considered likely to have a significant effect on a protected [habitats site](#) (either individually or in combination with other plans or projects) then an appropriate assessment of the implications for the site, in view of the site's conservation objectives, must be undertaken ([Part 6 of the Conservation of Habitats and Species Regulations 2017](#)). This does not apply to plans or projects directly connected to the conservation management of the features for which the site was designated.
- A significant effect should be considered likely if it cannot be excluded on the basis of objective information and it might undermine a site's conservation objectives. A risk or a possibility of such an effect is enough to warrant the need for an appropriate assessment.
- The [conservation objectives](#) relate to each of the habitats and species for which the site was designated and will be provided in more detail by Natural England. A competent authority must consult Natural England for the purposes of the assessment and must have regard to any representations that Natural England may wish to make within a reasonable time (as specified by the competent authority). Natural England's [formal advice on conservation objectives](#) is publicly available for both European terrestrial sites and European marine sites.

Paragraph: 002 Reference ID: 65-002-20190722 Revision date: 22 07 2019

What must an appropriate assessment contain?

The scope and content of an appropriate assessment will depend on the nature, location, duration and scale of the proposed plan or project and the interest features of the relevant site. 'Appropriate' is not a technical term. It indicates that an assessment needs to be proportionate and sufficient to support the task of the competent authority in determining whether the plan or project will adversely affect the integrity of the site.

An appropriate assessment must contain complete, precise and definitive findings and conclusions to ensure that there is **no reasonable scientific doubt** as to the effects of the proposed plan or project. The [competent authority](#) will require the applicant to provide such information as may reasonably be required to undertake the [assessment](#).

What are you trying to demonstrate?

The local planning authority needs to be able to demonstrate through a Habitats Regulations Assessment that ‘no reasonable scientific doubt remains’ that the development proposed by that plan or project, in combination with other plans and projects, would not have an adverse effect on the integrity of the SAC or SPA being considered.

The Regulations state that:

“A competent authority, before deciding to ... give any consent for a plan or project which is likely to have a significant effect on a European site ... shall make an appropriate assessment of the implications for the site in view of that sites conservation objectives... The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site”.

What is Natural England's role?

Natural England is the Government's statutory advisor for nature conservation.

A Council is required to consult with Natural England on the Appropriate Assessment it undertakes and to subsequently have regard to any comments it may have.

What issues can face Plan Makers?

Being able to demonstrate with 'no reasonable scientific doubt' that a local plan won't have an adverse effect on the integrity of the designated site.

Need to be determine what evidence is needed and therefore what data and modelling might need to be undertaken and what assumptions are appropriate.

The need to consider what can be taken into account and what can't when assessing those impacts and what mitigation measures can be modelled to demonstrate 'no reasonable scientific doubt.' There are plenty of measures that will make a positive contribution but the extent of which can't necessarily be modelled in order to meet the 'no reasonable scientific doubt' test.

The need to recognise the 'precautionary principle.'

Autonomous measures

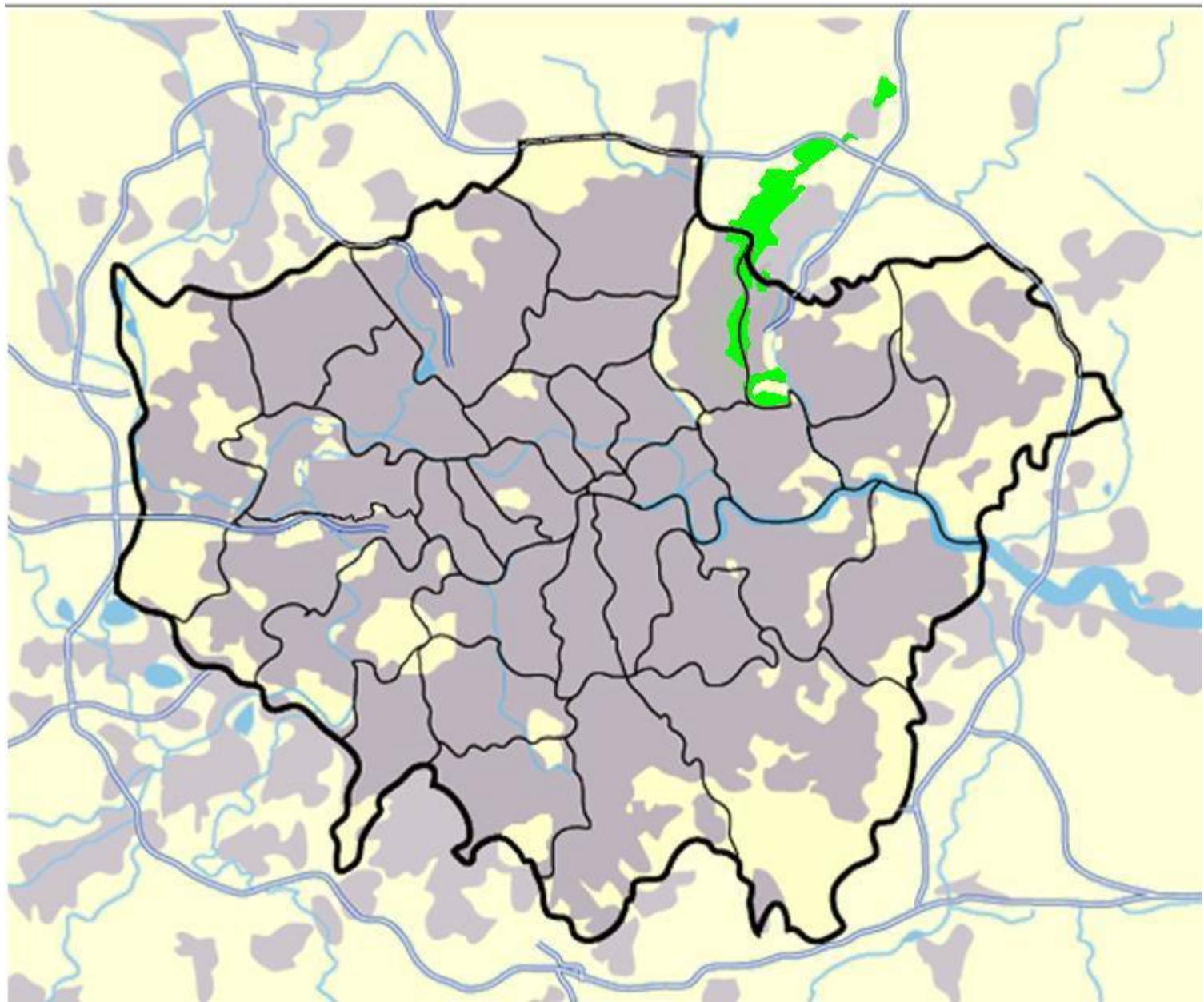
These are measures which bring about air quality benefits but are not specific to the development and primarily relate to national/international measures including:

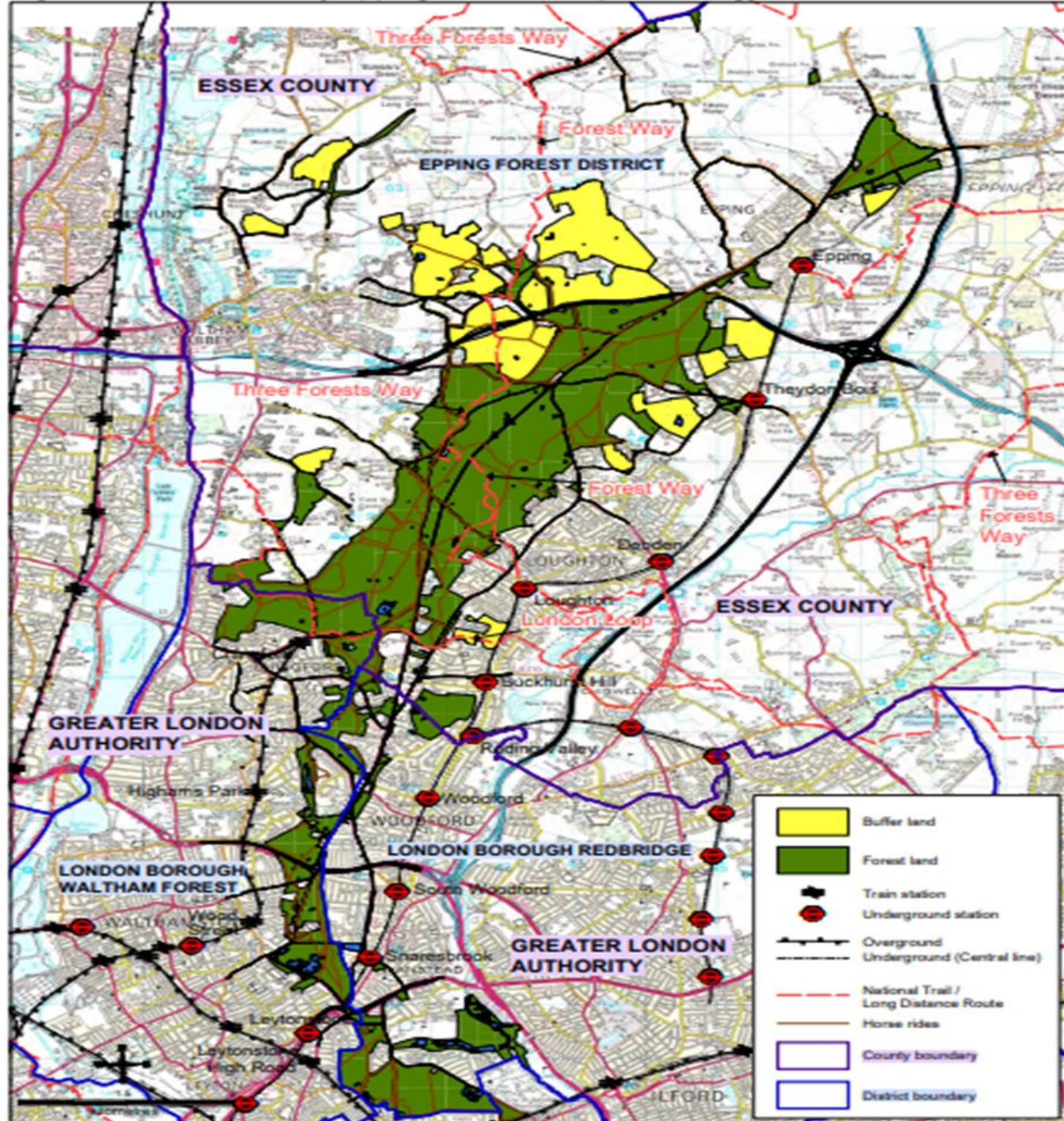
- Vehicle emission standards
- Taxation on dirty fuels – ‘red diesel’
- Ban on sales of petrol and diesel cars (from 2030)
- Fiscal measures to encourage uptake of e.g. electric cars
- Government’s Clean Air Strategy – particularly in relation to the role of the agricultural sector and coal/wood burning stoves
- PPG re. biomass heat and power
- Changes to Building Regulations – domestic boilers

An example: The Epping Forest SAC

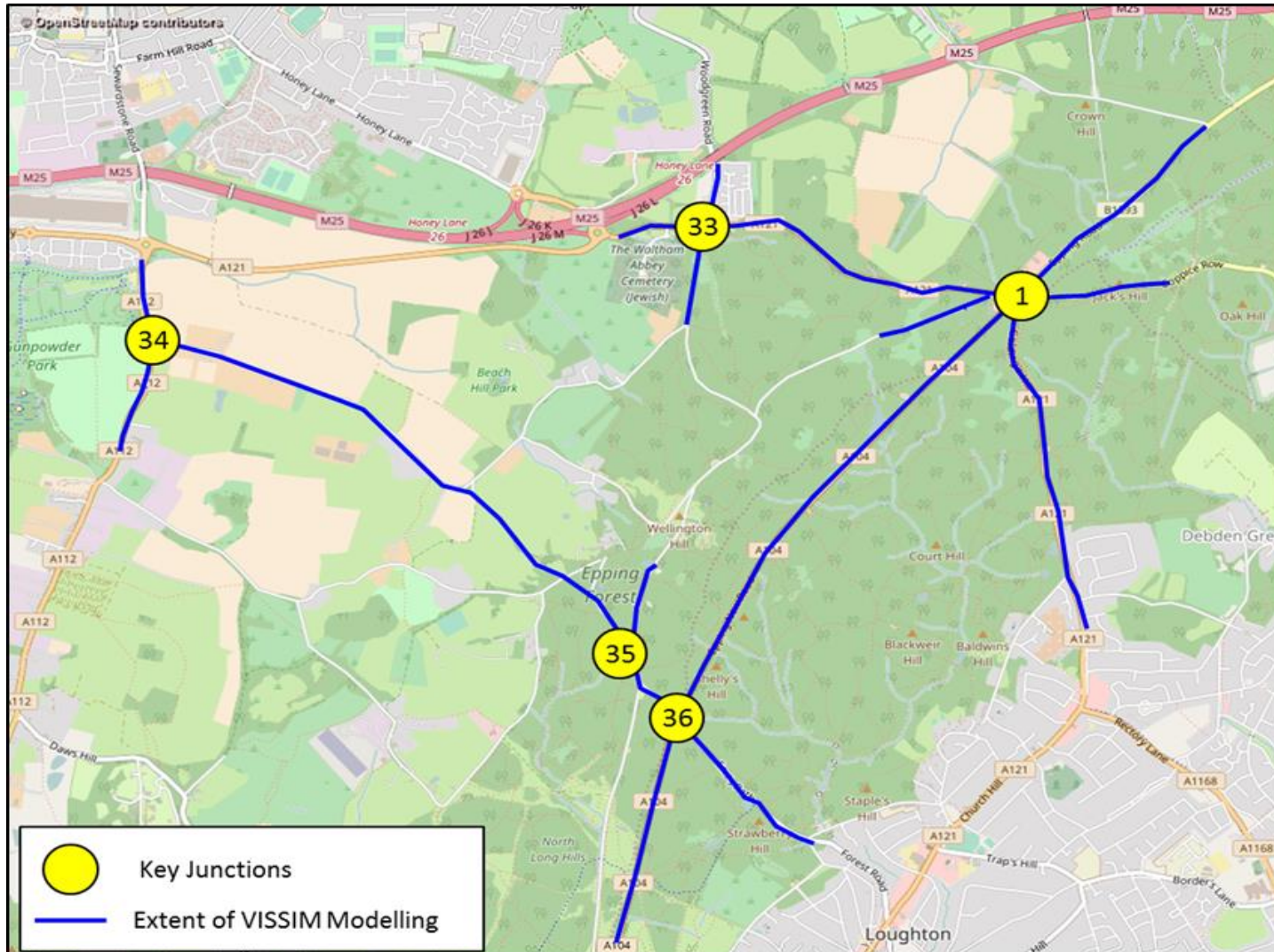
The next slides set out the approach that has been taken by Epping Forest District Council (EFDC).

- Known issues for the Epping Forest SAC include in relation to the atmospheric pollution pathway of impact.
- Two main pollutants – Nitrogen Dioxide (NO_x) and Ammonia (NH₃). Sources are, in this case, primarily from diesel vehicles (NO_x) and petrol and other vehicles with catalytic convertors.
- Major traffic routes cut through the Forest with high traffic volumes and lengthy traffic queues along parts of the network, primarily at peak times.





The EFDC road network within Epping Forest SAC



Approach to modelling the impacts of a Plan

Traffic modelling:

- Used a baseline based on actual traffic data
- Added in local plan development including a windfall allowance.
- Translated this into queue lengths and Annual Average Daily Traffic (AADT)

Air quality modelling:

- Using site specific information on Vehicle Fleet Mix using Automatic Number Plate Recognition (ANPR) data which provided:
 - age of vehicle – this gives information on Euro Standards
 - type of vehicle – car, HGV, LGV
 - fuel used– diesel/petrol/hybrid/electric/other
- Verification factors using on-site monitoring information
- **Scenarios:**
- The scenarios are critical – interim year and with and without mitigation

On-site monitoring was a key component of the approach:

- 13 transects of 200m in length
- Both NO_x and Ammonia monitored.
- 9 months of continuous monitoring to take into account changing seasons and foliage coverage.
- This is key to understanding what is already happening on the ground. Building in future on-site monitoring to assess the effects of measures is vital.

Why take a bespoke approach

"The steps you propose to take in relation to the HRA are clearly directed to addressing the concerns I have raised and seem to me a reasonable response. There is significant focus on improving confidence in the likely composition of the vehicle fleet and I understand that you propose to use a bespoke prediction of future emissions instead of relying upon the DEFRA 2030 factors. This would seem to serve the purpose of increasing scientific certainty..." (Local Plan Inspector)

Defra has an Emissions Factor Toolkit (EFT). EFT 9.0 (May 2019) provides the ability to produce projections based on local data. The EFT approach has been accepted in undertaking HRAs for plan-making for some time based on national projections. Epping Forest District Council has gone further by using local evidence.

Benefits of a bespoke approach

- Provides much clearer information on the Vehicle Fleet Mix and therefore helps to understand what mitigation measures may be effective and the potential opportunity to project the effects of this mitigation
- Provides the opportunity to build in robust monitoring mechanisms – both traffic and air quality
- Enables the ability to build in a ‘review point’ linked to the requirement to review local plans (to be completed within five years of the plan’s adoption) and then update if required.
- Needs to be supported by robust air quality and traffic modelling.

In taking a bespoke approach engagement with Natural England is critical.

More information on the EFDC approach

In reviewing the information below that has been provided to support EFDC's Local Plan it is important to note that the Council has not yet received the Local Plan Inspector's report.

The [Local Plan Habitats Regulations Assessment 2021](#) (to support consultation on Main Modifications to the emerging Local Plan) – a number of the appendices including for the [transect results](#) set out in more detail the bespoke approach.

[Interim Air Pollution Mitigation Strategy](#)

Possible Approaches to Mitigation

In identifying mitigation measures it is really important to understand which can be reasonably modelled and which cannot in light of the CJEU judgements and what you are trying to demonstrate. **All of the measures will provide some benefit, particularly as they are supportive measures but the efficacy of only a small number can actually be modelled with sufficient certainty** to be relied upon within an HRA.

- Reduce traffic growth – part of overall spatial strategy and having policies to secure modal shift away from the car – not a new concept
- Encouraging a move away from using petrol and diesel cars e.g. Electric Vehicle Charging Points – not just for cars but also a range of vehicles but don't exclude other clean technologies – hydrogen power is being looked at, including for larger vehicles.
- Digital technology infrastructure – e.g. broadband, real-time public transport information such as TfL's Live bus information
- Car parking standards – for destinations i.e. limiting parking available for staff, visitors etc.
- Car free developments supported by car clubs – area based or site based dependent on the scale of the scheme and location

Measures continued

- Travel plans
- Highway improvements - **but** need to consider whether the provision of additional capacity will attract additional traffic – this needs to be considered in the context of any traffic and air quality modelling – what are the highway and AQ implications of doing nothing?
- Route Management Strategies
- Signage strategies
- Banning lorries and/or vans on affected roads
- Introducing a Clean Air Zone
- Local awareness raising campaigns.
- Testing ‘novel’ initiatives
- Management measures for protecting the ecological assets themselves.

Drafting of Local Plan policies

Policies need to be drafted to ensure that mitigation measures can be secured and delivered. Advice from Natural England:

'...in order for the HRA of the Local Plan to conclude no adverse effects to site integrity and allow the plan to be adopted, there needs to be a clear and binding link between the plan policies and the actual delivery of the measures relied upon in the HRA to achieve those objectives.'

On occasions there may be a need to include case-specific policy restrictions or case-specific policy caveats. These need to be explicit and be embedded within policy itself rather than in the explanatory text or commentary.

Guidance on the above approach is contained in Annex 1 of the [Habitats Regulations Assessment Handbook](#) on the use of policy specific caveats and restrictions. Current subscribers to the Handbook include, amongst others, The Planning Inspectorate, Natural England, the Environment Agency, Natural Resources Wales, DEFRA, Welsh government, DAERA (NI) and the Marine Management Organisation.

