# Wokingham Local Plan Update (LPU)

**Air Quality – LPU Growth Scenario Appraisal**

On behalf of **Wokingham Borough Council**

Project Ref: 332110523/AQ | Rev: Final_v2 | Date:January 2023

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# Document Control Sheet

**Project Name:** **Wokingham Local Plan Update**

**Project Ref:** **332110523/AQ**

**Report Title:** **Air Quality – LPU Growth Scenario Appraisal**

**Doc Ref:** **Final_v2**

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| **Revision** | **Date** | **Description** | **Prepared** | **Reviewed** | **Approved** |
|---|---|---|---|---|---|
| Draft | 04/2022 | Draft for Client Comment | ERP | PB | BT |
| Final | 07/2022 | Response to Client Comments | ERP | PB | BT |
| Final v2 | 01/2023 | Minor revision following client review | ERP | PB | BT |

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# 1 Introduction

## 1.1 Overview

1.1.1 Stantec have been commissioned by Wokingham Borough Council (WBC) to provide support to understand the impact on Air Quality (at both human and ecological receptors) of future housing and employment growth and the resultant changes in traffic flows on the highway network. The outputs from the assessment will be used as part of the evidence base to support the preparation of the Local Plan Update (LPU).

1.1.2 Currently WBC is undertaking a review of the adopted development plan policy. Currently both the Core Strategy and the Managing Development Delivery Local Plan look forward to 2026. The LPU will put in place the spatial strategy and planning policies until at least 2038.

1.1.3 To support the preparation of the LPU, a number of growth scenarios have been appraised to assess the impact of growth on air quality.

1.1.4 This Air Quality LPU Growth Scenario Appraisal presents the methodology used to assess the growth scenarios. The subsequent results help to understand the impacts of the emissions resulting from growth and identify mitigation measures if required.

1.1.5 Subsequent to this appraisal, further modelling will be undertaken to inform the assessment of public health indicators (specifically indicator 3.01: fraction of mortality attributable to particulate air pollution and the percentage of all-cause mortality due to $PM_{2.5}$) of the Revised Growth Strategy and to inform the Habitats Regulation Assessment (HRA).

## 1.2 Report Structure

1.2.1 The remainder of this report is structured as follows:

- Section 2 provide a summary of the relevant regulations and guidance
- Section 3 provides an overview of the growth scenarios
- Section 4 provides a summary of the applied modelling methodology
- Section 5 presents the predicted result at human receptors
- Section 6 presents the predicted results at ecological receptors
- Section 7 summarises and concludes this report.

# 2 Relevant Legislation, Policy and Guidance

## 2.1 Air Quality Regulations

2.1.1 The Air Quality (England) Regulations 2000 (AQR) defined National Air Quality Objectives (NAQOs, a combination of concentration-based thresholds, averaging periods and compliance dates) for a limited range of pollutants. Subsequent amendments were made to the AQR in 2001 and 2002 to incorporate 'limit values' and 'target values' for a wider range of pollutants as defined in European Union (EU) Directives.

2.1.2 These amendments were consolidated by the Air Quality Standards Regulations 2010 (AQSR) (with subsequent amendments most notably in 2016 and for the devolved administrations), which transposed the EU's Directive on ambient air quality and cleaner air for Europe (2008/50/EC).

2.1.3 Following the Transition Period after the UK's departure from the EU in January 2020, the Air Quality (Amendment of Domestic Regulations) (EU Exit) Regulations 2019 (and subsequent amendments for the devolved administrations) have amended the AQ Standards Regulations 2010 to reflect the fact that the UK has left the EU, but do not change the pollutants assessed or the numerical thresholds. EU. The Environment (Miscellaneous Amendments) (EU Exit) Regulations 2020 amended the $PM_{2.5}$ limit value in the AQSR to 20µg/m$^3$.

2.1.4 The relevant AQOs for this assessment are shown in **Table 2-1**.

Table 2-1 Relevant Air Quality Objectives / Limit Values

| Pollutant | Time Period | Objectives | Source |
|---|---|---|---|
| $NO_2$ | 1-hour mean | 200 µg/m$^3$ not to be exceeded more than 18 times a year | NAQO and AQSR limit value |
| | Annual mean | 40 µg/m$^3$ | NAQO and AQSR limit value |
| $PM_{10}$ | 24-hour mean | 50 µg/m$^3$ not to be exceeded more than 35 times a year | NAQO and AQSR limit value |
| | Annual mean | 40 µg/m$^3$ | NAQO and AQSR limit value |
| $PM_{2.5}$ | Annual mean | 20 µg/m$^3$ | AQSR limit value |

2.1.5 The NAQO's for $NO_2$ and $PM_{10}$ were to have been achieved by 2005 and 2004 respectively, but also continue to apply in all future years thereafter.

2.1.6 The 2019 Clean Air Strategy includes a commitment to set a "*new, ambitious, long-term target to reduce people's exposure to* $PM_{2.5}$" which the Environment Act 2021 has set at 10µg/m$^3$ by 2040.

## 2.2 Air Quality Management

### The Air Quality Strategy

2.2.1 Part IV of the Environment Act 1995 (Environment Act, 1995) required the Secretary of State to prepare and publish and 'strategy' regarding air quality.

2.2.2 The Air Quality Strategy (2007) establishes the policy framework for ambient air quality management and assessment in the UK (DEFRA, 2007). The primary objective of the Air Quality Strategy is to ensure that everyone can enjoy a level of ambient air quality which poses no significant risk to health or quality of life. The Air Quality Strategy sets out the NAQOs and Government policy on achieving these.

### The Clean Air Strategy

2.2.3 The Clean Air Strategy (2019) aims to lower national emissions of pollutants, thereby reducing background pollution and minimising human exposure to harmful concentrations of pollution. The Strategy aims to create a stronger and more coherent framework for action to tackle air pollution (DEFRA, 2019a).

### Local Air Quality Management

2.2.4 Part IV of the Environment Act 1995 (Environment Act, 1995) introduced a system of Local Air Quality Management (LAQM) which requires local authorities to regularly and systematically review and assess air quality within their boundary and appraise development and transport plans against these assessments.

2.2.5 Where a NAQO is unlikely to be met, the local authority must designate an Air Quality Management Area (AQMA) and draw up an Air Quality Action Plan (AQAP) setting out the measures it intends to introduce in pursuit of the NAQO's within its AQMA.

2.2.6 The Local Air Quality Management Technical Guidance 2016 (LAQM.TG(16); DEFRA, 2021b), issued by the Department for Environment, Food and Rural Affairs (DEFRA) for Local Authorities provides advice on where the NAQOs apply. These include outdoor locations where members of the public are likely to be regularly present for the averaging period of the objective (which vary from 15 minutes to a year) as summarised in **Table 2-2**.

Table 2-2 Relevant Public Exposure

| Averaging Period | NAQOs should apply at: | NAQOs don't apply at: |
|---|---|---|
| Annual mean | All locations where members of the public might be regularly exposed<br><br>For example:<br>Building façades of residential properties, schools, hospitals, care homes etc | Façades of offices or other places of work where members of the public do not have regular access<br><br>Hotels, unless people live there as their permanent residence<br><br>Gardens of residences<br><br>Kerbside sites<br><br>Any other location where public exposure is expected to be short term |
| 24-hour mean and 8-hour mean | All locations where the annual mean NAQO would apply, together with hotels and gardens of residences | Kerbside sites<br><br>Any other location where public exposure is expected to be short term |
| 1-hour mean | All locations where the annual mean and 24 and 8-hour mean NAQOs apply as well as:<br><br>Kerbside sites | Kerbside locations where the public would not be expected to have regular access |

| Averaging Period | NAQOs should apply at: | NAQOs don't apply at: |
|---|---|---|
| | Those parts of car parks, bus stations and railway stations etc. which are not fully enclosed, where members of the public might reasonably be expected to spend one hour or more.<br><br>Any outdoor locations where members of the public might reasonably be expected to spend one hour or longer. | |

### National Air Pollution Plan for $NO_2$ in the UK

2.2.7 The national Air Quality Plan for $NO_2$ (DEFRA, 2018) sets out how the Government plans to deliver reductions in $NO_2$ throughout the UK, with a focus on reducing concentrations to below the EU Limit Values (which are now AQSR limit values) throughout the UK within the 'shortest possible time'.

2.2.8 The plan requires all Local Authorities (LAs) in England which DEFRA identified as having exceedances of the Limit Values in their areas past 2020 to develop local plans to improve air quality and identify measures to deliver reduced emissions, with the aim of meeting the Limit Values within their area within "*the shortest time possible*". Potential measures include changing road layouts, encouraging public and private ultra-low emission vehicle (ULEV) uptake, the use of retrofitting technologies and new fuels and encouraging public transport. In cases where these measures are not sufficient to bring about the required change within 'the shortest time possible' then LAs may consider implementing access restrictions on more polluting vehicles (e.g. Clean Air Zones (CAZs)).

## 2.3 Protection of Habitats

2.3.1 As well as their potential to impact on human health, some air pollutants have long been acknowledged to have effects on vegetation and freshwater systems. Whilst direct impacts of air pollutants on fauna are less common, any such effect on the health of vegetation or freshwater systems can then affect animal species that are dependent on the vegetation.

2.3.2 Biodiversity 2020 is the latest biodiversity strategy for the UK (DEFRA, 2020) and aims to "*halt biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks…".* The Strategy recognises air pollution as a direct environmental pressure on biodiversity and planning and development as one of the sectors with the greatest potential for direct influence.

2.3.3 The Conservation of Habitats and Species Regulations 2017 (Statutory Instrument, 2017) (the 'Habitats Regulations'), transposed the Habitats Directive (European Council Directive 92/43/EEC) in England and Wales. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (Statutory Instrument, 2019) amends the 2017 Habitats Regulations to reflect the UK's departure from the EU and came into force following the end of the Transition Period in December 2020.

2.3.4 The Habitats Regulations require the UK Government to introduce a range of measures for the protection of habitats and species. Special Areas of Conservation (SACs) are designated under these regulations, as are Special Protection Areas (SPAs). These sites form a network termed 'Natura 2000' and collectively these sites are known as European Sites, or the 'national site network'.

2.3.5 Designated Wetlands of International Importance (known as Ramsar sites) do not form part of the national site network. Many Ramsar sites overlap with SACs and SPAs and may be designated for the same or different species and habitats. All Ramsar sites remain protected in the same way as SACs and SPAs.

2.3.6 The Habitats Regulations primarily provide measures for the protection of European Sites and European Protected Species, but also require local planning authorities to encourage the management of other features that are of major importance for wild flora and fauna.

2.3.7 The Habitats Regulations require the competent authority firstly to evaluate whether a project of plan has the potential to give rise to a "*likely significant effect*" (LSE) and where this is the case, an "*appropriate assessment*" (AA) is required to determine whether the development will adversely affect the integrity of the site.

### Critical Levels

2.3.8 Critical levels are a quantitative estimate of exposure to one or more airborne pollutants in gaseous form, below which significant harmful effects on sensitive elements of the environment do not occur, according to present knowledge

2.3.9 Critical levels for NOx for the protection of vegetation and ecosystems have been set by the UK Government within the AQSR as summarised in **Table 2-3** and are the same as the EU limit values and Natural England applies the objective to all internationally designated conservation Sites and SSSIs.

Table 2-3 Vegetation and Ecosystem Objectives

| Pollutant | Time Period | Objective |
|---|---|---|
| Oxides of nitrogen (expressed as $NO_2$) | Annual mean | 30 µg/m$^3$ |
| | 24-hour mean | 75 µg/m$^3$ |
| Ammonia ($NH_3$) | Annual mean | 3 µg/m$^3$ (unless lichens or bryophytes are present, then 1 µg/m$^3$) |

### Critical Loads

2.3.10 Critical loads for nitrogen deposition onto sensitive ecosystems have been identified by the United Nations Economic Commission for Europe (UNECE). They are defined as the amount of pollutant deposited to a given area over a year, below which significant harmful effects on sensitive elements of the environment do not occur, according to present knowledge.

2.3.11 In relation to combustion emissions, critical loads for eutrophication and acidification are relevant which can occur via both wet and dry deposition; however, on a local scale only dry (direct deposition) is considered significant.

2.3.12 Empirical critical loads for eutrophication (derived from a range of experimental studies) are assigned based for different habitats, including grassland ecosystems, mire, bog and fen habitats, freshwaters, heathland ecosystems, coastal and marine habitats, and forest habitats and can be obtained from the UK Air Pollution Information System (APIS) website (APIS, 2022)

2.3.13 Critical loads for acidification have been set in the UK using an empirical approach for non-woodland habitats on a 1km grid square based upon the mineralogy and chemistry of the dominant soil series present in the grid square, and the simple mass balance (SMB) equation for both managed and unmanaged woodland habitats.

## 2.4 Planning Policy

### National Planning Policy

2.4.1 The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how they are expected to be applied (Ministry of Housing, Communities & Local Government, 2021). The following paragraphs are considered relevant from and air quality perspective.

2.4.2 Paragraph 174 on conserving and enhancing the natural environment states:

*"Planning policies and decisions should contribute to and enhance the natural and local environment by: …*

*e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land stability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans, and…"*

2.4.3 Paragraph 180 within habitats and biodiversity states:

*"When determining planning applications, local planning authorities should apply the following principles:*

*a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*

*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;*

*c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*

*d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate".*

2.4.4 Paragraph 185 within ground conditions and pollution states:

*"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."*

2.4.5 Paragraph 186 states that:

*"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."*

## National Planning Practice Guidance

2.4.6 The Government maintains a series of online Planning Practice Guidance which supplements the NPPF. Paragraph 002 Reference ID: 32-002-20191101 (revision date 01.11.2019), of the PPG: Air Quality provides guidance on the role of plan-making with regard to air quality as follows:

*"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.*

*Drawing on the review of air quality carried out for the local air quality management regime, plans may need to consider:*

- *what are the observed trends shown by recent air quality monitoring data and what would happen to these trends in light of proposed development and / or allocations;*
- *the impact of point sources of air pollution (pollution that originates from one place);*
- *the potential cumulative impact of a number of smaller developments on air quality as well as the effect of more substantial developments, including their implications for vehicle emissions;*
- *ways in which new development could be made appropriate in locations where air quality is or is likely to be a concern, and not give rise to unacceptable risks from pollution. This could, for example, entail identifying measures for offsetting the impact on air quality arising from new development including supporting measures in an air quality action plan or low emissions strategy where applicable; and*
- *opportunities to improve air quality or mitigate impacts, such as through traffic and travel management and green infrastructure provision and enhancement.*

*As part of the strategic environmental assessment or sustainability appraisal of a plan, consideration will need to be given to potential trends in air quality in the presence and absence of development, as well as any impacts and mitigation / improvement opportunities arising from the plan's proposals."*

2.4.7 Paragraph 008, Reference 32-008-20140306 (revision date 01.11.2019), of the PPG provides guidance on how an impact on air quality can be mitigated:

*"Mitigation options will need to be locationally specific, will depend on the proposed development and need to be proportionate to the likely impact. It is important that local planning authorities work with applicants to consider appropriate mitigation so as to ensure new*

*development is appropriate for its location and unacceptable risks are prevented. Planning conditions and obligations can be used to secure mitigation where the relevant tests are met.*

*Examples of mitigation include:*

- *Maintaining adequate separation distances between sources of air pollution and receptors;*
- *Using green infrastructure, trees, where this can create a barrier or maintain separation between sources of pollution and receptors;*
- *Appropriate means of filtration and ventilation;*
- *Including infrastructure to promote modes of transport with a low impact on air quality (such as electric vehicle charging points);*
- *Controlling dust and emissions from construction, operation and demolition; and*
- *Contributing funding to measures, including those identified in air quality action plans and low emission strategies, designed to offset the impact on air quality arising from new development."*

## 2.5 Assessment Guidance

2.5.1 The primary guidance documents used in undertaking this assessment are detailed in the section below.

### Relevant Local Guidance

### DEFRA 'Local Air Quality Management Technical Guidance (LAQM.TG(16))'

2.5.2 DEFRA LAQM.TG(16) was published for use by local authorities in their LAQM review and assessment work (DEFRA, 2021). The document provides key guidance on aspects of air quality assessment, including screening, use of monitoring data, and use of background data that are applicable to all air quality assessments.

### IAQM 'Guide to the Assessment of Air Quality Impacts on Designated Nature Conservation Sites'

2.5.3 The IAQM has published guidance on the assessment of air quality impacts on designated nature conservation sites (IAQM, 2019) which adopts a similar procedure to that detailed in Natural England guidance on the assessment of road traffic emissions (Natural England, 2018) and identifies that exhaust pipe emission of ammonia is an additional relevant pollutant when assessing nitrogen deposition to sensitive ecological features.

### JNCC 'Guidance on Decision-making Thresholds for Air Pollution'

2.5.4 The JNCC has published guidance (Chapman & Kite, 2021) on decision making thresholds (DMT) to help inform the assessment of the impacts of air quality on designated nature conservation sites.

2.5.5 These DMTs have been derived through an assessment which aims to consider the cumulative effects of plans and projects which might be excluded from further assessment. These DMT are intended to be applied to individual developments (as opposed to a Local Plan) to identify which are below a relevant threshold can properly be discounted on the basis that their contribution to an overall combined effect will not undermine the achievement of the conservation objectives or make a meaningful contribution to a significant effect.

2.5.6 In relation to local plans, the JNCC guidance (JNCC, 2022a) identifies that a ‘zone of influence’ of 10km from the ‘plan’ boundary is appropriate recognising that the effects of growth from development beyond 10km will have been accounted for in the Nitrogen Futures business as usual scenario.

# 3 Local Plan Update Growth Scenarios

## 3.1 Overview

3.1.1 The Transport Assessment (Stantec, 2021) considered the transport implications of the following different growth and mitigation options:

| Scenario | 1 | 2a | 2b | 2c | 2d | 3a | 3b | 3c | 3d | 4a | 4b | 5a | 5b | 6a | 6b | 6c | 7a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Completed? | | | | | | | | | | | | | | | | | |
| Baseline | | | | | | | | | | | | | | | | | |
| Current Draft Allocations | | | | | | | | | | | | | | | | | |
| Ph1 Science Pk | | | | | | | | | | | | | | | | | |
| Ph2 Science Pk | | | | | | | | | | | | | | | | | |
| Cine Valley (replace Ph2 science pk) | | 95,000m² | 95,000m² | 95,000m² | 95,000m² | 95,000m² | 95,000m² | 95,000m² | 95,000m² | | | | | 95,000m² | 95,000m² | 95,000m² | 95,000m² |
| Hall Farm | | 4450 | 4450 | 4450 | 4450 | 4450 | 4450 | 4450 | 4450 | | | | | 4450 | 3000 | 4000 | 4450 |
| Four Valleys | | 354,000m² | 354,000 m² | 178,000 m² | 178,000 m² | 354,000 m² | 354,000 m² | 354,000 m² | 354,000 m² | | | | | | | | 100000 m² |
| SWSDL Extension | | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 |
| Additional Smaller Sites | | | | | | | | | | | | | | | | | |
| Ashridge | | | | | | | | | | 3000 | 3000 | 3000 | 3000 | | | | |
| Bridge over M4 | | | | | | | | | | | | | | | | | |
| New M4 Junction | | | | | | | | | | | | | | | | | |
| With Mitigation | | | Package 2 + SW | | Package 3 + SW | | | | | | Ashridge +SW | | Ashridge +SW | Package 1 + SW | Package 1 + SW | Package 1 + SW | Package 2 + SW |
| Hall Farm Hospital | | | | 1000 bed | 1000 bed | | | | | | | | | | | | |

3.1.2 This Air Quality LPU Growth Scenario Appraisal considers a subset of these scenarios (specifically scenarios 3d, 6a and 7a) which relate to different development quantum and mitigation options relating to the Hall Farm site as summarised in the following sections.

3.1.3 This Air Quality LPU Scenario Appraisal is informed by Transport Modelling undertaken using the Wokingham Strategic Transport Model 4 (WSTM4) model for the 2038 forecast year.

## 3.2 Reference Case

3.2.1 The Reference Case model will be used as the basis of comparison with the growth scenarios and will inform the impacts and mitigation that would be required should the growth be delivered. The Reference Case therefore includes all committed growth up to 2038 which results from development in neighbouring authorities and growth within Wokingham Borough, excluding likely growth associated with emerging Local Plan. The Reference Case therefore presents a picture of air quality conditions, prior to the addition of the potential growth scenarios as part of the LPU.

3.2.2 The following schemes are included in the 2038 forecast scenarios, the majority of which are now implemented and operational:

- M4 Smart Motorway (Junction 3-12)
- Elms Road Link Road
- Winnersh Relief Road Phase 1

  *A Link road including new junctions with King Street Lane and Lower Earley Way*
- Winnersh Relief Road Phase 2

  *A link road connecting B3030 King Street Lane / Winnersh Relief Road Phase 1 to the A329 Reading Road*
- Arborfield Cross Relief Road (ACRR);

- North Wokingham Distributor Road (NWDR);

  *The NWDR will connect the A329 near the BP garage on Reading Road, with the A329(M) Reading to Bracknell motorway near the Coppid Beech roundabout junction.*

- South Wokingham Distributor Road (SWDR);

  *Following on from the development on William Heelas Way in Montague Park, the SWDR will join with Waterloo Road, and then run west across Easthampstead Road to Finchampstead Road - connecting at the existing Tesco roundabout.*

- Shinfield Eastern Relief Road (SERR).

  *A 2km length of single carriageway road running eastwards from the new signalised junction, crossing Cutbush Lane and joining the existing A327, Arborfield Road at a new roundabout located between the Parrot Farmhouse and Magpie and Parrot Public House*

- Nine Mile Ride Extension (NMRE)

  *NRME connects the existing A327 Eversley Road in the north with the Nine Mile Ride / Park Lane junction in the south.*

- Barkham Bridge

  *The Barkham Bridge project consists of a new bridge structure across the Barkham Brook and approximately 300 metres of associated carriageway realignment.*

3.2.3 The overall traffic growth outside of Wokingham Borough for neighbouring authority traffic is set to NTEM forecasts. Trips for large development sites close to the Wokingham Borough boundary have been added to the model where deemed to impact the Wokingham Borough or strategic road network within proximity to the borough.

3.2.4 Neighbouring local authorities to Wokingham Borough are also in the process of producing new local plans. National planning policy requires cross boundary cooperation to share as much information as possible to reach agreements on strategic matters. Local authorities where impacts will need to be considered include Bracknell Forest Council (BFC), Reading Borough Council (RBC), West Berkshire District Council (WBDC), Hart District Council (HDC) and Royal Borough of Windsor Maidenhead (RBWM). There may also be other local authorities that are not immediately adjacent to Wokingham Borough, but are important to engage with given strategic issues, for example due to the Strategic Road Network extending into wider areas and commuting patterns.

3.2.5 Neighbouring authorities, namely Basingstoke and Deane Borough Council (BDBC), BFC, HDC, RBC, WBDC, Buckinghamshire Council (BC), RBWM and South Oxfordshire District Council (SODC) and Vale of White Horse District Council (VWHDC), were contacted to provide details of commitments in their development plans to inform the transport modelling.

3.2.6 Development plans from these authorities informed the development assumptions in the Reference Case transport model scenario.

## 3.3 Local Plan Update Growth Scenarios

3.3.1 The full range of the growth scenarios are defined in the Transport Assessment (Stantec, 2021) (with and without required mitigation), and the following scenarios have been subject to Air Quality assessment within this scenario appraisal:

- **Scenario 3d** – 4,450 dwellings at Hall Farm, 354,000m² of employment at Four Valleys, 920 dwellings at South Wokingham extension, associated mitigation for both strategic sites, smaller development parcels and a new M4 junction.

- **Scenario 6a** - 4,450 dwellings at Hall Farm, no additional employment at Four Valleys, 920 dwellings at South Wokingham extension, associated mitigation for both strategic sites, smaller development parcels and no M4 junction, but a bridge connecting Hall Farm to Lower Earley.

- **Scenario 7a** – 4,450 dwellings at Hall Farm, 100,000m² of science park type employment at Four Valleys, 920 dwellings at South Wokingham extension, associated mitigation for both strategic sites, smaller development parcels and no M4 junction, but a bridge connecting Hall Farm to Lower Earley.

# 4 Assessment Methodology

4.1.1 The assessment methodology detailed in the following sections has been applied to ascertain the potential impacts of emissions to air associated with growth scenarios in order to identify whether or not additional mitigation is required.

## 4.2 Impacts at Human Receptors

**Identification of Receptors**

4.2.1 Relevant sensitive human receptor locations are places where members of the public might be expected to be regularly present over the averaging period of the NAQOs. The $NO_2$, $PM_{10}$ and $PM_{2.5}$ annual mean and 1-hour mean NAQO sensitive locations include largely residential dwellings. When identifying the receptors, particular attention has been paid to assessing impacts close to junctions, traffic lights and roundabouts where traffic may become congested, where there is a combined effect of several road links and routes along which substantial volumes of traffic generated will travel. In some cases, traffic arising from the growth scenarios result in a redistribution of traffic on the local network.

4.2.2 Based on these criteria, 1,146 sensitive receptors have been identified for the assessment. These locations are shown in **Figure 4-1, Appendix F** Concentrations of pollutants ($NO_2$, $PM_{10}$ and $PM_{2.5}$) have been predicted at sensitive existing properties and within the LPU sites to allow comparison with the NAQOs.

4.2.3 Concentrations have also been predicted at one automatic monitoring station and diffusion tube monitoring sites within Wokingham in order to verify the modelled results. Paragraphs 4.2.14 – 4.2.16 and **Appendix C** provide further details on the verification method.

**Modelling Approach**

4.2.4 The following scenarios have been modelled:

- 2015 Traffic Model Baseline and Air Quality Model Verification;
- 2038 Reference Case (excluding potential LPU growth but including committed developments);
- 2038 Scenario 3d (including forecast growth on the local network and Growth Scenario 3d**)**;
- 2038 Scenario 6a (including forecast growth on the local network and Growth Scenario 6a);
- 2038 Scenario 7a (including forecast growth on the local network and Growth Scenario 7a)

4.2.5 The assessment for human health has considered all roads within the WBC administrative area contained within WSTM4, and roads on the model network up to 300m from the borough boundary to capture impacts of roads beyond the boundary on sensitive receptors.

4.2.6 Emissions from road vehicles and their resultant impact at receptor locations have been predicted using the ADMS-Roads dispersion model (v5.0.0.1). The model requires the user to provide various input data, including traffic flows (in AADT format), vehicle composition (i.e. the proportion of Heavy Duty Vehicles (HDVs)), road characteristics (including road width, gradient and street canyon dimensions, where applicable), and average vehicle speed.

4.2.7 AADT flows, speeds and the proportions of HDVs, for roads within the study area have been provided by the Project's transport consultants, Stantec, extracted from WSTM4. The road geometry and widths have been derived from OS MasterMap data.

4.2.8 Road vehicular emissions are primarily associated with the exhaust emissions but also include particles generated from abrasion (of tyres, brakes and road). The EFT allows users to calculate road vehicle pollutant emission rates for NOx, $PM_{10}$ and $PM_{2.5}$ (exhaust and brake, tyre and road wear) for a specified year, road type, vehicle speed and vehicle fleet composition. Traffic emissions have been calculated using the Emission Factor Toolkit (EFT) v11 (DEFRA, 2020c), which utilises NOx emission factors taken from the European Environment Agency (EEA) COPERT 5.3 emission tool. The traffic data were entered into the EFT to provide emission rates for each of the road links within the traffic model.

4.2.9 The EFT provides pollutant emission rates for 2018 through to 2030 (and 2050 in EFTv11) and takes into consideration bespoke vehicle fleet information as well as the following information available from the National Atmospheric Emissions Inventory (NAEI):

- fleet composition data for motorways, urban and rural roads in the UK (excluding London);
- fleet composition based on European emission standards from pre-Euro I to Euro6/VI (including Euro 6 subcategories);
- scaling factors reflecting improvements in the quality of fuel and some degree of retrofitting; and
- technology conversions in the national fleet.

4.2.10 As a result of this the road vehicle exhaust emissions of NOx are projected to decrease year-on-year due to technological advances and improvements to the fleet mix i.e. penetration of Euro VI HDVs, which recent research suggests are performing well and are considered reasonably certain to continue to be delivered. Whilst there has been uncertainty over NOx emissions from vehicle exhausts (particularly from Euro 5 and 6 LDVs) it is important to note the EFT is not based on the Euro emission standards. Specifically, the latest version of the EFT (v11) includes updated NOx and PM speed emission coefficient equations for Euro 5 and 6 vehicles taken from the EEA COPERT 5.3 emission calculation tool, reflecting emerging evidence on the real-world emission performance of these vehicles.

4.2.11 Whilst the EFT (v11) provides pollutant emission rates upto 2035, beyond 2030 these are primarily provided to inform climate assessments and air pollutant emissions subject to significant uncertainty; therefore 2030 emission factors were applied in the 2038 growth scenarios. This is considered to represent a conservative assessment, given the assumed completion of all allocated developments by 2038. With regards to the verification and baseline models, 2015 vehicle fleet composition was imported from a previous version of the EFT (v11) and run with custom fleet to provide emissions equivalent to the 2015 fleet mix, but using the latest emission factors provided in EFT v11.

4.2.12 Background pollutant concentrations for the study area have been taken from Defra's national maps, which are provided on a 1km x 1km grid with 'sector removal' for modelled road types. An interpolation exercise has been undertaken to reduce any step changes that may occur as a result of Defra's maps resolution.

4.2.13 The model also requires meteorological data and has been run using 2015 meteorological data from the Farnborough meteorological station, which are considered suitable for this area. To account for differing locations within the study area and best represent the dispersion in the receptor location, the Urban Canopy flow option in ADMS-Roads has been used. **Appendix B** provides further details on the model inputs.

**Model Verification**

4.2.14 A comparison of NOx modelled results with monitoring results within the study area has been undertaken using the approach recommended in Defra's Local Air Quality Management Technical Guidance (TG16). The following verification zones (as shown in **Figure 5-1**) have been applied depending on the monitoring location setting and whether it is located within an AQMA:

- Zone A: Twyford village- verification factor of 4.90;
- Zone B: Wokingham Town and Wokingham West urban areas - verification factor of 1.72;
- Zone C: M4 area - verification factor of 1; and
- Zone D: Wokingham Rural – verification factor of 1.47.

4.2.15 The calculated emission factors imply that the model has under-predicted the road NOx contribution. This is a common experience with this and most other models. With regards to Modelled $PM_{10}$ and $PM_{2.5}$ have been adjusted using the verification factors obtained for NOx.

4.2.16 Details of the verification factor calculations and the monitoring sites included in the verification process are presented in **Appendix C**.

**Processing of Modelled Results**

4.2.17 In accordance with LAQM TG(16), all modelled road-based concentrations of NOx were converted to annual mean $NO_2$ using the NOx to $NO_2$ calculator (Defra, 2020).

4.2.18 Once processed, the predicted concentrations were compared against the relevant NAQOs for $NO_2$, $PM_{10}$ and $PM_{2.5}$.

## 4.3 Impacts at Ecological Receptors

4.3.1 In order to inform the assessment of the impact of traffic emission associated with the potential growth under the LPU, the following scenarios have been investigated:

- 2015 Baseline (for verification)'
- 2038 Do Nothing (DN) – a theoretical future baseline with no traffic growth between the baseline and 2038, but with anticipated reduction in emissions from traffic and background concentrations
- 2038 Do Minimum (DM) – the 'reference case' traffic model scenario with forecast growth on the local road network between the baseline and 2038, but with anticipated reduction in emissions from traffic and background concentrations
- 2038 Do Something (DS) – Forecast growth on the local road network between the 2015 baseline and 2038 plus growth due to the implementation of the differing growth scenarios (3d, 6a,7a) with anticipated reduction in emissions from traffic and background concentrations

4.3.2 The results for the Do-Minimum and Do-Something scenarios have been compared to show the impacts of the growth scenarios 'in isolation'.

4.3.3 The results of the Do-Nothing and Do-Something scenarios have been compared to identify the potential 'in-combination' impacts associated with the growth scenarios and other projects and plans (although it should be noted that many of these have already been developed given the 2015 base year).

**Identification of Relevant Roads and Receptors**

4.3.4 In relation to ecological receptors, guidance (NE, 2018 and IAQM, 2020) indicates that a detailed (quantitative) air quality assessment of impacts is required where there are sensitive habitats (within designated sites) within 200 m of a road with a ‘potentially significant change’. If there are no designated sites containing sensitive habitats within 200 m of an affected road, then no further assessment is required as research shows (NE, 2018) that there is no credible risk of a significant effect beyond 200m from a road which might undermine a site’s conservation objectives.

4.3.5 The ‘potentially significant change’ could be associated with carriageway realignment (i.e. increased proximity to receptors), changes to speed (>10 kph) or traffic flow. The applied screening criteria for changes in road traffic flows is a change of LDV flows of more than 1,000 AADT (or HDV flows of more than 100 AADT).

4.3.6 This change in traffic flows has been shown (NE, 2018) to not have the potential to result in changes to annual NOx in excess of 0.3 $\mu g/m^3$ (i.e 1% of the critical level of 30 $\mu g/m^3$) within a few meters of roadside. Changes in traffic flows below these criteria are therefore not considered to have the potential to result in a significant effect which might undermine a site’s conservation objectives.

4.3.7 Whilst the JNCC guidance (JNCC, 2022a) does not provide screening thresholds for changes in traffic flows applicable to ‘plans’, to enable a proportionate assessment ,within 10km of the WBC boundary the threshold of 1,000 AADT (as explained in 4.3.6) has been applied to the ‘in-combination’ change in traffic flows and a screening criterion of 50 AADT has been applied to ‘in-isolation’ increases in traffic flows associated with the growth scenarios.

4.3.8 This ‘in-isolation’ screening criteria was agreed during consultation with NE and JNCC research[1] (JNCC, 2022b) indicates that such changes in traffic flows are unlikely to lead to impacts in excess of 0.5% of the annual average critical level for NOx or critical load for N-deposition at 1m from road edge are therefore not considered to have the potential to result in a significant effect which might undermine a site’s conservation objectives.

**Modelling Approach**

4.3.9 All roads from the WSTM4 within 1km of the identified relevant ecological receptors (as shown on **Figure 6-1**) have been included within the model, with road geometry adjustment (to align with OS basedata) within 500 m.

4.3.10 A variable surface roughness file has been incorporated within the modelling to account for difference in land characteristics actors the study area.

4.3.11 In order to quantify the potential impact of air pollutant from traffic on ecological receptors, the EFT has been applied (with a 2030 emission year for the growth scenarios) to quantify NOx emissions and emissions of ammonia ($NH_3$) are calculated using the Calculator for Road Emissions of Ammonia (CREAM[2]) tool (with a 2030 emission year for the growth scenarios).

4.3.12 The ADMS Roads has been used to calculate concentrations of NOx and $NH_3$ at a range of transects at increasing distances from the adjacent road (at site boundary and 5m increments

[1] Table 12 & 13 of the JNCC research tabulates the AADT change that could result in a 1% change of critical level or load at 1m from road edge, this exceeds 100 AADT for a majority of habitats and is based on 2019 emission factors.

[2] Air Quality Consultants (2020). ‘Calculator for Road Emissions of Ammonia (CREAM) v1A.’ Available at: https://www.aqconsultants.co.uk/resources

for first 30m from the road, then 10m until 50m from the road, then 25m until 200m from the road). The resultant nitrogen (and acid) deposition rates have been calculated using deposition velocities for grassland habitats of 1.5mm/s for $NO_2$ and 20mm/s for $NH_3$, and for taller vegetation such as trees of 3mm/s for $NO_2$ and 30mm/s for $NH_3$

4.3.13 For these receptors, existing critical levels and critical loads for habitats within the study area were collated from the Air Pollution Information System website (APIS, 2022).

**Model Verification**

4.3.14 For the calculation of impacts of NOx at ecological receptors, a separate verification study was undertaken utilising diffusion tubes within Bracknell Forest Borough; these locations are outside of main urban areas and in relative proximity to the ecological receptors. Monitoring data reported in the BF Pre-Submission Local Plan within the ecological designations comprised of 3-months of $NO_2$ data from March 2019 which was then annualised and converted to NOx for use in model verification against the 2019 traffic model for BFC. This monitoring indicated widespread exceedances of the annual mean critical level for NOx however it is not considered applicable to this assessment as the year of monitoring does not correspond to the WSTM4 baseline year (2015).

4.3.15 The model verification study is summarised in **Appendix D** and a factor of 2.785 applied to modelled road-NOx concentrations which is considered typical for this type of assessment.

4.3.16 Model results of ammonia have not been verified as the emission factors are derived from roadside measurement and therefore verification is not required.

**Assessment of Impacts**

4.3.17 In terms of the impact of road traffic emissions on ecological receptors, an impact of less than 1% of the critical level or load is accepted to be a pragmatic threshold for determining no likely significant effects (Natural England, 2018). It should be noted that an impact of more than 1% is not, per se, an indication that a significant effect exists, only the possibility of one. which would trigger the need for further, more detailed assessment of the ecological sensitivity and value of the habitat.

4.3.18 Where the predicted impact exceeds 1%, consideration needs to be given to the overall critical level or load (within an ecological assessment) to ascertain the potential significant of the impact and resultant effects.

## 4.4 Assumptions and Limitations

4.4.1 There are many components that contribute to the uncertainty in predicted concentrations. The model used in this assessment is/are dependent upon the traffic that have been input which will have inherent uncertainties associated with them. There is then additional uncertainty as the model is required to simplify real-world conditions into a series of algorithms.

4.4.2 There has been an acknowledged disparity between national road transport emissions projections and measured annual mean concentrations of nitrogen oxides (NOx) and $NO_2$ for many years. Recent monitoring has shown that reductions in concentrations are now being measured in many parts of the country (Air Quality Consultants Ltd., 2020), however, there is still some uncertainty regarding the rate at which emissions will reduce in the future and therefore some consideration must be given to the accuracy of any projection and to appropriately respond to this.

4.4.3 To account for this uncertainty, the growth scenario appraisal has been based on 2030 emission factors and background concentrations, whilst utilising traffic flows for 2038. This is considered to provide an appropriately conservative assessment taking into account the uncertainties regarding future vehicle emission factors.

# 5 Predicted Impacts on Human Receptors

## 5.1 Baseline Air Quality

5.1.1 The study area does not contain any predicted or measured exceedances of an EU Limit Values either in the current year or the future year. The study area is not within a zone where DEFRA have reported an exceedance of an EU Limit Values in future years.

### LAQM

5.1.2 WBC has investigated air quality within its administrative area as part of its responsibilities under the Local Air Quality Management (LAQM) regime. WBC has declared three Air Quality Management Areas (AQMAs) as follows (as shown in **Figure 5-1):**

- The Wokingham AQMA – an area encompassing properties along the M4 motorway, and along part of the A329 where it passes under the M4;
- The Twyford Crossroads AQMA – an area which covers residential and commercial properties along parts of the High Street, Wargrave Road, London Road and Church Street; and
- The Wokingham Town Centre AQMA – an area which covers residential and commercial properties along a small part of Reading Road and Station Road in the northwest, along Shute End and into Broad Street and Denmark Street in the south-west and Peach Street into London Road in the west.

5.1.3 All AQMAs were declared due to exceedances of the annual mean nitrogen dioxide ($NO_2$) National Air Quality Objective (NAQO) and the Wokingham (M4) AQMA was also declared for exceedances of the hourly mean NAQO.

5.1.4 WBC undertakes automatic continuous monitoring of $NO_2$ concentrations at two sites, and passive monitoring using diffusion tubes at 46 locations. No particulate matter ($PM_{10}$ and $PM_{2.5}$) monitoring is undertaken at present.

5.1.5 Concentrations of $NO_2$ measured within WBC administrative area are provided in **Table 5-1** below, and their locations in relation to the AQMA's are shown in **Figure 5-1**. Where there have been exceedances of the NAQO these are highlighted in bold. 2020 monitoring results have not been included in **Table 5-1**, as these are not considered to be representative due to COVID-19 restrictions in place during 2020. The 2021 data was not available at the time of writing.

5.1.6 The data shows that the NAQO for annual mean $NO_2$ was generally met at most monitoring locations, with the exception of some diffusion tubes within the Wokingham Town Centre AQMA and the Twyford Crossroads AQMA, where the annual mean was slightly exceeded in recent years. All mean concentrations were less than 60 µg/m$^3$, which indicates no exceedances of the 1-hour $NO_2$ objective.

5.1.7 Overall, the diffusion tube sites $NO_2$ levels in Wokingham Borough have shown a decreasing trend in $NO_2$ since 2015, a trend that is generally evident nationwide (AQC, 2020a).

Table 5-1 Measured Annual Mean $NO_2$ Concentrations 2015 – 2019

| Site ID | Site Name | Site Type | Within AQMA | Annual Mean (µg/m³) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | 2015 | 2016 | 2017 | 2018 | 2019 |
| **Automatic Site** | | | | | | | | |
| CM2* | Peach Street | Roadside | Y | 35 | **41.3** | 38.1 | 32.9 | 33.0 |
| CM3 | Twyford Cross Roads | Kerbside | Y | - | - | - | - | 29.9 |
| **Diffusion Tubes** | | | | | | | | |
| WOK11* | Robin Hood Lane, Winnersh | Roadside | N | 32 | 31.9 | 35.4 | 29.2 | 32.0 |
| WOK19* | Thames Street (by bridge), Sonning | Roadside | N | 27 | 22.2 | 31.1 | 26.5 | 28.9 |
| WOK52* | Westende Flats, London Road, Wokingham | Urban Centre | N | 33 | 30.8 | 34.9 | 29.2 | 30.3 |
| WOK53* | Dunt Lane, Hurst | Roadside | Y | 27 | 22 | 27.8 | 22.8 | 22.1 |
| WOK70* | Longdon Road, Winnersh | Roadside | Y | 29 | 25 | 28.5 | 27.3 | 25.5 |
| WOK71* | 38 King Street Lane, Winnersh | Roadside | N | 33 | 24.3 | 33.1 | 30.2 | 31.9 |
| WOK98* | 309 Reading Road, Winnersh | Roadside | Y | 32 | 29 | 37.1 | 31.1 | 25.4 |
| WOK503* | 25, Rainworth Close Lower Earley | Suburban | N | 31 | 27 | 32.2 | 26.7 | 27.5 |
| WOK505* | 23 Church Road Earley | Roadside | N | 38 | 31.5 | 38.3 | 36.9 | 36.5 |
| WOK509* | Henley Bridge Remenham | Roadside | N | 27 | 24.4 | 28.1 | 23.8 | 23.9 |
| WOK601* | Sadler's Lane Winnersh | Roadside | Y | 25 | 24.8 | 23.1 | 22.4 | 20.0 |
| WOK602* | 2 Green Lane Winnersh | Roadside | Y | 28 | 27.4 | 26 | 25.2 | 21.2 |
| WOK803* | 3 Wellington Road, Wokingham | Roadside | N | 28 | 29.1 | 32.1 | 30.7 | 30.7 |
| WOK805* | 18 Barkham Road, Wokingham | Roadside | N | 24 | 27 | 25.9 | 237 | 25.0 |
| WOK817* | 298 London Road,Wokingham | Roadside | N | 29 | 26.1 | 33.1 | 28.8 | 21.6 |
| WOK825* | High Street south, Wargrave | Roadside | N | 35 | 36 | 35.6 | 29.5 | 31.1 |
| WOK827* | The Old Station House, Station Road, Twyford | Kerbside | N | 27 | 23.4 | 27.9 | 21.4 | 20.6 |
| WOK829* | Long Acre, Thames Street, Sonning | Roadside | N | 31 | 33 | 33.3 | 28.0 | 28.6 |
| WOK835* | 14, Robinhood Lane, Winnersh | Roadside | N | 33 | 28.5 | 32.4 | 27.9 | 26.6 |

| Site ID | Site Name | Site Type | Within AQMA | Annual Mean (µg/m$^3$) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | 2015 | 2016 | 2017 | 2018 | 2019 |
| WOK836 | 343 Old, Whitley | Roadside | Y | 38 | 29.6 | 33.6 | 26.2 | 27.0 |
| WOK838* | Giggling Spring Shute End Wokingham | Roadside | Y | **43** | **45** | **44** | **41.3** | **41.8** |
| WOK840 | 30 Finbeck Way, Lower Earley | Suburban | N | 24 | 24 | 24.9 | 21.6 | 24.8 |
| WOK841* | 2 Lane End Villas, Shinfield | Roadside | N | 39 | 37.2 | 39.1 | 30.1 | 33.3 |
| WOK842* | Foxglade, Brookers Hill, Shinfield | Other | Y | 26 | 29 | 25 | 24.6 | 20.0 |
| WOK844* | Buckingham Court, Wokingham | Roadside | Y | 39 | **40.5** | **45** | 36 | 38.6 |
| WOK846* | 4 Hatch Farm Cottages, Sindlesham | Roadside | Y | 27 | 29 | 27.4 | 25.6 | 21.6 |
| WOK847* | Wellness Clinic, High Street, Wargrave | Roadside | | 34 | - | - | - | - |
| WOK850* | 19 High Street, Twyford 1 | Roadside | Y | **46** | **43** | **44.9** | **42.6** | **42.8** |
| WOK857* | 1 Rectory Road, Wokingham | Roadside | Y | **41** | **45** | **49.1** | 39.3 | 39.9 |
| WOK861* | Mill Lane (by bridge), Sindlesham | Roadside | N | 42 | 29 | 34.1 | 26.3 | 23.2 |
| WOK863* | 3 Wargrave Road, Twyford | Roadside | Y | 35 | 33.3 | 36.7 | 34.6 | 30.7 |
| WOK864* | 1 Waltham Road, Twyford 1 | Roadside | N | **42** | **43** | **41.8** | 35.7 | 36.9 |
| WOK866* | 58 Denmark Street, Wokingham | Roadside | N | 31 | 32 | 27.6 | 23.6 | 25.3 |
| WOK867* | 21 Denmark Street, Wokingham | Roadside | Y | 28 | 28.2 | 27.6 | 23.1 | 23.7 |
| WOK868[a] | 59 London Road, Wokingham | Roadside | Y | 31 | 27.8 | 30.5 | 30.3 | 27.7 |
| WOK869* | Muille 26, High Street, Twyford | Roadside | N | 32 | 28.1 | 30.7 | 28.1 | 27.1 |
| WOK870* | Hunt&Nash, Church Street, Twyford | Roadside | Y | 33 | 33 | 34 | 29.3 | 29.0 |
| WOK871* | 15 London Road, Twyford 1 | Roadside | N | 32 | 30.7 | 32.3 | 27.4 | 27.3 |
| WOK872* | Old Registry Office, Reading Road, Wokingham | Roadside | Y | 32 | 36.4 | 38.1 | 33.2 | 32.4 |
| WOK873* | 27 The Terrace,Wokingham | Roadside | N | 27 | 27 | 26.5 | 24.6 | 24.7 |
| WOK874 | Corner Broad St & Rose St, Wokingham | Roadside | Y | 23 | 24.9 | 26.9 | 27.9 | 28.9 |
| WOK875* | 15 London Road Twyford 2 | Roadside | N | 31 | 30.7 | 31.8 | 27.4 | 27.3 |
| WOK876* | 15 London Road, Twyford 3 | Roadside | N | 32 | 30.7 | 32.7 | 28.4 | 27.3 |
| WOK877* | Almshouses, London Road, Twyford | Roadside | N | 27 | 25.9 | 26.9 | 22.9 | 22.9 |

| Site ID | Site Name | Site Type | Within AQMA | Annual Mean (µg/m³) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | 2015 | 2016 | 2017 | 2018 | 2019 |
| WOK878* | 17 Wargrave Road, Twyford | Roadside | N | 28 | 27.4 | 30.2 | 25.2 | 25.7 |
| WOK879* | Peach Street Unit 1 | Roadside | Y | 38 | 35.5 | 39.0 | 33.4 | 36.7 |
| WOK880* | Peach Street Unit 2 | Roadside | Y | 36 | 35.5 | 39.7 | 33.4 | 36.7 |
| WOK881* | Peach Street Unit 3 | Roadside | Y | 38 | 35.5 | 38.9 | 33.4 | 36.7 |
| WOK882 | 341 Whitley Wood Lane, Shinfield | Roadside | N | 38 | 35.5 | 38.9 | 33.4 | 36.7 |
| WOK 883 | Evendons Primary School | Roadside | N | - | - | - | 31.1 | 29.1 |
| WOK 884 | -- | Roadside | Y | - | - | - | **43** | 30.5 |
| WOK 885 | -- | Roadside | N | - | - | - | | 30.5 |
| WOK 886 | -- | Roadside | N | - | - | - | - | 30.5 |
| WOK 887 | 19 High Street, Twyford 2 | Roadside | Y | - | - | - | **42.6** | **42.8** |
| WOK 888 | 19 High Street, Twyford 3 | Roadside | Y | - | - | - | **42.6** | **42.8** |
| WOK 889[a] | 1 Waltham Road, Twyford 2 | Roadside | N | - | - | - | 35.3 | 37.9 |
| WOK 890 | 1 Waltham Road,Twyford 3 | Roadside | N | - | - | - | 35.6 | 36.2 |
| WOK 891 | | Roadside | N | - | - | - | - | 22.2 |
| | **NAQO** | | | **40** | | | | |

2015 – 2019 data taken from the WBC Air Quality Annual Status Report for 2019 (WBC, 2020).
[a] Low data capture.
* Used for model verification.

## 5.2 Reference Case

5.2.1 The Reference Case includes all committed growth up to 2038 which results from development in neighbouring authorities and growth within Wokingham Borough, excluding likely growth associated with emerging Local Plan. The Reference Case therefore presents a picture of air quality conditions, prior to the addition of the potential growth scenarios as part of the LPU.

5.2.2 Predicted concentrations of $NO_2$, $PM_{10}$ and $PM_{2.5}$ at the ten receptor locations with the highest concentrations are presented in **Table 5-2** to **Table 5-4** below.

Table 5-2 Highest Ten Predicted Annual Average Concentrations of $NO_2$ (µg/m³)

| Receptor | Reference Case Annual Average $NO_2$ (µg/m³) |
|---|---|
| WW_6 | 28.2 |
| WW_194 | 24.1 |
| TWY_76 | 23.0 |
| WW_204 | 22.9 |
| TWY_30 | 22.1 |
| WW_25 | 22.1 |
| TWY_75 | 21.9 |
| WW_377 | 21.9 |
| WW_374 | 21.8 |
| TWY_77 | 21.7 |
| **Air Quality Objective (AQO)** | **40** |

Table 5-3 Highest Ten Predicted Annual Average Concentrations of $PM_{10}$ (µg/m³)

| Receptor | Reference Case Annual Average $PM_{10}$ (µg/m³) |
|---|---|
| WW_6 | 23.3 |
| WW_194 | 21.7 |
| TWY_76 | 21.5 |
| TWY_77 | 21.2 |
| WW_25 | 21.0 |
| WW_16 | 20.2 |
| WW_5 | 20.0 |
| WW_171 | 20.0 |
| TWY_75 | 19.9 |
| WW_407 | 19.9 |
| **Air Quality Objective (AQO)** | **40** |

Table 5-4 Highest Ten Predicted Annual Average Concentrations of $PM_{2.5}$ (µg/m³)

| Receptor | Reference Case Annual Average $PM_{2.5}$ (µg/m³) |
|---|---|
| WW_6 | 14.7 |
| WW_194 | 14.1 |
| WW_25 | 13.6 |
| TWY_76 | 13.3 |
| WW_407 | 13.2 |
| WW_16 | 13.1 |

| Receptor | Reference Case Annual Average $PM_{2.5}$ (µg/m³) |
|---|---|
| TWY_77 | 13.1 |
| WW_204 | 13.0 |
| WW_355 | 12.9 |
| WW_203 | 12.8 |
| **Air Quality Objective (AQO)** | **20** |

5.2.3 The predicted $NO_2$, $PM_{10}$ and $PM_{2.5}$ concentrations in 2038, without the growth scenarios are below the relevant NAQOs at all existing receptors. Furthermore, predicted annual mean $NO_2$ concentrations are below 60µg/m³ at all receptors, indicating that exceedances of the 1-hour mean $NO_2$ NAQO are not likely, and the predicted annual mean $PM_{10}$ concentrations are below 32 µg/m³ at all receptors, indicating that exceedances of the 24-hour mean $PM_{10}$ NAQO are not likely.

## 5.3 LPU Growth Scenario 3d

5.3.1 LPU Growth Scenario 3d considers the impacts associated with 4,450 dwellings at Hall Farm, 354,000m² of employment at Four Valleys, 920 dwellings at South Wokingham extension, associated mitigation for both strategic sites, smaller development parcels and a new M4 junction.

5.3.2 Predicted concentrations of $NO_2$, $PM_{10}$ and $PM_{2.5}$ at the ten receptor locations with the highest concentrations as a result of the Local Plan developments tested in Scenario 3d are presented in **Table 5-5** to **Table 5-7**.

Table 5-5 Sc3d: Highest Ten Predicted Annual Average Concentrations of $NO_2$ (µg/m³) at Receptors

| Receptor | Scenario 3d Annual Average $NO_2$ (µg/m³) |
|---|---|
| WW_6 | 27.7 |
| TWY_76 | 23.4 |
| TWY_30 | 23.2 |
| TWY_77 | 22.1 |
| TWY_75 | 22.1 |
| WW_407 | 22.0 |
| WW_374 | 22.0 |
| WW_377 | 21.8 |
| TWY_34 | 21.6 |
| WW_204 | 21.4 |
| **Air Quality Objective (AQO)** | **40** |

Table 5-6 Sc3d: Highest Ten Predicted Annual Average Concentrations of $PM_{10}$ (µg/m³) at Receptors

| Receptor | Scenario 3d Annual Average $PM_{10}$ (µg/m³) |
|---|---|
| WW_6 | 22.8 |
| TWY_76 | 21.7 |
| TWY_77 | 21.4 |
| TWY_75 | 20.0 |

| Receptor | Scenario 3d Annual Average $PM_{10}$ (μg/m$^3$) |
|---|---|
| WW_194 | 19.9 |
| WW_5 | 19.9 |
| WW_25 | 19.9 |
| WW_16 | 19.8 |
| WW_407 | 19.5 |
| TWY_34 | 19.5 |
| **Air Quality Objective (AQO)** | **40** |

Table 5-7 Sc3d: Highest Ten Predicted Annual Average Concentrations of $PM_{2.5}$ (μg/m³) at Receptors

| Receptor | Scenario 3d Annual Average $PM_{2.5}$ (μg/m$^3$) |
|---|---|
| WW_6 | 14.4 |
| TWY_75 | 13.4 |
| TWY_75 | 13.2 |
| WW_191 | 13.1 |
| WW_403 | 13.0 |
| WW_20 | 12.9 |
| WW_10 | 12.8 |
| WW_197 | 12.8 |
| WW_347 | 12.7 |
| TWY_66 | 12.7 |
| **Air Quality Objective (AQO)** | **20** |

5.3.3 The predicted $NO_2$, $PM_{10}$ and $PM_{2.5}$ concentrations with Growth Scenario 3d are below the relevant NAQOs at all existing receptors. Furthermore, predicted annual mean $NO_2$ concentrations are below 60μg/m$^3$ at all receptors, indicating that exceedances of the 1-hour mean $NO_2$ NAQO are not likely, and the predicted annual mean $PM_{10}$ concentrations are below 32 μg/m$^3$ at all receptors, indicating that exceedances of the 24-hour mean $PM_{10}$ NAQO are not likely.

5.3.4 The receptors with the largest change in pollutant concentrations in relation to the reference case are shown in **Table 5-8** to **Table 5-10.**

Table 5-8 Sc3d: Highest Ten Changes in Predicted Annual Average Concentrations of $NO_2$ (μg/m³) at Receptors

| Receptor | Reference Case | Scenario 3d | Change (μg/m$^3$) | Change as % of AQO |
|---|---|---|---|---|
| TWY_30 | 22.1 | 23.2 | 1.1 | 2.7% |
| WW_37 | 15.4 | 16.3 | 0.9 | 2.4% |
| WW_38 | 15.4 | 16.4 | 0.9 | 2.3% |
| WW_34 | 15.0 | 15.9 | 0.9 | 2.3% |
| TWY_3 | 15.8 | 16.7 | 0.9 | 2.1% |
| WS_117 | 12.7 | 13.4 | 0.8 | 1.9% |
| WT_22 | 16.2 | 17.0 | 0.8 | 1.9% |
| WS_394 | 10.7 | 11.4 | 0.7 | 1.9% |
| TWY_32 | 19.8 | 20.5 | 0.7 | 1.8% |

| Receptor | Reference Case | Scenario 3d | Change (µg/m³) | Change as % of AQO |
|---|---|---|---|---|
| WW_39 | 16.0 | 16.7 | 0.7 | 1.8% |
| AQO | 40 | | | |

Table 5-9 Sc3d: Highest Ten Changes in Predicted Annual Average Concentrations of $PM_{10}$ (µg/m³) at Receptors

| Receptor | Reference Case | Scenario 3d | Change(µg/m³) | Change as % of AQO |
|---|---|---|---|---|
| TWY_3 | 17.0 | 17.5 | 0.5 | 1.2% |
| WW_37 | 17.0 | 17.5 | 0.4 | 1.1% |
| WW_34 | 17.1 | 17.5 | 0.4 | 1.1% |
| WW_38 | 17.0 | 17.5 | 0.4 | 1.1% |
| TWY_30 | 18.4 | 18.9 | 0.4 | 1.1% |
| TWY_4 | 16.4 | 16.8 | 0.3 | 0.9% |
| TWY_45 | 17.2 | 17.6 | 0.3 | 0.8% |
| TWY_28 | 16.2 | 16.5 | 0.3 | 0.8% |
| TWY_24 | 17.5 | 17.8 | 0.3 | 0.8% |
| TWY_32 | 18.1 | 18.4 | 0.3 | 0.8% |
| AQO | 40 | | | |

Table 5-10 Sc3d: Highest Ten Changes in Predicted Annual Average Concentrations of $PM_{2.5}$ (µg/m³) at Receptors

| Receptor | Reference Case | Scenario 3d | Change (µg/m³) | Change as % of AQO |
|---|---|---|---|---|
| TWY_3 | 11.1 | 11.3 | 0.3 | 1.3% |
| WW_37 | 11.6 | 11.9 | 0.2 | 1.2% |
| WW_34 | 11.6 | 11.8 | 0.2 | 1.2% |
| WW_38 | 11.6 | 11.9 | 0.2 | 1.2% |
| TWY_30 | 11.9 | 12.2 | 0.2 | 1.2% |
| TWY_4 | 10.8 | 11.0 | 0.2 | 1.0% |
| TWY_32 | 11.7 | 11.8 | 0.2 | 0.9% |
| TWY_28 | 10.7 | 10.8 | 0.2 | 0.9% |
| TWY_45 | 11.2 | 11.4 | 0.2 | 0.9% |
| TWY_24 | 11.4 | 11.5 | 0.2 | 0.9% |
| AQO | 20 | | | |

5.3.5 The largest changes in annual mean $NO_2$ concentrations range from 0.7 to 0.8 µg/m³ at five receptors and are 1.1 µg/m³ at one receptor. The largest changes in annual mean $PM_{10}$ concentrations range from 0.3 to 0.4 µg/m³ at nine receptors and are 0.5 µg/m³ at one receptor. With regards to $PM_{2.5}$ concentrations, the largest changes range from 0.2 µg/m³ at nine receptors to 0.3 µg/m³ at one receptor.

## 5.4 LPU Growth Scenario 6a

5.4.1 LPU Growth Scenario 6a considers the impacts associated with 4,450 dwellings at Hall Farm, no additional employment at Four Valleys, 920 dwellings at South Wokingham extension, associated mitigation for both strategic sites, smaller development parcels and no M4 junction, but a bridge connecting Hall Farm to Lower Earley.

5.4.2 Predicted concentrations of $NO_2$, $PM_{10}$ and $PM_{2.5}$ at the 10 receptor locations with the highest concentrations as a result of the Local Plan developments tested in Scenario 6a are presented in **Table 5-11** to **Table 5-13.**

Table 5-11 Sc6a Highest Ten Predicted Annual Average Concentrations of $NO_2$ (µg/m³) at Receptors

| Receptor | Scenario 6a Annual Average $NO_2$ (µg/m³) |
|---|---|
| WW_6 | 28.4 |
| WW_194 | 24.6 |
| TWY_76 | 23.1 |
| WW_204 | 22.7 |
| TWY_30 | 22.5 |
| TWY_75 | 22.1 |
| WW_377 | 22.0 |
| WW_374 | 22.0 |
| WW_25 | 21.9 |
| TWY_77 | 21.8 |
| **Air Quality Objective (AQO)** | **40** |

Table 5-12 Sc6a Highest Ten Predicted Annual Average Concentrations of $PM_{10}$ (µg/m³) at Receptors

| Receptor | Scenario 6a Annual Average $PM_{10}$ (µg/m³) |
|---|---|
| WW_6 | 23.4 |
| WW_194 | 21.9 |
| TWY_76 | 21.6 |
| TWY_77 | 21.2 |
| WW_25 | 20.9 |
| WW_16 | 20.3 |
| WW_171 | 20.1 |
| WW_5 | 20.1 |
| TWY_75 | 20.0 |
| WW_3 | 19.9 |
| **Air Quality Objective (AQO)** | **40** |

Table 5-13 Sc6a Highest Ten Predicted Annual Average Concentrations of $PM_{2.5}$ (µg/m³) at Receptors

| Receptor | Scenario 6a Annual Average $PM_{2.5}$ (µg/m³) |
|---|---|
| WW_6 | 14.7 |
| WW_193 | 14.2 |
| WW_23 | 13.5 |
| TWY_73 | 13.3 |
| WW_403 | 13.2 |
| WW_11 | 13.1 |
| TWY_71 | 13.1 |
| WW_197 | 13.1 |

| Receptor | Scenario 6a Annual Average $PM_{2.5}$ (µg/m$^3$) |
|---|---|
| WW_347 | 12.9 |
| WW_194 | 12.9 |
| **Air Quality Objective (AQO)** | **20** |

5.4.3 The predicted $NO_2$, $PM_{10}$ and $PM_{2.5}$ concentrations with Scenario 6a, are below the relevant NAQOs at all existing receptors. Furthermore, predicted annual mean $NO_2$ concentrations are below 60µg/m$^3$ at all receptors, indicating that exceedances of the 1-hour mean $NO_2$ NAQO are not likely, and the predicted annual mean $PM_{10}$ concentrations are below 32 µg/m$^3$ at all receptors, indicating that exceedances of the 24-hour mean $PM_{10}$ NAQO are not likely.

5.4.4 Additionally, receptors with the largest change in pollutant concentrations in relation to the reference case are shown in Table 5-14 to Table 5-16.

Table 5-14 Sc6a Highest Ten Changes in Predicted Annual Average Concentrations of $NO_2$ (µg/m³) at Receptors

| Receptor | Reference Case | Scenario 6a | Change (µg/m$^3$) | Change as % of AQO |
|---|---|---|---|---|
| WS_83 | 12.5 | 13.6 | 1.1 | 2.6% |
| WW_3 | 18.8 | 19.5 | 0.8 | 1.9% |
| WW_154 | 16.4 | 17.1 | 0.7 | 1.8% |
| WS_82 | 12.1 | 12.8 | 0.7 | 1.7% |
| WS_207 | 12.1 | 12.8 | 0.7 | 1.7% |
| WW_176 | 19.2 | 19.8 | 0.6 | 1.5% |
| WS_146 | 11.7 | 12.3 | 0.6 | 1.5% |
| WS_50 | 15.5 | 16.1 | 0.5 | 1.4% |
| WS_50 | 15.5 | 16.1 | 0.5 | 1.4% |
| WS_148 | 10.4 | 10.9 | 0.5 | 1.3% |
| **AQO** | **40** | | | |

Table 5-15 Sc6a Highest Ten Changes in Predicted Annual Average Concentrations of $PM_{10}$ (µg/m³) at Receptors

| Receptor | Reference Case | Scenario 6a | Change (µg/m$^3$) | Change as % of AQO |
|---|---|---|---|---|
| WS_83 | 16.5 | 17.0 | 0.5 | 1.4% |
| WS_82 | 16.2 | 16.5 | 0.3 | 1.0% |
| WS_50 | 18.5 | 18.8 | 0.3 | 0.9% |
| WW_176 | 18.1 | 18.5 | 0.3 | 0.8% |
| WS_117 | 16.0 | 16.2 | 0.3 | 0.8% |
| WS_207 | 14.8 | 15.1 | 0.2 | 0.7% |
| WS_146 | 15.1 | 15.3 | 0.2 | 0.6% |
| WW_194 | 21.7 | 21.9 | 0.2 | 0.6% |
| WS_145 | 14.1 | 14.3 | 0.2 | 0.5% |
| WT_50 | 18.1 | 18.3 | 0.2 | 0.5% |
| **AQO** | **40** | | | |

Table 5-16 Sc6a: Highest Ten Changes in Predicted Annual Average Concentrations of $PM_{2.5}$ (μg/m³) at Receptors

| Receptor | Reference Case | Scenario 6a | Change (μg/m³) | Change as % of AQO |
|---|---|---|---|---|
| WS_83 | 10.6 | 10.9 | 0.3 | 1.6% |
| WS_82 | 10.4 | 10.6 | 0.2 | 1.1% |
| WS_50 | 11.7 | 11.9 | 0.2 | 1.0% |
| WW_176 | 11.8 | 12.0 | 0.2 | 0.9% |
| WS_117 | 10.3 | 10.4 | 0.1 | 0.9% |
| WS_207 | 9.6 | 9.8 | 0.1 | 0.8% |
| WS_146 | 9.7 | 9.8 | 0.1 | 0.7% |
| WW_194 | 14.1 | 14.2 | 0.1 | 0.7% |
| WS_145 | 9.2 | 9.3 | 0.1 | 0.6% |
| WS_148 | 9.3 | 9.5 | 0.1 | 0.6% |
| **AQO** | **20** | | | |

5.4.5 The largest changes in annual mean $NO_2$ concentrations range from 0.5 to 0.7 μg/m³ at eight receptors and are 0.8 μg/m³ at one receptor and 1.1 μg/m³ at one receptor. The largest changes in annual mean $PM_{10}$ concentrations range from 0.2 to 0.3 μg/m³ at nine receptors and are 0.5 μg/m³ at one receptor. With regards to $PM_{2.5}$ concentrations, the largest changes range from 0.1 to 0.2 μg/m³ at nine receptors to 0.3 μg/m³ at one receptor.

## 5.5 LPU Growth Scenario 7a

5.5.1 LPU Growth Scenario 7a considers the impacts associated with 4,450 dwellings at Hall Farm, 100,000m² of science park type employment at Four Valleys, 920 dwellings at South Wokingham extension, associated mitigation for both strategic sites, smaller development parcels and no M4 junction, but a bridge connecting Hall Farm to Lower Earley.

5.5.2 Predicted concentrations of $NO_2$, $PM_{10}$ and $PM_{2.5}$ at the 10 receptor locations with the highest concentrations as a result of the LPU developments tested in Scenario 7a are presented in **Table 5-17** to **Table 5-19**.

Table 5-17 Sc7a: Highest Ten Predicted Annual Average Concentrations of $NO_2$ (μg/m³) at Receptors

| Receptor | Scenario 7a Annual Average $NO_2$ (μg/m³) |
|---|---|
| WW_6 | 28.9 |
| WW_194 | 24.7 |
| TWY_76 | 23.1 |
| WW_204 | 22.8 |
| TWY_30 | 22.5 |
| WW_374 | 22.1 |
| WW_377 | 22.1 |
| TWY_75 | 22.1 |
| WW_25 | 21.9 |
| TWY_77 | 21.8 |
| **Air Quality Objective (AQO)** | **40** |

Table 5-18 Sc7a: Highest Ten Predicted Annual Average Concentrations of $PM_{10}$ (µg/m³) at Receptors

| Receptor | Scenario 7a Annual Average $PM_{10}$ (µg/m³) |
|---|---|
| WW_6 | 23.7 |
| WW_194 | 22.0 |
| TWY_76 | 21.6 |
| TWY_77 | 21.3 |
| WW_25 | 20.9 |
| WW_16 | 20.2 |
| WW_5 | 20.2 |
| WW_171 | 20.1 |
| TWY_75 | 20.0 |
| WW_3 | 19.9 |
| **Air Quality Objective (AQO)** | **40** |

Table 5-19 Sc7a: Highest Ten Predicted Annual Average Concentrations of $PM_{2.5}$ (µg/m³) at Receptors

| Receptor | Scenario 7a Annual Average $PM_{2.5}$ (µg/m³) |
|---|---|
| WW_6 | 14.9 |
| WW_193 | 14.3 |
| WW_23 | 13.5 |
| TWY_73 | 13.3 |
| WW_403 | 13.2 |
| TWY_72 | 13.1 |
| WW_198 | 13.1 |
| WW_9 | 13.1 |
| WW_347 | 13.0 |
| WW_194 | 12.9 |
| **Air Quality Objective (AQO)** | **20** |

5.5.3 The predicted $NO_2$, $PM_{10}$ and $PM_{2.5}$ concentrations with Scenario 7a are below the relevant NAQOs at all existing receptors. Furthermore, predicted annual mean $NO_2$ concentrations are below 60µg/m³ at all receptors, indicating that exceedances of the 1-hour mean $NO_2$ NAQO are not likely, and the predicted annual mean $PM_{10}$ concentrations are below 32 µg/m³ at all receptors, indicating that exceedances of the 24-hour mean $PM_{10}$ NAQO are not likely.

5.5.4 Receptors with the largest change in pollutant concentrations in relation to the reference case are shown in **Table 5-20** to **Table 5-22**.

Table 5-20 Sc7a: Highest Ten Changes in Predicted Annual Average Concentrations of $NO_2$ (µg/m³) at Receptors

| Receptor | Reference Case | Scenario 7a | Change (µg/m³) | Change as % of AQO |
|---|---|---|---|---|
| WW_178 | 14.1 | 15.4 | 1.4 | 3.4% |
| WW_177 | 15.9 | 17.1 | 1.2 | 2.9% |
| WS_83 | 12.5 | 13.6 | 1.1 | 2.7% |
| WS_117 | 12.7 | 13.6 | 1.0 | 2.4% |

| Receptor | Reference Case | Scenario 7a | Change ($\mu g/m^3$) | Change as % of AQO |
|---|---|---|---|---|
| WS_82 | 12.1 | 12.9 | 0.7 | 1.9% |
| WW_3 | 18.8 | 19.5 | 0.7 | 1.8% |
| WS_122 | 14.0 | 14.7 | 0.7 | 1.8% |
| WS_122 | 14.0 | 14.7 | 0.7 | 1.8% |
| WW_6 | 28.2 | 28.9 | 0.7 | 1.8% |
| WS_50 | 15.5 | 16.2 | 0.7 | 1.7% |
| **AQO** | **40** | | | |

Table 5-21 Sc7a: Highest Ten Changes in Predicted Annual Average Concentrations of $PM_{10}$ ($\mu g/m^3$) at Receptors

| Receptor | Reference Case | Scenario 7a | Change ($\mu g/m^3$) | Change as % of AQO |
|---|---|---|---|---|
| WW_178 | 17.7 | 18.3 | 0.7 | 1.7% |
| WW_177 | 17.8 | 18.4 | 0.6 | 1.5% |
| WS_83 | 16.5 | 17.0 | 0.5 | 1.4% |
| WS_117 | 16.0 | 16.4 | 0.4 | 1.0% |
| WS_82 | 16.2 | 16.5 | 0.4 | 0.9% |
| WW_176 | 18.1 | 18.5 | 0.4 | 0.9% |
| WW_6 | 23.3 | 23.7 | 0.4 | 0.9% |
| WS_50 | 18.5 | 18.9 | 0.3 | 0.8% |
| WW_85 | 17.3 | 17.6 | 0.3 | 0.7% |
| WW_87 | 17.9 | 18.2 | 0.3 | 0.7% |
| **AQO** | **40** | | | |

Table 5-22 Sc7a: Highest Ten Changes in Predicted Annual Average Concentrations of $PM_{2.5}$ ($\mu g/m^3$) at Receptors

| Receptor | Reference Case | Scenario 7a | Change ($\mu g/m^3$) | Change as % of AQO |
|---|---|---|---|---|
| WW_178 | 11.4 | 11.8 | 0.4 | 1.9% |
| WW_177 | 11.5 | 11.8 | 0.3 | 1.6% |
| WS_83 | 10.6 | 10.9 | 0.3 | 1.5% |
| WS_117 | 10.3 | 10.5 | 0.2 | 1.1% |
| WS_82 | 10.4 | 10.6 | 0.2 | 1.0% |
| WW_6 | 14.7 | 14.9 | 0.2 | 1.0% |
| WW_176 | 11.8 | 12.0 | 0.2 | 1.0% |
| WS_50 | 11.7 | 11.9 | 0.2 | 0.9% |
| WW_85 | 11.8 | 11.9 | 0.2 | 0.8% |
| WW_126 | 11.7 | 11.9 | 0.1 | 0.7% |
| **AQO** | **20** | | | |

5.5.5 The largest changes in annual mean $NO_2$ concentrations range from 0.7 to 1.0 $\mu g/m^3$ at seven receptors, from 1.1 to 1.2 $\mu g/m^3$ at two receptors and are 1.4 $\mu g/m^3$ at one receptor. The largest changes in annual mean $PM_{10}$ concentrations range from 0.3 to 0.4 $\mu g/m^3$ at seven receptors, from 0.5 to 0.6 $\mu g/m^3$ at two receptors and are 0.7 $\mu g/m^3$ at one receptor. With regards to $PM_{2.5}$ concentrations, the largest changes range from 0.1 to 0.3 $\mu g/m^3$ at nine receptors and are 0.4 $\mu g/m^3$ at one receptor.

## 5.6 Summary

5.6.1 The predicted $NO_2$, $PM_{10}$ and $PM_{2.5}$ concentrations in 2038, with LPU Growth Scenarios 3d, 6a or 7a are below the relevant NAQOs at all existing receptors. Furthermore, predicted annual mean $NO_2$ concentrations are below 60µg/m$^3$ at all receptors, indicating that exceedances of the 1-hour mean $NO_2$ NAQO are not likely, and the predicted annual mean $PM_{10}$ concentrations are below 32 µg/m$^3$ at all receptors, indicating that exceedances of the 24-hour mean $PM_{10}$ NAQO are not likely.

5.6.2 Therefore, it can be concluded that the LPU Growth Scenario 3d, 6a or 7a do not result unacceptable risks from air pollution and is therefore in accordance with the requirements of the NPPG.

# 6 Impacts at Ecological Receptors

## 6.1 Identified Ecological Receptors

6.1.1 The potential impact of traffic related emissions associated with the LPU Growth Scenarios have been assessed for the following Habitat Regulation Sites (i.e those within 200m of an 'affected road') as shown on **Figure 6-1**. **Table 6-1** details the Habitat Regulation Sites considered in the assessment, the habitat types within each site, and the critical loads used for each habitat types.

Table 6-1 Identified Ecological Receptor's (Habitat Regulation Sites)

| Habitat Regulations Site | Secondary Designation (within 200m of affected road) | Interest Feature | Assessed habitat type | Nitrogen Critical load (kgN/ha/yr) |
|---|---|---|---|---|
| Thames Basin Heaths SPA[a] | Broadmoor to Bagshot Woods and Heaths SSSI<br><br>Sandhurst to Owlsmoor Bogs and Heaths SSS<br><br>Hazeley Heath SSSI<br><br>Bramshill SSSI<br><br>Castle Bottom to Yateley and Hawley Commons SSSI | Nightjar | Dry heaths | 10 -20 |
| | | Woodlark | Dry heaths | 10 -20 |
| | | Dartford Warbler | Dry heaths | 10 -20 |
| Windsor Forest and Great Park SAC | Windsor Forest and Great Park SSSI | Old acidophilous oak woods with Quercus robur on sandy plains | Acidophiliois Quercus-dominated woodland | 10 - 15 |
| | | Atlantic acidophilous beech forests with Ilex and sometimes also Taxus baccata in the shrub layer (Quercion robori-petraeae or Ilici-Fagenion) | Fagus woodland | 10 -20 |
| | | Violet click beetle Limoniscus violaceus | Broadleaved deciduous woodland | 10 -20 |
| Chilterns Beechwoods SAC | Bisham Woods SSSI<br><br>Hollowhill and Pullingshill Woods SSSI | Asperulo-Fagetum beech forests | Fagus woodland | 10 -20 |
| | | Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (*important orchid sites) | Sub-Atlantic semi-dry calcareous grassland | 15 - 25 |
| Thursley, Ash, Pirbright and Chobham SAC | Colony Bog and Bagshot Heath SSSI | Depressions on peat substrates of the Rhynchosporion | Valley mires, poor fens and transition mire) | 10 - 15 |

| Habitat Regulations Site | Secondary Designation (within 200m of affected road) | Interest Feature | Assessed habitat type | Nitrogen Critical load (kgN/ha/yr) |
|---|---|---|---|---|
| Thames Basin Heaths SPA[(a)] | Broadmoor to Bagshot Woods and Heaths SSSI<br><br>Sandhurst to Owlsmoor Bogs and Heaths SSS<br><br>Hazeley Heath SSSI<br><br>Bramshill SSSI<br><br>Castle Bottom to Yateley and Hawley Commons SSSI | Nightjar | Dry heaths | 10 -20 |
| | | Woodlark | Dry heaths | 10 -20 |
| | | Dartford Warbler | Dry heaths | 10 -20 |
| | Chobham Common SSSI | North Atlantic wet heaths with Erica tetralix | Northern wet heath: Erica tetralix dominated wet heath | 10 -20 |
| | | European dry heath | Dry heaths | 10 -20 |

(a) Thames Basin Heaths SPA assessed as heathland habitat only (as opposed to coniferous woodland) on the basis that the site objective is to 'restore' and it is the heathland habitat that supports the Annex 1 bird species. Coniferous woodland within the Thames Basin Heaths SPA is considered as a land use subject to change, as opposed to a supporting habitat for maintenance or restoration.

6.1.2 Where changes in traffic flows (alone or in-combination) associated with the growth scenarios exceed the screening criteria (defined in paragraphs 4.3.4 to 4.3.8 ), modelling has been undertaken to quantify the changes in concentration of air pollutants and associated nitrogen (and acid) deposition (note these vary between scenarios).

6.1.3 At this stage, consideration of potential impacts has focussed on the predicted changes in annual average NOx concentrations and nitrogen deposition rates as these are considered to be the main determinants as to the acceptability of the impacts. Full results of the ecological receptors for each scenario are presented in **Appendix E** and an overview is presented below.

6.1.4 Further analysis of these results alongside consideration of ammonia and acid deposition would be provided to inform the assessment of Likely Significant Effect (LSE) and any required Habitat Regulation Assessment (HRA) of the future growth scenario.

## 6.2 LPU Growth Scenario 3d

6.2.1 LPU Growth Scenario 3d considers the impacts associated with 4,450 dwellings at Hall Farm, 354,000m² of employment at Four Valleys, 920 dwellings at South Wokingham extension, associated mitigation for both strategic sites, smaller development parcels and a new M4 junction.

### Annual NOx Impacts

6.2.2 The predicted in-isolation NOx contributions associated with LPU Growth Scenario 3d are below 1% of the critical level at a majority (approximately 90%) of modelled receptors and reductions are predicted at approximately 20% of modelled receptors.

6.2.3 Where predicted in-isolation NOx contributions are in excess of 1% of the critical level beyond 5m from the boundary of the habitat site, the overall concentration does not exceed the critical level at the habitat regulations sites identified in Table 6-1, except for transects within the Thursley, Ash, Pirbright and Chobham SAC in proximity to the M3.

6.2.4 The in-combination NOx contributions exceed 1% of the critical level at a majority (approximately 70%) of modelled receptors in 2038 and reductions are predicted at approximately 20% of modelled receptors.

6.2.5 Whilst NOx impacts associated with LPU Growth Scenario 3d result in increases and decreases in excess of 1% of the critical level, there is a predicted decrease in NOx concentrations at all receptor locations over the assessed period.

6.2.6 This predicted decrease is a result of the methodology applied (as detailed in Section 4) which accounts for a degree of future decreases in vehicle exhaust emissions and reduced background concentrations (by applying data for 2030) which are considered reasonably certain to be delivered. These reductions more than offset the predicted impacts due to forecast growth in traffic resulting from the potential growth under the LPU and other projects and plans within WSTM4.

**Annual Nitrogen Deposition Impacts**

6.2.7 The predicted in-isolation nitrogen deposition contributions associated with LPU Growth Scenario 3d are below 1% of the critical load at a majority (approximately 80%) of modelled receptors in 2038 and reductions are predicted at approximately 20% of modelled receptors

6.2.8 The in-combination contribution to nitrogen deposition exceeds 1% of the critical load at a majority (approximately 75%) of modelled receptors and reductions are predicted at approximately 20% of modelled receptors.

6.2.9 Nitrogen deposition rates at all locations remain in exceedance of the critical loads in all assessment years and nitrogen deposition associated with LPU Growth Scenario 3d results in increases and decreases in excess of 1% of the critical load.

6.2.10 Overall, there is a predicted decrease in nitrogen deposition rates at all receptor locations over the assessed period. This predicted decrease is a result of the methodology applied (as detailed in Section 4) which accounts for a degree of future decreases in vehicle NOx emissions and reduced NOx background concentrations (by applying data for 2030) which are considered reasonably certain to be delivered. These reductions more than offset the predicted impacts due to forecast growth in traffic resulting from potential growth under the LPU and other projects and plans within WSTM4.

## 6.3 LPU Growth Scenario 6a

6.3.1 LPU Growth Scenario 6a considers the impacts associated with 4,450 dwellings at Hall Farm, no additional employment at Four Valleys, 920 dwellings at South Wokingham extension, associated mitigation for both strategic sites, smaller development parcels and no M4 junction, but a bridge connecting Hall Farm to Lower Earley.

**Annual NOx Impacts**

6.3.2 The predicted in-isolation NOx contributions associated with LPU Growth Scenario 6a are below 1% of the critical level at a majority (approximately 90%) of modelled receptors in 2038 and reductions are predicted at approximately 20% of modelled receptors

6.3.3 Where predicted in-isolation NOx contributions are in excess of 1% of the critical level beyond 5m from the boundary of the habitat site, the overall concentration does not exceed the critical level except for transects within the Thursley, Ash, Pirbright and Chobham SAC in proximity to the M3.

6.3.4 The in-combination NOx contributions exceed 1% of the critical level at a majority (approximately 70%) of modelled receptors and reductions are predicted at approximately 20%of modelled receptors.

6.3.5 Whilst NOx impacts associated with LPU Growth Scenario 6a result in increases and decreases in excess of 1% of the critical level, there is a predicted decrease in NOx concentrations at all receptor locations over the assessed period

6.3.6 This predicted decrease is a result of the methodology applied (as detailed in Section 4) which accounts for a degree of future decreases in vehicle exhaust emissions and reduced background concentrations (by applying data for 2030) which are considered reasonably certain to be delivered. These reductions more than offset the predicted impacts due to forecast growth in traffic resulting from the potential growth under the LPU and other projects and plans within WSTM4.

**Annual Nitrogen Deposition Impacts**

6.3.7 The predicted in-isolation nitrogen deposition contributions associated with LPU Growth Scenario 6a are below 1% of the critical load at a majority (approximately 80%) of modelled receptors in 2038 and reductions are predicted at approximately 20% of modelled receptors.

6.3.8 The in-combination contribution to nitrogen deposition exceeds 1% of the critical load at a majority (approximately 75%) of modelled receptors and reductions are predicted. at approximately 20% of modelled receptors.

6.3.9 Nitrogen deposition rates at all locations remain in exceedance of the critical loads in all assessment years and nitrogen deposition associated with LPU Growth Scenario 6a results in increases and decreases in excess of 1% of the critical load.

6.3.10 Overall, there is a predicted decrease in nitrogen deposition rates at all receptor locations over the assessed period. This predicted decrease is a result of the methodology applied (as detailed in Section 4) which accounts for a degree of future decreases in vehicle NOx emissions and reduced NOx background concentrations (by applying data for 2030) which are considered reasonably certain to be delivered. These reductions more than offset the predicted impacts due to forecast growth in traffic resulting from potential growth under the LPU and other projects and plans within WSTM4.

## 6.4 LPU Growth Scenario 7a

6.4.1 LPU Growth Scenario 7a considers the impacts associated with 4,450 dwellings at Hall Farm, 100,000m² of science park type employment at Four Valleys, 920 dwellings at South Wokingham extension, associated mitigation for both strategic sites, smaller development parcels and no M4 junction, but a bridge connecting Hall Farm to Lower Earley.

**Annual NOx Impacts**

6.4.2 The predicted in-isolation NOx contributions associated with LPU Scenario 7a are below 1% of the critical level at all modelled receptors and reductions are predicted.at approximately 90% of modelled receptors.

6.4.3 The in-combination NOx contributions exceed 1% of the critical level at approximately 50% of modelled receptors and reductions are predicted. at approximately 20% of modelled receptors.

6.4.4 This predicted decrease is a result of the methodology applied (as detailed in Section 4) which accounts for a degree of future decreases in vehicle exhaust emissions and reduced background concentrations (by applying data for 2030) which are considered reasonably certain to be delivered. These reductions more than offset the predicted impacts due to forecast growth in traffic resulting from the potential growth under the LPU and other projects and plans within WSTM4.

**Annual Nitrogen Deposition Impacts**

6.4.5 The predicted in-isolation nitrogen deposition contributions associated with LPU Scenario 7a are below 1% of the critical load at all modelled receptors and reductions are predicted at approximately 90%of modelled receptors.

6.4.6 The in-combination contribution to nitrogen deposition exceeds 1% of the critical load at a majority (approximately 60%) of modelled receptors and reductions are predicted at approximately 20% of modelled receptors.

6.4.7 Overall, there is a predicted decrease in nitrogen deposition rates at all receptor locations over the assessed period. This predicted decrease is a result of the methodology applied (as detailed in Section 4) which accounts for a degree of future decreases in vehicle NOx emissions and reduced NOx background concentrations (by applying data for 2030) which are considered reasonably certain to be delivered. These reductions more than offset the predicted impacts due to forecast growth in traffic resulting from potential growth under the LPU and other projects and plans within WSTM4.

## 6.5 Summary

**Growth Scenarios 3d and 6a**

6.5.1 The predicted in-isolation impacts associated with Growth Scenario 3d and 6a exceed 1% of the relevant critical level or load (and the baseline widely exceeds the critical level/load) in the following areas:

- Thursley, Ash, Pirbright & Chobham SAC:
  - Chobham Common SSSI in proximity to the M3 and the junction of the B383 and B386; and
  - Colony Bog and Bagshot Heat SSSI in proximity to the B3015 and M3.
- Thames Basin Heaths SPA (in addition to those within the Thursley, Ash, Pirbright & Chobham SAC):
  - Hazeley Heath SSI in proximity to the B3011;
  - Bramshill SSI in proximity to Bramshill Road and the B3016;
  - Castle Bottom to Yateley and Hawley Commons SSSI in proximity to the B3016 and Hawley Green Road; and
  - Broadmoor to Bagshot Woods and Heaths SSSI in proximity to Sandhurst Road.
- Windsor Forest and Great Park SAC/SSSI in proximity to the B3022 and B383.

6.5.2 However, the methodology applied (as detailed in Section 4) which accounts for a degree of future decreases in vehicle NOx emissions and reduced NOx background concentrations (by applying data for 2030) which are considered reasonably certain to be delivered, and these reductions more than offsets the predicted impacts resulting from the LPU Growth Scenarios in-isolation.

6.5.3 The predicted in-combination impacts associated Growth Scenarios 3d or 6a and other projects and plans exceed the 1% threshold for NOx and nitrogen deposition (and the baseline widely exceeds the critical level/load) in the following areas:

- Thursley, Ash, Pirbright & Chobham SAC:
  - Chobham Common SSSI in proximity to the M3 and the B386; and
  - Colony Bog and Bagshot Heat SSSI in proximity to the B3015, A322 and M3.
- Thames Basin Heaths SPA (in addition to those within the Thursley, Ash, Pirbright & Chobham SAC):
  - Hazeley Heath SSI in proximity to the B3011;
  - Bramshill SSI in proximity to the A30, A327, Bramshill Road and the B3016;
  - Castle Bottom to Yateley and Hawley Commons SSSI in proximity to the A30, B3016, B3272 and Hawley Green Road; and
  - Broadmoor to Bagshot Woods and Heaths SSSI in proximity to the A3095, B3348, A322, B3430 and Sandhurst Road.

6.5.4 However, the methodology applied (as detailed in Section 4) which accounts for a degree of future decreases in vehicle NOx emissions and reduced NOx background concentrations (by applying data for 2030) which are considered reasonably certain to be delivered, and these reductions more than offsets the predicted impacts resulting from the LPU Growth Scenarios in-combination with other projects and plans.

6.5.5 The predicted in-combination impacts associated with Growth Scenarios 3d or 6a and other projects and plans results in decreased impacts at Chilterns Beechwoods SAC and Windsor Forest and Great Park SAC.

**Growth Scenario 7a**

6.5.6 The changes in traffic flows associated with Growth Scenario 7a do not exceed the screening criteria (defined in paragraphs 4.3.4 to 4.3.8 ) for roads in proximity to Thursley, Ash, Pirbright & Chobham SAC, Chilterns Beechwoods SAC and Windsor Forest and Great Park SAC.

6.5.7 The predicted in-isolation impacts associated with Growth Scenario 7a result in decreased impacts in the following areas of the Thames Basin Heaths SPA:

- Castle Bottom to Yateley and Hawley Commons SSSI in proximity to the A30; and
- Broadmoor to Bagshot Woods and Heaths SSSI in proximity to the A3095, B3348 and B3430.

# 7 Summary and Conclusions

7.1.1 Stantec have undertaken an assessment to understand the impact on Air Quality (at both human and ecological receptors) of future housing and employment growth and the resultant changes in traffic flows on the highway network. The outputs from the assessment will be used as part of the evidence base to support the preparation of the LPU.

7.1.2 A number of scenarios have been appraised to assess the impact of local growth on air quality. These will then identify any implications of development and consequently help ascertain which sites may be suitable for allocation from an Air Quality perspective and any works that are necessary to mitigate impacts.

7.1.3 The following scenarios have been subject to Air Quality assessment:

- **Scenario 3d** - 4,450 dwellings at Hall Farm, 354,000m² of employment at Four Valleys, 920 dwellings at South Wokingham extension, associated mitigation for both strategic sites, smaller development parcels and a new M4 junction.

- **Scenario 6a** - 4,450 dwellings at Hall Farm, no employment at Four Valleys, 920 dwellings at South Wokingham extension, associated mitigation for both strategic sites, smaller development parcels and no M4 junction, but a bridge connecting Hall farm to Lower Earley.

- **Scenario 7a** - 4,450 dwellings at Hall Farm, 100,000m² of science park type employment at Four Valleys, 920 dwellings at South Wokingham extension, associated mitigation for both strategic sites, smaller development parcels and no M4 junction, but a bridge connecting Hall farm to Lower Earley.

**Air Quality Impacts**

7.1.4 The predicted $NO_2$, $PM_{10}$ and $PM_{2.5}$ concentrations without the potential growth under the LPU are below the relevant NAQOs at all existing receptors. Furthermore, predicted annual mean $NO_2$ concentrations are below 60µg/m$^3$ at all receptors, indicating that exceedances of the 1-hour mean $NO_2$ NAQO are not likely, and the predicted annual mean $PM_{10}$ concentrations are below 32 µg/m$^3$ at all receptors, indicating that exceedances of the 24-hour mean $PM_{10}$ NAQO are not likely.

7.1.5 The predicted $NO_2$, $PM_{10}$ and $PM_{2.5}$ concentrations with LPU Growth Scenarios 3d, 6a or 7a are below the relevant NAQOs at all existing receptors. Furthermore, predicted annual mean $NO_2$ concentrations are below 60µg/m$^3$ at all receptors, indicating that exceedances of the 1-hour mean $NO_2$ NAQO are not likely, and the predicted annual mean $PM_{10}$ concentrations are below 32 µg/m$^3$ at all receptors, indicating that exceedances of the 24-hour mean $PM_{10}$ NAQO are not likely.

7.1.6 Overall, with respect to the impact on $NO_2$, $PM_{10}$ and $PM_{2.5}$ concentrations, there are considered to be no substantial differences between the predicted concentrations at receptors as a result of the three LPU Growth Scenarios.

**Ecological Impacts**

7.1.7 The predicted in-isolation impacts associated with Growth Scenario 3d and 6a exceed 1% of the relevant critical level or load (and the baseline widely exceeds the critical level/load) in the following areas:

- Thursley, Ash, Pirbright & Chobham SAC:

  - Chobham Common SSSI in proximity to the M3 and the junction of the B383 and B386; and
  - Colony Bog and Bagshot Heat SSSI in proximity to the B3015 and M3.
- Thames Basin Heaths SPA (in addition to those within the Thursley, Ash, Pirbright & Chobham SAC):
  - Hazeley Heath SSI in proximity to the B3011;
  - Bramshill SSI in proximity to Bramshill Road and the B3016;
  - Castle Bottom to Yateley and Hawley Commons SSSI in proximity to the B3016 and Hawley Green Road; and
  - Broadmoor to Bagshot Woods and Heaths SSSI in proximity to Sandhurst Road.
- Windsor Forest and Great Park SAC/SSSI in proximity to the B3022 and B383.

7.1.8 The predicted in-combination impacts associated Growth Scenarios 3d or 6a and other projects and plans exceed the 1% threshold for NOx and nitrogen deposition (and the baseline widely exceeds the critical level/load) in the following areas:

- Thursley, Ash, Pirbright & Chobham SAC:
  - Chobham Common SSSI in proximity to the M3 and the B386; and
  - Colony Bog and Bagshot Heat SSSI in proximity to the B3015, A322 and M3.
- Thames Basin Heaths SPA (in addition to those within the Thursley, Ash, Pirbright & Chobham SAC):
  - Hazeley Heath SSI in proximity to the B3011;
  - Bramshill SSI in proximity to the A30, A327, Bramshill Road and the B3016;
  - Castle Bottom to Yateley and Hawley Commons SSSI in proximity to the A30, B3016, B3272 and Hawley Green Road; and
  - Broadmoor to Bagshot Woods and Heaths SSSI in proximity to the A3095, B3348, A322, B3430 and Sandhurst Road.

7.1.9 The predicted in-combination impacts associated with Growth Scenarios 3d or 6a and other projects and plans results in decreased impacts at Chilterns Beechwoods SAC and Windsor Forest and Great Park SAC.

7.1.10 The changes in traffic flows associated with Growth Scenario 7a do not exceed the screening criteria (defined in paragraphs 4.3.4 to 4.3.8) for roads in proximity to Thursley, Ash, Pirbright & Chobham SAC, Chilterns Beechwoods SAC and Windsor Forest and Great Park SAC.

7.1.11 The predicted in-isolation impacts associated with Growth Scenario 7a result in decreased impacts in the following areas of the Thames Basin Heaths SPA:

- Castle Bottom to Yateley and Hawley Commons SSSI in proximity to the A30; and
- Broadmoor to Bagshot Woods and Heaths SSSI in proximity to the A3095, B3348 and B3430.

7.1.12 Overall, there is a predicted decrease in nitrogen deposition rates at all receptor locations between the base year and future scenarios This predicted decrease is a result of the methodology applied (as detailed in Section 4) which accounts for a degree of future decreases in vehicle NOx emissions and reduced NOx background concentrations (by applying data for 2030) which are considered reasonably certain to be delivered. These reductions more than offset the predicted impacts due to forecast growth in traffic resulting from potential growth under the LPU in-isolation and in-combination with other projects and plans within WSTM4.

7.1.13 Further analysis of the effects of these contributions, both alone and in-combination (as well as of ammonia and acid deposition) will be undertaken as part the Habitat Regulation Assessment (HRA) for the Revised Growth Scenario to determine whether the predicted impacts have the potential to result in a Likely Significant Effect (LSE).

# References

Air Quality Consultants Ltd. (2020a). '*Nitrogen Oxides Trends in the UK 2013 to 2019*'

Air Quality Consultants (2020c). *'Calculator for Road Emissions of Ammonia (CREAM) v1A.' Available at: https://www.aqconsultants.co.uk/resources*

Air Pollution Information System (APIS) (2022). The UK Air Pollution Information System. Available at: http://www.apis.ac.uk/

Department of the Environment, Food and Rural Affairs (DEFRA) in partnership with the Scottish Executive, The National Assembly for Wales and the Department of the Environment for Northern Ireland (2007). '*The Air Quality Strategy for England, Scotland, Wales, Northern Ireland'* HMSO, London.

Department of the Environment, Food and Rural Affairs (DEFRA) (2018). '*UK Plan for tackling Roadside Nitrogen Dioxide Concentrations: Detailed Plan'.* Available at: https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017

Department of the Environment, Food and Rural Affairs (DEFRA) (2019a). '*Clean Air Strategy 2019*'.

Department of the Environment, Food and Rural Affairs (DEFRA) (2020a) '*2020 $NO_2$ and PM Projections Data (2018 Reference Year)*' [online] Available at: https://uk-air.defra.gov.uk/library/no2ten/2020-no2-pm-projections-from-2018-data

Department of the Environment, Food and Rural Affairs (DEFRA) (2020b). '*2018 Based Background Maps*

Department of the Environment, Food and Rural Affairs (DEFRA) (2020c). '*$NO_x$ to $NO_2$ Conversion* Spreadsheet' [online] Available at: https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html#NOxNO2calc

Department of the Environment, Food and Rural Affairs (DEFRA) (2020d). '*Biodiversity 2020: A strategy for England's wildlife and ecosystem services'*

Department of the Environment, Food and Rural Affairs (DEFRA) (2021a). '*Local Air Quality Management Technical Guidance (TG16)*'. April 2021.

Department of the Environment, Food and Rural Affairs (DEFRA) (2021b). '*Emissions Factor Toolkit (Version 11.0)*' Online, available at: https://laqm.defra.gov.uk/review-and-assessment/tools/emissions-factors-toolkit.html

Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive)

Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe

Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.

Environment Act 1995, Part IV.

IAQM (2020) A guide *to the Assessment of Air Quality Impacts on Designated Nature Conservation Sites – version 1.1*. London

Chapman, C & Kite, B (2020). '*Guidance on Decision-Making Thresholds for Air Pollution'*. JNCC Report No. 696 (Main Report), JNCC, Peterborough.

Ministry of Housing, Communities & Local Government (2021). '*National Planning Policy Framework*'. Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2#history

Natural England (NE) (2018). Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations. Version: June 2018.

Planning Practice Guidance (2014). '*Air Quality*'.

Statutory Instrument 2000, No. 921, '*The Air Quality (England) Regulations 2000'* HMSO, London.

Statutory Instrument 2000, c. 37, '*Countryside and Rights of Way Act 2000'* HMSO, London.

Statutory Instrument 2002, No. 3034, '*The Air Quality (England) (Amendment) Regulations 2002'* HMSO, London.

Statutory Instrument 2010, No. 1001, '*The Air Quality Standards Regulations 2010'* HMSO, London.

Statutory Instrument 2016, No. 1184, '*The Air Quality Standards (Amendment) Regulations 2016*' HMSO, London.

Statutory Instruments 2019, No. 74, '*The Air Quality (Amendment of Domestic Regulations) (EU Exit) Regulations 2019'* HMSO, London

Statutory Instruments 2019, No. 0000, '*The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*' HMSO, London

Statutory Instruments 2020, No. 131, '*The Environment (Miscellaneous Amendments) (EU Exit) Regulations 2020'* HMSO, London

Statutory Instruments 2021, c. 30, '*Environment Act 2021'* HMSO, London

Statutory Instrument 2017, No. 1012, '*The Conservation of Habitats and Species Regulations 2017'* HMSO, London.

# Appendix A Glossary

| Abbreviations | Meaning |
|---|---|
| AADT | Annual Average Daily Traffic |
| APIS | Air Pollution Information System |
| AQMA | Air Quality Management Area |
| BFC | Bracknell Forest Council |
| DEFRA | Department for Environment, Food and Rural Affairs |
| DN | Do Nothing |
| DM | Do Minimum |
| DS | Do Something |
| Diffusion Tube | A passive sampler used for collecting $NO_2$ in the air |
| EFT | Emission Factor Toolkit |
| EPUK | Environmental Protection UK |
| HDC | Hart District Council |
| HRA | Habitat Regulation Assessment |
| HDV | Heavy Duty Vehicle; a vehicle with a gross vehicle weight greater than 3.5 tonnes. Includes Heavy Goods Vehicles and buses |
| IAQM | Institute of Air Quality Management |
| LPU | Local Plan Update |
| NAEI | National Atmospheric Emission Inventory |
| NE | Natural England |
| NAQO | National Air Quality Objective as set out in the Air Quality Strategy and the Air Quality Regulations |
| $NO_2$ | Nitrogen Dioxide |
| NOx | Oxides of nitrogen generally considered to be nitric oxide and $NO_2$. Its main source is from combustion of fossil fuels, including petrol and diesel used in road vehicles |
| NPPF | National Planning Policy Framework |
| $PM_{10}/PM_{2.5}$ | Small airborne particles less than 10/2.5 µm in diameter |
| PPG | Planning Practice Guidance |
| RBC | Reading Borough Council |
| RBWM | Royal Borough of Windsor Maidenhead |
| Receptor | A location where the effects of pollution may occur |
| SAC | Special Area of Conservation |
| SPA | Special Protection Area |
| SSSI | Site of Scientific Special Interest |
| UNECE | United Nations Economic Commission for Europe |
| WBC | Wokingham Borough Council |
| WBDC | West Berkshire District Council |
| WSTM | Wokingham Strategic Transport Model |

# Appendix B Model Inputs and Results Processing

**Summary of Model Inputs**

| Meteorological Data | 2015 hourly meteorological data from Farnborough station has been used in the model. |
|---|---|
| ADMS | Version 5.0.0.1 |
| Time Varying Emission Factors | Based on Department for Transport statistics. Table TRA0307. Motor vehicle traffic distribution by time of day and day of the week on all roads, Great Britain: 2015 |
| Latitude | 52° |
| Minimum Monin-Obukhov length | A value of 10 for 'cities and large towns' was used to represent the modelled area and the meteorological station site. |
| Urban Canopy | ADMS Urban Canopy flow model option was used (human receptors only) to calculate the changes in vertical profiles of velocity and turbulence caused by the presence of buildings in the area. Building heights were obtained from OS MasterMap. |
| Emission Factor Toolkit (EFT) | V11 (DEFRA, 2021b) |
| NOx to $NO_2$ Conversion | NOx to $NO_2$ calculator version 8.1, August 2020 (DEFRA, 2020c) |
| Background Maps | 2018 reference year background maps (DEFRA, 2020b) |

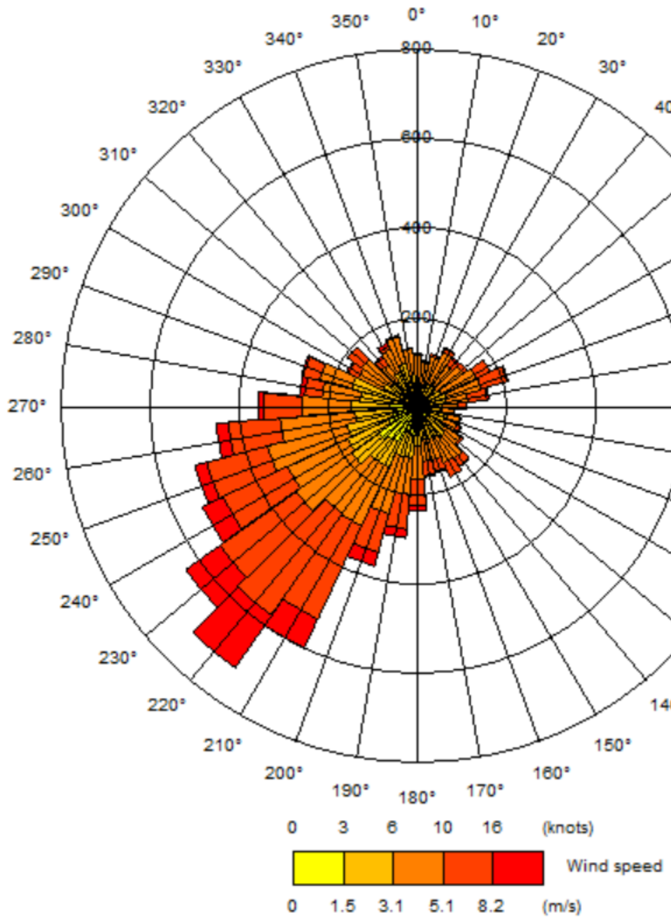


Figure C-1: Windrose for Farnborough (2015)

# Appendix C Model Verification (Human Receptors)

## $NO_2$

Most $NO_2$ is produced in the atmosphere by the reaction of nitric oxide (NO) with ozone. It is therefore most appropriate to verify the model in terms of primary pollutant emission of nitrogen oxides (NOx = NO + $NO_2$). The model has been run to predict the 2015 annual mean road-NOx contribution at the monitoring locations identified in Paragraph **4.2.14** and shown in **Figure 5-1**.

The verification process for human receptors comprised four different zones determine don the basis of the site environment and the following verification factors determined as summarised in the following sections:

- Zone A: 4.90;
- Zone B: 1.72;
- Zone C: 1; and
- Zone D: 1.47.

**Verification Zone A:**

A primary adjustment factor of **4.9036** has been determined as the slope of the best fit line between the modelled road NOx contribution and the 'measured' road-$NO_x$ (which is calculated from the measured and background $NO_2$ concentrations within DEFRA's $NO_x$ from $NO_2$ calculator (DEFRA, 2019e)), forced through zero (**Figure C-1**). This factor has then been applied to the raw modelled road-$NO_x$ concentration to provide adjusted modelled road-$NO_x$ concentrations.

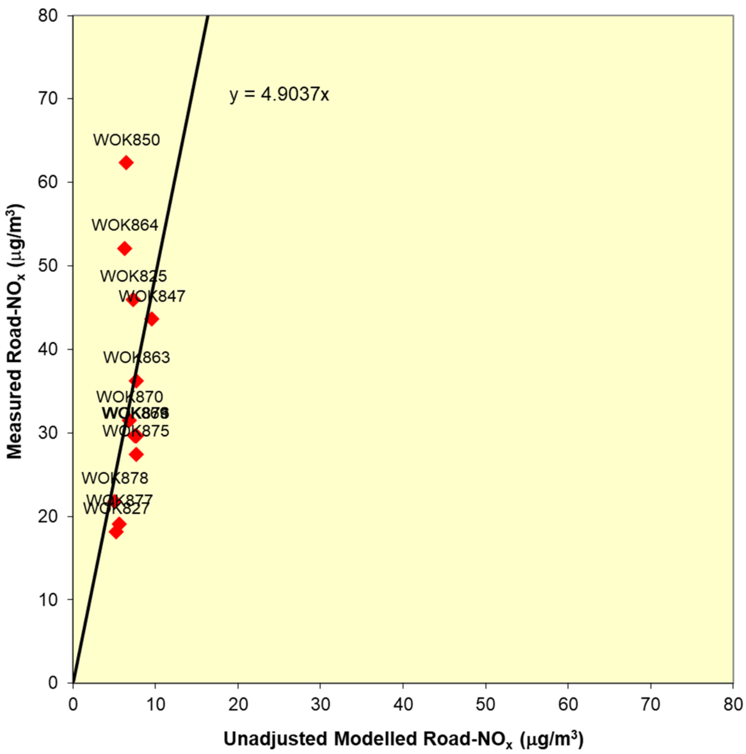

Figure C-1 Measured and Unadjusted Road-$NO_x$ Comparison

The total $NO_2$ concentrations have then been determined by combining the adjusted modelled road-$NO_x$ concentrations with the background $NO_2$ concentration within DEFRA's $NO_x$ from $NO_2$ calculator (DEFRA, 2019e). A secondary adjustment factor of **0.9978** has then been calculated as the slope of the best fit line applied to the adjusted data and forced through zero (**Figure C-2**).

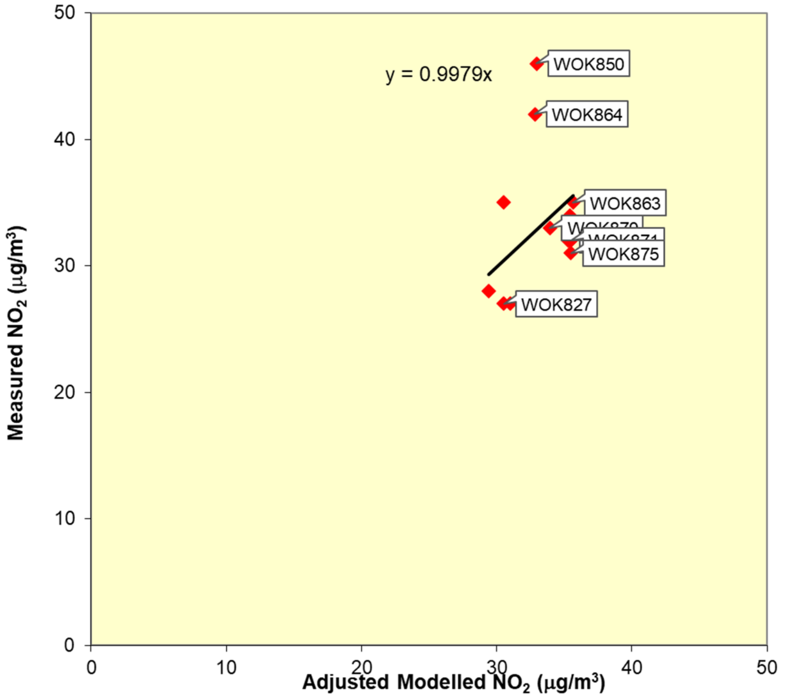


Figure C-2 Measured and Primary Adjusted Modelled NO2 Comparison

**Figure C-3** compares final adjusted modelled total $NO_2$ at each of the monitoring sites, to measured total NOx and shows the 1:1 relationship, as well as ±10% and ±25% of the 1:1 line.

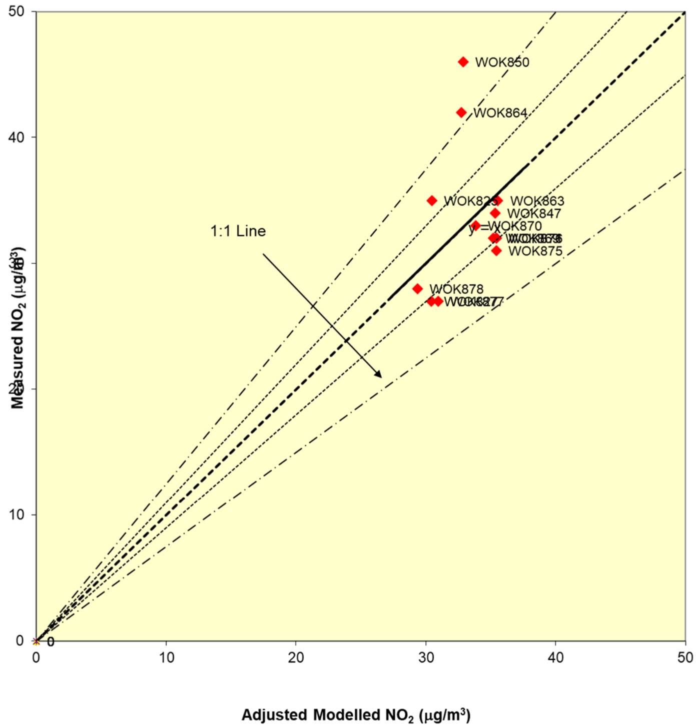

Figure C-3 Measured and Final Adjusted Modelled $NO_2$ Comparison

The calculated adjustment factors imply that overall, the model has under-predicted the road-$NO_x$ contribution. This is a common experience with this and most other models. The calculated Root Mean Square Error (RMSE) for this verification (5.1 µg/m$^3$) lies within the range considered to be acceptable by DEFRA (DEFRA, 2018a) (4 – 10).

**Verification Zone B:**

A primary adjustment factor of **1.7174** has been determined as the slope of the best fit line between the modelled road NOx contribution and the 'measured' road-$NO_x$ (which is calculated from the measured and background $NO_2$ concentrations within DEFRA's $NO_x$ from $NO_2$ calculator (DEFRA, 2019e)), forced through zero (**Figure C-4**). This factor has then been applied to the raw modelled road-$NO_x$ concentration to provide adjusted modelled road-$NO_x$ concentrations.

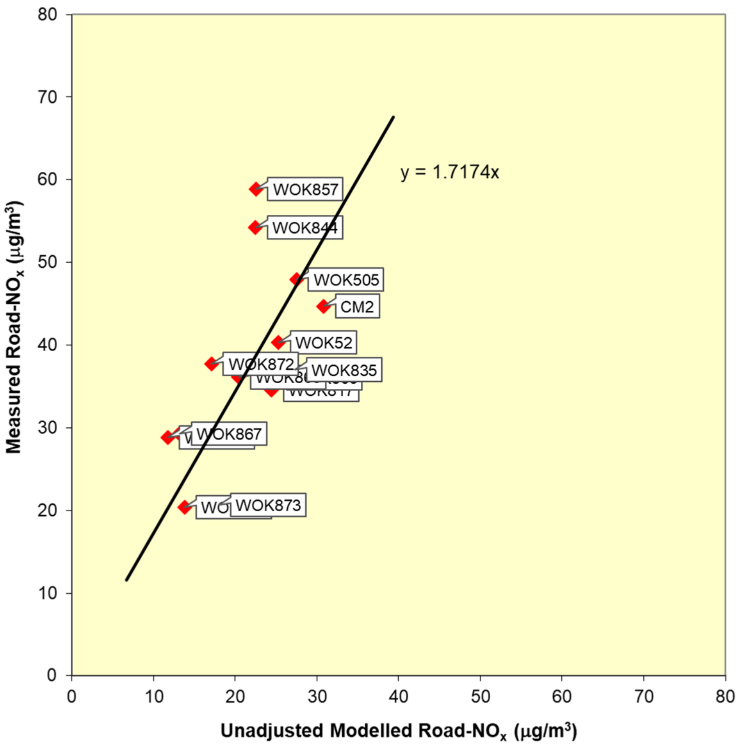


Figure C-4 Measured and Unadjusted Road-$NO_x$ Comparison

The total $NO_2$ concentrations have then been determined by combining the adjusted modelled road-$NO_x$ concentrations with the background $NO_2$ concentration within DEFRA's $NO_x$ from $NO_2$ calculator (DEFRA, 2019e). A secondary adjustment factor of **1.0051** has then been calculated as the slope of the best fit line applied to the adjusted data and forced through zero (**Figure C-5**).

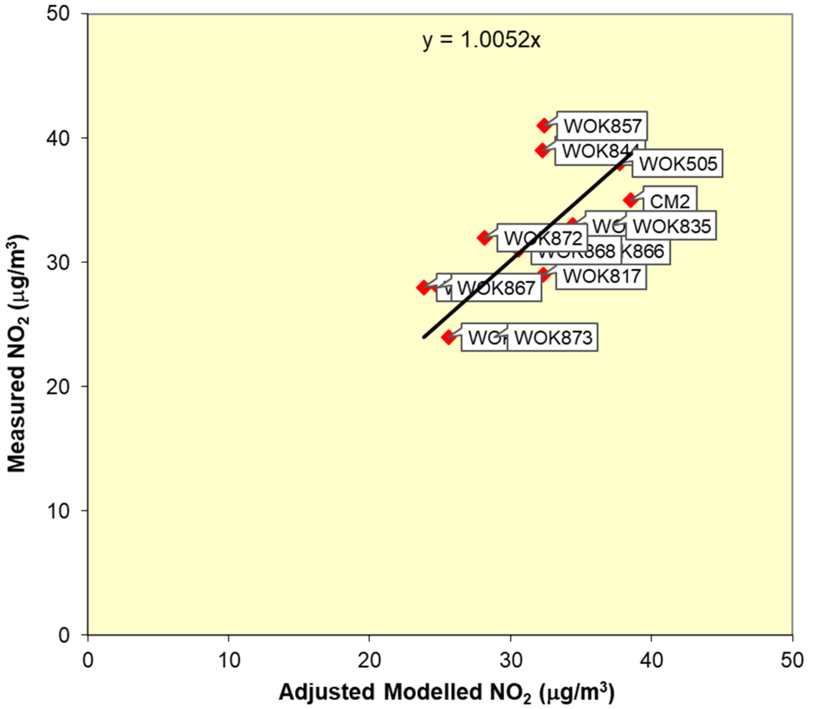


Figure C-5 Measured and Primary Adjusted Modelled $NO_2$ Comparison

**Figure C-6** compares final adjusted modelled total $NO_2$ at each of the monitoring sites, to measured total NOx and shows the 1:1 relationship, as well as ±10% and ±25% of the 1:1 line.

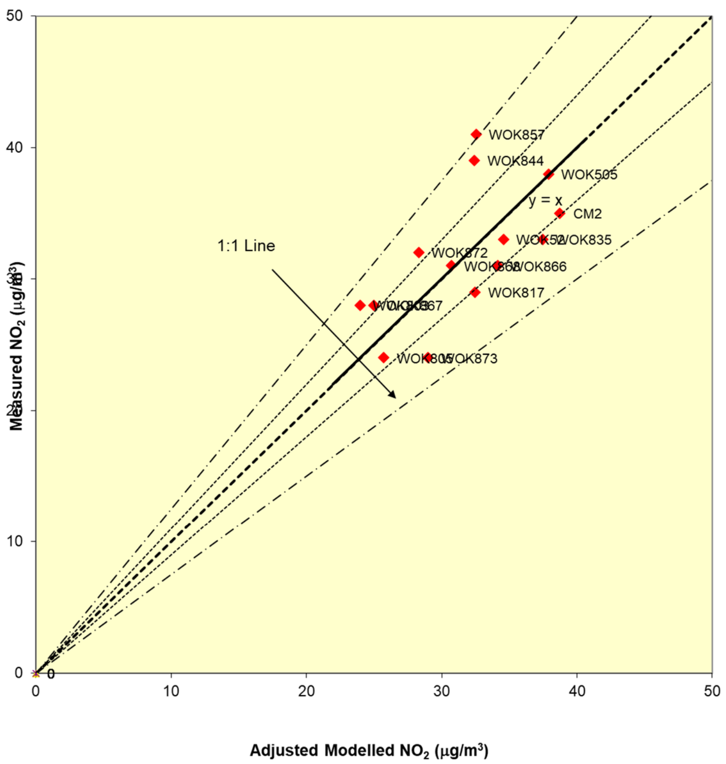


Figure C-6 Measured and Final Adjusted Modelled $NO_2$ Comparison

The calculated adjustment factors imply that overall, the model has under-predicted the road-$NO_x$ contribution. This is a common experience with this and most other models. The calculated Root Mean

Square Error (RMSE) for this verification (4.1 µg/m³) lies within the range considered to be acceptable by DEFRA (DEFRA, 2018a) (4 – 10).

**Verification Zone C:**

A primary adjustment factor of **0.8645** has been determined as the slope of the best fit line between the modelled road NOx contribution and the 'measured' road-$NO_x$ (which is calculated from the measured and background $NO_2$ concentrations within DEFRA's $NO_x$ from $NO_2$ calculator (DEFRA, 2019e)), forced through zero (**Figure C-7**). A factor of 1 has been applied to the raw modelled road-$NO_x$ concentration to provide adjusted modelled road-$NO_x$ concentrations.

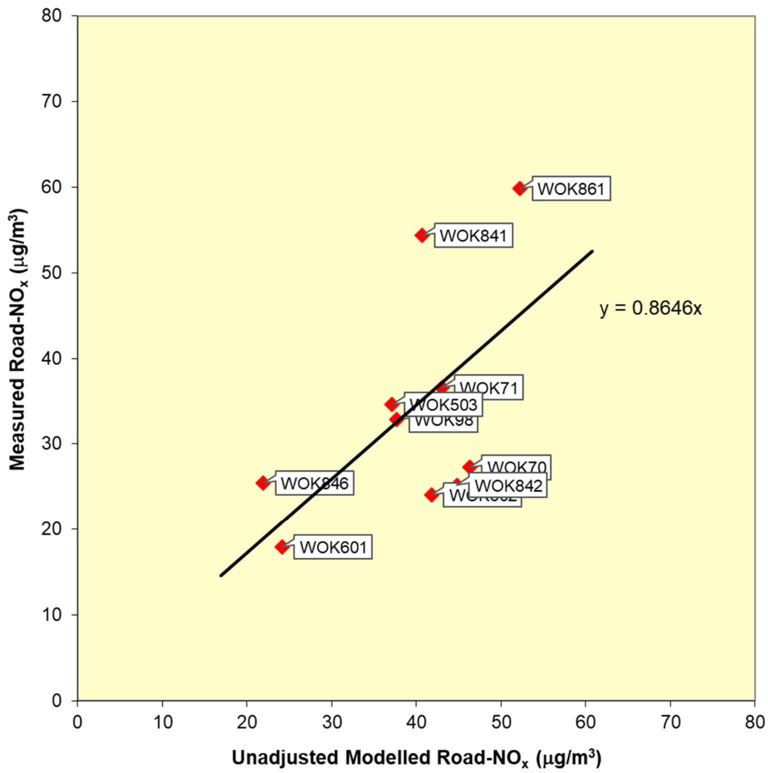


Figure C-7 Measured and Unadjusted Road-$NO_x$ Comparison

The total $NO_2$ concentrations have then been determined by combining the adjusted modelled road-$NO_x$ concentrations with the background $NO_2$ concentration within DEFRA's $NO_x$ from $NO_2$ calculator (DEFRA, 2019e). A secondary adjustment factor of **0.9953** has then been calculated as the slope of the best fit line applied to the adjusted data and forced through zero (**Figure C-8**).

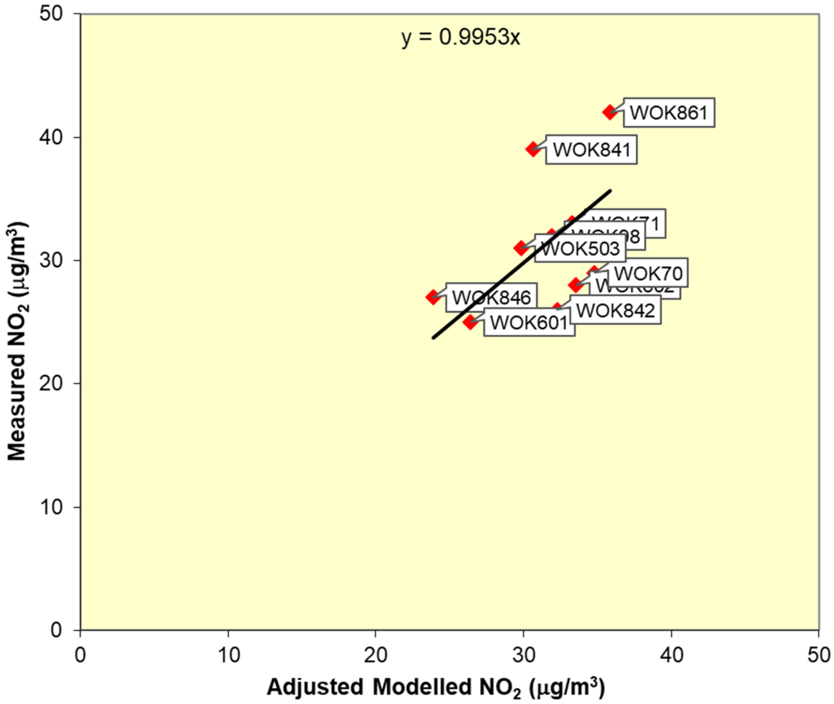


Figure C-8 Measured and Primary Adjusted Modelled $NO_2$ Comparison

**Figure C-9** compares final adjusted modelled total $NO_2$ at each of the monitoring sites, to measured total NOx and shows the 1:1 relationship, as well as ±10% and ±25% of the 1:1 line.

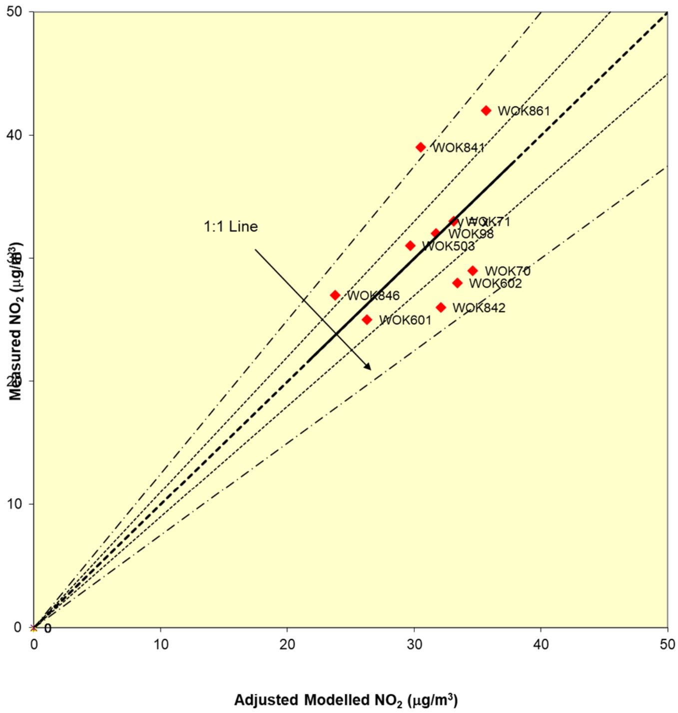


Figure C-9 Measured and Final Adjusted Modelled $NO_2$ Comparison

The calculated adjustment factors imply that overall, the model has under-predicted the road-$NO_x$ contribution. This is a common experience with this and most other models. The calculated Root Mean Square Error (RMSE) for this verification (4.7 µg/m³) lies within the range considered to be acceptable by DEFRA (DEFRA, 2018a) (4 – 10).

**Verification Zone D:**

A primary adjustment factor of **1.4719** has been determined as the slope of the best fit line between the modelled road NOx contribution and the 'measured' road-$NO_x$ (which is calculated from the measured and background $NO_2$ concentrations within DEFRA's $NO_x$ from $NO_2$ calculator (DEFRA, 2019e)), forced through zero (**Figure C-10**). This factor has then been applied to the raw modelled road-$NO_x$ concentration to provide adjusted modelled road-$NO_x$ concentrations.

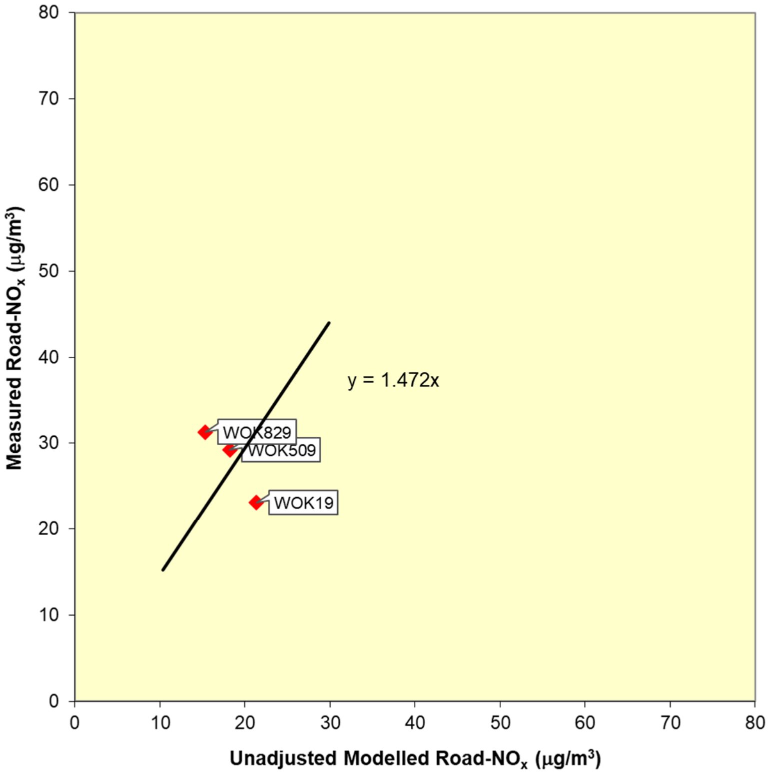


Figure C-10 Measured and Unadjusted Road-$NO_x$ Comparison

The total $NO_2$ concentrations have then been determined by combining the adjusted modelled road-$NO_x$ concentrations with the background $NO_2$ concentration within DEFRA's $NO_x$ from $NO_2$ calculator (DEFRA, 2019e). A secondary adjustment factor of **1.008** has then been calculated as the slope of the best fit line applied to the adjusted data and forced through zero (**Figure C-11**).

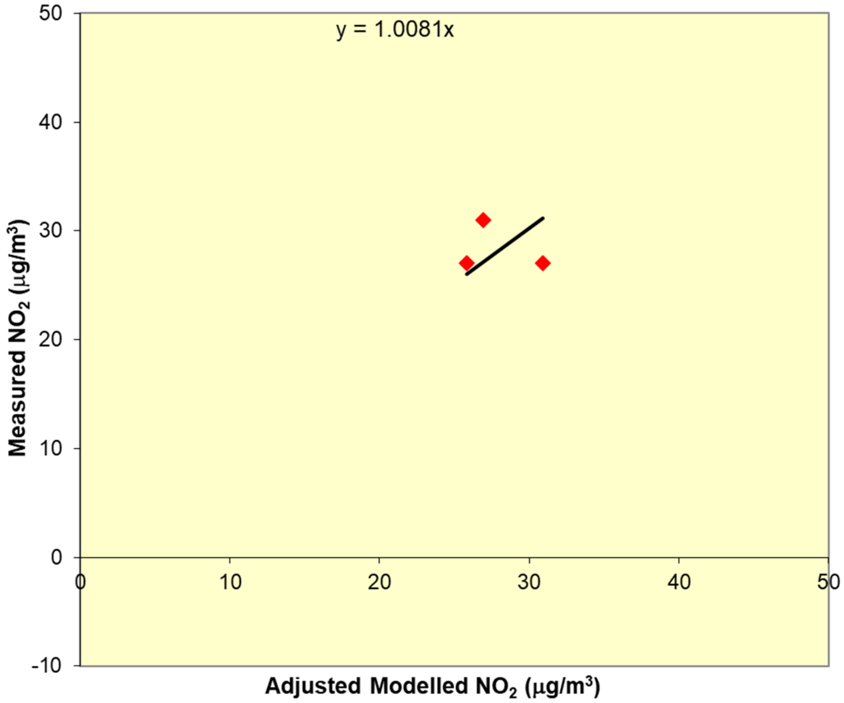


Figure C-11 Measured and Primary Adjusted Modelled $NO_2$ Comparison

**Figure C-12** compares final adjusted modelled total $NO_2$ at each of the monitoring sites, to measured total NOx and shows the 1:1 relationship, as well as ±10% and ±25% of the 1:1 line.

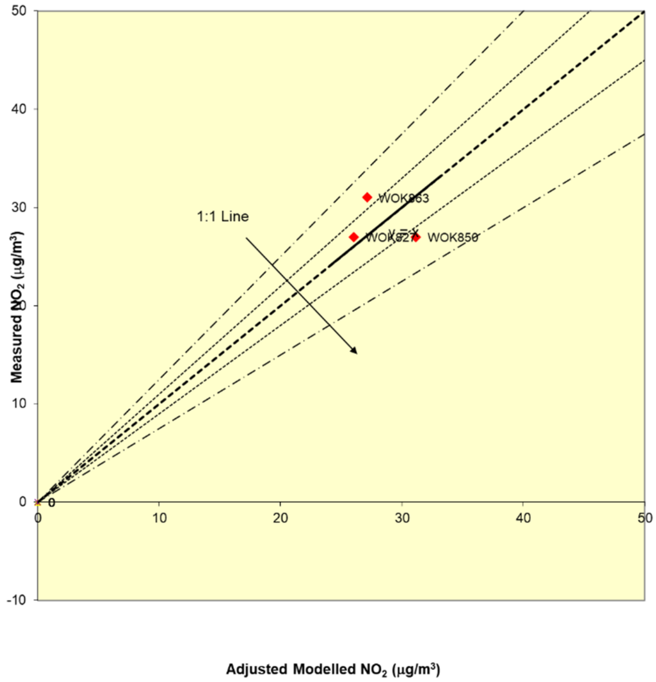


Figure C-12 Measured and Final Adjusted Modelled $NO_2$ Comparison

The calculated adjustment factors imply that overall, the model has under-predicted the road-$NO_x$ contribution. This is a common experience with this and most other models. The calculated Root Mean Square Error (RMSE) for this verification (3.3 µg/m³) lies within the range considered to be acceptable by DEFRA (DEFRA, 2018a) (4 – 10).

# Appendix D Model Verification (Ecological Receptors)

## $NO_2$

A separate verification study was undertaken utilising diffusion tubes in the neighbouring borough of Bracknell Forest, given the lack of suitable and representative sites of roads adjacent to the designated sites within WBC. The following nitrogen dioxide monitoring sites were used:

- 58xyz - Pine View, Bracknell Road;
- 90xyz - Dive Shop, Bracknell Road;
- 91xyz - The Mount, Bracknell Road;
- 102xyz - 28 Southwold; and
- 105xyz - 69 Quintiles.

A primary adjustment factor of **2.7847** has been determined as the slope of the best fit line between the modelled road NOx contribution and the 'measured' road-NOx (which is calculated from the measured and background NO2 concentrations within DEFRA's NOx from $NO_2$ calculator (DEFRA, 2019e)), forced through zero (**Figure D-1**). This factor has then been applied to the raw modelled road-NOx concentration to provide adjusted modelled road-NOx concentrations.

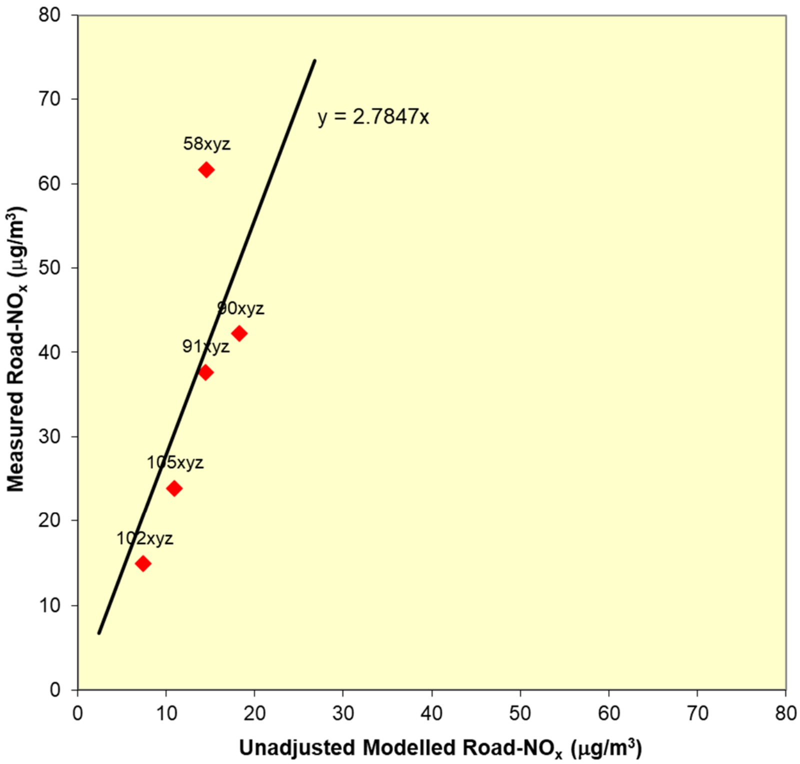


Figure D-1 Measured and Primary Adjusted Modelled $NO_2$ Comparison

The total $NO_2$ concentrations have then been determined by combining the adjusted modelled road-$NO_x$ concentrations with the background $NO_2$ concentration within DEFRA's $NO_x$ from $NO_2$ calculator

(DEFRA, 2019e). A secondary adjustment factor of **0.9925** has then been calculated as the slope of the best fit line applied to the adjusted data and forced through zero (**Figure D-2**).

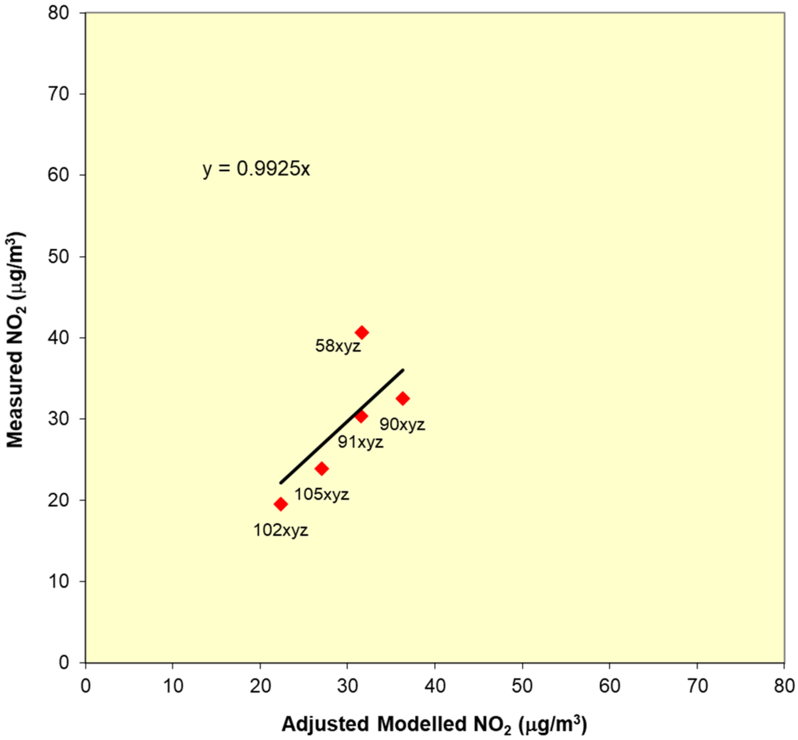


Figure D-2 Measured and Primary Adjusted Modelled $NO_2$ Comparison

**Figure D-3** compares final adjusted modelled total $NO_2$ at each of the monitoring sites, to measured total NOx and shows the 1:1 relationship, as well as ±10% and ±25% of the 1:1 line.

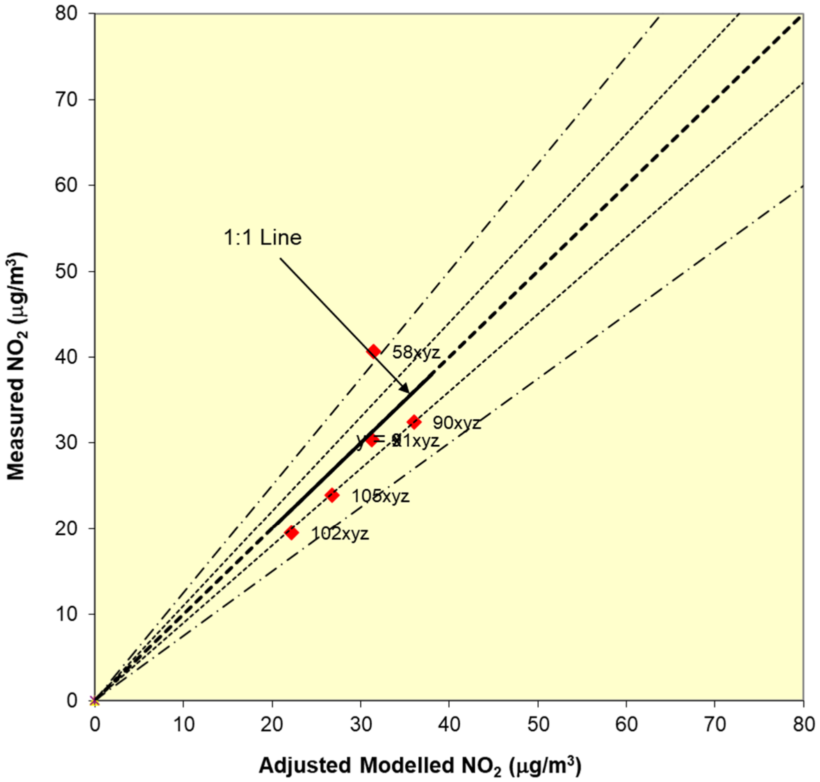


Figure D-3 Measured and Final Adjusted Modelled $NO_2$ Comparison

The calculated adjustment factors imply that overall, the model has under-predicted the road-$NO_x$ contribution. This is a common experience with this and most other models. The calculated Root Mean Square Error (RMSE) for this verification (4.8 µg/m$^3$) lies within the range considered to be acceptable by DEFRA (DEFRA, 2018a) (4 – 10).

# Appendix E Ecological Receptor Results

Table E-1 Scenario 3d: Predicted 'in-isolation' Annual Nitrogen Deposition at Modelled Ecological Receptors (change >1% of critical load)

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| CB1_0 | 10 | -0.4 | -4.3% | **46.5** | **32.7** | **32.3** |
| CB1_5 | 10 | -0.4 | -3.8% | **45.1** | **31.7** | **31.3** |
| CB1_10 | 10 | -0.3 | -3.5% | **44.0** | **30.8** | **30.5** |
| CB1_15 | 10 | -0.3 | -3.2% | **43.0** | **30.1** | **29.8** |
| CB1_20 | 10 | -0.3 | -2.9% | **42.1** | **29.5** | **29.2** |
| CB1_25 | 10 | -0.3 | -2.6% | **40.7** | **28.6** | **28.3** |
| CB1_30 | 10 | -0.2 | -2.3% | **39.5** | **27.8** | **27.5** |
| CB1_40 | 10 | -0.2 | -2.2% | **38.5** | **27.1** | **26.9** |
| CB1_50 | 10 | -0.2 | -1.8% | **36.7** | **26.0** | **25.8** |
| CB1_75 | 10 | -0.2 | -1.6% | **35.5** | **25.2** | **25.0** |
| CB1_100 | 10 | -0.1 | -1.4% | **34.6** | **24.6** | **24.5** |
| CB1_125 | 10 | -0.1 | -1.2% | **33.9** | **24.2** | **24.0** |
| CB1_150 | 10 | -0.1 | -1.1% | **33.3** | **23.8** | **23.7** |
| TAP11_0 | 10 | 1.0 | **10.0%** | **48.9** | **43.3** | **44.3** |
| TAP11_5 | 10 | 0.8 | **8.4%** | **44.1** | **38.6** | **39.4** |
| TAP11_10 | 10 | 0.7 | **7.4%** | **41.0** | **35.4** | **36.1** |
| TAP11_15 | 10 | 0.7 | **6.6%** | **38.5** | **32.9** | **33.6** |
| TAP11_20 | 10 | 0.6 | **6.0%** | **36.6** | **31.0** | **31.6** |
| TAP11_25 | 10 | 0.5 | **5.1%** | **33.7** | **28.0** | **28.5** |
| TAP11_30 | 10 | 0.4 | **4.4%** | **31.5** | **25.9** | **26.3** |
| TAP11_40 | 10 | 0.4 | **3.9%** | **29.9** | **24.3** | **24.7** |
| TAP11_50 | 10 | 0.3 | **3.1%** | **27.2** | **21.7** | **22.0** |
| TAP11_75 | 10 | 0.2 | **2.5%** | **25.6** | **20.3** | **20.5** |
| TAP11_100 | 10 | 0.2 | **2.1%** | **25.0** | **19.8** | **20.0** |
| TAP11_125 | 10 | 0.2 | **1.7%** | **25.4** | **20.5** | **20.7** |
| TAP11_150 | 10 | 0.1 | **1.3%** | **29.7** | **25.3** | **25.4** |
| TAP11_175 | 10 | 0.1 | **1.3%** | **24.8** | **20.1** | **20.2** |
| TAP11_200 | 10 | 0.1 | **1.3%** | **23.0** | **18.3** | **18.4** |
| TAP13_0 | 10 | 0.3 | **2.6%** | **33.3** | **30.5** | **30.7** |
| TAP13_5 | 10 | 0.2 | **2.1%** | **29.5** | **26.3** | **26.5** |
| TAP13_10 | 10 | 0.2 | **1.8%** | **27.1** | **23.7** | **23.9** |
| TAP13_15 | 10 | 0.2 | **1.6%** | **25.5** | **22.0** | **22.2** |
| TAP13_20 | 10 | 0.1 | **1.4%** | **24.3** | **20.7** | **20.9** |
| TAP13_25 | 10 | 0.1 | **1.2%** | **22.6** | **18.9** | **19.1** |
| TAP14_0 | 10 | 0.5 | **4.7%** | **30.5** | **28.3** | **28.8** |
| TAP14_5 | 10 | 0.4 | **4.2%** | **28.8** | **26.3** | **26.7** |
| TAP14_10 | 10 | 0.4 | **3.8%** | **27.5** | **24.7** | **25.1** |
| TAP14_15 | 10 | 0.4 | **3.5%** | **26.4** | **23.4** | **23.8** |
| TAP14_20 | 10 | 0.3 | **3.2%** | **25.5** | **22.4** | **22.7** |
| TAP14_25 | 10 | 0.3 | **2.8%** | **24.1** | **20.8** | **21.1** |
| TAP14_30 | 10 | 0.3 | **2.5%** | **23.1** | **19.6** | **19.9** |
| TAP14_40 | 10 | 0.2 | **2.3%** | **22.3** | **18.7** | **18.9** |
| TAP14_50 | 10 | 0.2 | **1.8%** | **20.7** | **17.0** | **17.2** |
| TAP14_75 | 10 | 0.2 | **1.6%** | **19.7** | **16.0** | **16.1** |
| TAP14_100 | 10 | 0.1 | **1.3%** | **19.0** | **15.2** | **15.4** |
| TAP14_125 | 10 | 0.1 | **1.2%** | **18.5** | **14.7** | **14.8** |
| TAP14_150 | 10 | 0.1 | **1.1%** | **18.0** | **14.2** | **14.3** |
| TAP4_0 | 10 | 0.1 | **1.3%** | **25.7** | **22.4** | **22.5** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TAP4_5 | 10 | 0.1 | **1.3%** | **24.4** | **20.7** | **20.9** |
| TAP4_10 | 10 | 0.1 | **1.2%** | **23.5** | **19.7** | **19.8** |
| TAP4_15 | 10 | 0.1 | **1.2%** | **22.8** | **18.9** | **19.0** |
| TAP4_20 | 10 | 0.1 | **1.2%** | **22.3** | **18.3** | **18.4** |
| TAP4_25 | 10 | 0.1 | **1.1%** | **21.6** | **17.5** | **17.6** |
| TAP4_30 | 10 | 0.1 | **1.1%** | **21.0** | **16.9** | **17.0** |
| TAP4_40 | 10 | 0.1 | **1.1%** | **20.6** | **16.4** | **16.5** |
| TAP5_0 | 10 | 0.1 | **1.4%** | **27.9** | **20.9** | **21.0** |
| TAP5_5 | 10 | 0.1 | **1.4%** | **26.8** | **20.0** | **20.1** |
| TAP5_10 | 10 | 0.1 | **1.3%** | **26.0** | **19.4** | **19.5** |
| TAP5_15 | 10 | 0.1 | **1.3%** | **25.4** | **18.9** | **19.0** |
| TAP5_20 | 10 | 0.1 | **1.2%** | **24.8** | **18.5** | **18.6** |
| TAP5_25 | 10 | 0.1 | **1.2%** | **24.0** | **17.8** | **17.9** |
| TAP5_30 | 10 | 0.1 | **1.2%** | **23.3** | **17.3** | **17.4** |
| TAP5_40 | 10 | 0.1 | **1.1%** | **22.7** | **16.9** | **17.0** |
| TAP5_50 | 10 | 0.1 | **1.1%** | **21.7** | **16.1** | **16.2** |
| TAP6_0 | 10 | 0.8 | **7.9%** | **46.1** | **39.8** | **40.6** |
| TAP6_5 | 10 | 0.7 | **6.7%** | **41.5** | **35.2** | **35.8** |
| TAP6_10 | 10 | 0.6 | **5.9%** | **38.4** | **32.0** | **32.6** |
| TAP6_15 | 10 | 0.5 | **5.3%** | **36.0** | **29.6** | **30.2** |
| TAP6_20 | 10 | 0.5 | **4.8%** | **34.1** | **27.7** | **28.2** |
| TAP6_25 | 10 | 0.4 | **4.0%** | **31.1** | **24.9** | **25.3** |
| TAP6_30 | 10 | 0.3 | **3.5%** | **29.1** | **22.8** | **23.2** |
| TAP6_40 | 10 | 0.3 | **3.0%** | **27.4** | **21.3** | **21.6** |
| TAP6_50 | 10 | 0.2 | **2.3%** | **24.6** | **18.7** | **19.0** |
| TAP6_75 | 10 | 0.2 | **1.9%** | **22.8** | **17.1** | **17.3** |
| TAP6_100 | 10 | 0.2 | **1.6%** | **21.5** | **16.0** | **16.2** |
| TAP6_125 | 10 | 0.1 | **1.3%** | **20.5** | **15.2** | **15.4** |
| TAP6_150 | 10 | 0.1 | **1.2%** | **19.8** | **14.6** | **14.7** |
| TAP6_175 | 10 | 0.1 | **1.1%** | **19.2** | **14.2** | **14.3** |
| TAP7_0 | 10 | 0.8 | **8.3%** | **47.6** | **41.5** | **42.4** |
| TAP7_5 | 10 | 0.7 | **7.2%** | **43.3** | **37.2** | **37.9** |
| TAP7_10 | 10 | 0.6 | **6.4%** | **40.1** | **34.1** | **34.7** |
| TAP7_15 | 10 | 0.6 | **5.8%** | **37.7** | **31.6** | **32.2** |
| TAP7_20 | 10 | 0.5 | **5.2%** | **35.7** | **29.7** | **30.2** |
| TAP7_25 | 10 | 0.4 | **4.4%** | **32.7** | **26.7** | **27.1** |
| TAP7_30 | 10 | 0.4 | **3.9%** | **30.5** | **24.5** | **24.9** |
| TAP7_40 | 10 | 0.3 | **3.4%** | **28.7** | **22.9** | **23.2** |
| TAP7_50 | 10 | 0.3 | **2.7%** | **25.5** | **19.9** | **20.2** |
| TAP7_75 | 10 | 0.2 | **2.2%** | **23.5** | **18.1** | **18.3** |
| TAP7_100 | 10 | 0.2 | **1.8%** | **22.0** | **16.8** | **17.0** |
| TAP7_125 | 10 | 0.2 | **1.6%** | **21.0** | **15.9** | **16.1** |
| TAP7_150 | 10 | 0.1 | **1.4%** | **20.1** | **15.2** | **15.3** |
| TAP7_175 | 10 | 0.1 | **1.2%** | **19.4** | **14.6** | **14.8** |
| TAP7_200 | 10 | 0.1 | **1.1%** | **18.9** | **14.2** | **14.3** |
| TBH10_0 | 10 | -0.1 | -1.1% | **37.1** | **31.0** | **30.9** |
| TBH10_5 | 10 | -0.1 | -1.1% | **32.8** | **26.9** | **26.8** |
| TBH11_0 | 10 | -0.3 | -3.4% | **33.0** | **26.3** | **26.0** |
| TBH11_5 | 10 | -0.3 | -2.5% | **30.4** | **24.0** | **23.7** |
| TBH11_10 | 10 | -0.2 | -1.9% | **28.6** | **22.5** | **22.3** |
| TBH11_15 | 10 | -0.2 | -1.6% | **27.4** | **21.5** | **21.4** |
| TBH11_20 | 10 | -0.1 | -1.4% | **26.4** | **20.8** | **20.6** |
| TBH13_0 | 10 | -0.1 | -1.3% | **33.7** | **27.0** | **26.9** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH13_5 | 10 | -0.1 | -1.1% | **30.9** | **24.5** | **24.4** |
| TBH14_0 | 10 | 0.1 | **1.4%** | **17.8** | **14.0** | **14.1** |
| TBH14_5 | 10 | 0.1 | **1.1%** | **17.4** | **13.6** | **13.7** |
| TBH16_10 | 10 | 0.1 | **1.1%** | **20.6** | **17.2** | **17.3** |
| TBH18_0 | 10 | 0.2 | **1.6%** | **29.4** | **24.7** | **24.9** |
| TBH18_5 | 10 | 0.1 | **1.1%** | **26.3** | **21.6** | **21.8** |
| TBH19_0 | 10 | 1.3 | **12.6%** | **21.6** | **17.4** | **18.7** |
| TBH19_5 | 10 | 0.7 | **7.1%** | **18.5** | **14.5** | **15.2** |
| TBH19_10 | 10 | 0.5 | **5.2%** | **17.5** | **13.4** | **13.9** |
| TBH19_15 | 10 | 0.4 | **4.1%** | **16.9** | **12.9** | **13.3** |
| TBH19_20 | 10 | 0.3 | **3.5%** | **16.5** | **12.5** | **12.8** |
| TBH19_25 | 10 | 0.3 | **2.6%** | **16.0** | **12.0** | **12.3** |
| TBH19_30 | 10 | 0.2 | **2.1%** | **15.7** | **11.8** | **12.0** |
| TBH19_40 | 10 | 0.2 | **1.8%** | **15.5** | **11.6** | **11.8** |
| TBH19_50 | 10 | 0.1 | **1.3%** | **15.2** | **11.3** | **11.4** |
| TBH20_0 | 10 | 0.3 | **3.1%** | **16.2** | **12.3** | **12.6** |
| TBH20_5 | 10 | 0.8 | **8.0%** | **19.0** | **14.9** | **15.7** |
| TBH20_10 | 10 | 0.6 | **6.5%** | **18.1** | **14.1** | **14.7** |
| TBH20_15 | 10 | 0.5 | **5.5%** | **17.6** | **13.5** | **14.1** |
| TBH20_20 | 10 | 0.5 | **4.7%** | **17.1** | **13.1** | **13.6** |
| TBH20_25 | 10 | 0.4 | **3.8%** | **16.6** | **12.6** | **13.0** |
| TBH20_30 | 10 | 0.3 | **3.1%** | **16.2** | **12.3** | **12.6** |
| TBH20_40 | 10 | 0.3 | **2.7%** | **16.0** | **12.0** | **12.3** |
| TBH20_50 | 10 | 0.2 | **2.0%** | **15.6** | **11.7** | **11.9** |
| TBH20_75 | 10 | 0.2 | **1.6%** | **15.4** | **11.5** | **11.6** |
| TBH20_100 | 10 | 0.1 | **1.3%** | **15.2** | **11.3** | **11.4** |
| TBH20_125 | 10 | 0.1 | **1.2%** | **15.1** | **11.2** | **11.3** |
| TBH21_0 | 10 | 0.5 | **5.1%** | **18.4** | **14.2** | **14.7** |
| TBH21_5 | 10 | 0.5 | **4.7%** | **18.2** | **13.9** | **14.4** |
| TBH21_10 | 10 | 0.4 | **4.3%** | **18.0** | **13.7** | **14.2** |
| TBH21_15 | 10 | 0.4 | **4.0%** | **17.8** | **13.6** | **14.0** |
| TBH21_20 | 10 | 0.4 | **3.7%** | **17.6** | **13.4** | **13.8** |
| TBH21_25 | 10 | 0.3 | **3.3%** | **17.4** | **13.2** | **13.5** |
| TBH21_30 | 10 | 0.3 | **2.9%** | **17.2** | **13.0** | **13.3** |
| TBH21_40 | 10 | 0.3 | **2.6%** | **17.0** | **12.8** | **13.1** |
| TBH21_50 | 10 | 0.2 | **2.2%** | **16.8** | **12.6** | **12.8** |
| TBH21_75 | 10 | 0.2 | **1.8%** | **16.6** | **12.4** | **12.6** |
| TBH21_100 | 10 | 0.2 | **1.5%** | **16.4** | **12.2** | **12.4** |
| TBH21_125 | 10 | 0.1 | **1.3%** | **16.3** | **12.1** | **12.3** |
| TBH21_150 | 10 | 0.1 | **1.2%** | **16.2** | **12.0** | **12.2** |
| TBH22_0 | 10 | 0.1 | **1.4%** | **23.7** | **19.1** | **19.2** |
| TBH24_0 | 10 | 0.2 | **2.0%** | **27.2** | **21.7** | **21.9** |
| TBH24_5 | 10 | 0.1 | **1.3%** | **23.2** | **18.0** | **18.1** |
| TBH3_0 | 10 | -0.4 | -3.8% | **22.3** | **18.1** | **17.7** |
| TBH3_5 | 10 | -0.2 | -2.4% | **19.5** | **15.3** | **15.1** |
| TBH3_10 | 10 | -0.2 | -1.8% | **18.4** | **14.3** | **14.1** |
| TBH3_15 | 10 | -0.1 | -1.5% | **17.8** | **13.7** | **13.5** |
| TBH3_20 | 10 | -0.1 | -1.3% | **17.3** | **13.3** | **13.1** |
| TBH4_0 | 10 | 0.4 | **4.3%** | **23.7** | **20.1** | **20.5** |
| TBH4_5 | 10 | 0.3 | **3.0%** | **21.2** | **17.4** | **17.7** |
| TBH4_10 | 10 | 0.2 | **2.3%** | **19.9** | **16.1** | **16.3** |
| TBH4_15 | 10 | 0.2 | **1.9%** | **19.1** | **15.3** | **15.4** |
| TBH4_20 | 10 | 0.2 | **1.6%** | **18.6** | **14.7** | **14.8** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH4_25 | 10 | 0.1 | **1.3%** | **17.9** | **13.9** | **14.1** |
| TBH5_0 | 10 | -0.1 | -1.4% | **29.2** | **23.2** | **23.1** |
| TBH5_5 | 10 | -0.2 | -2.3% | **26.7** | **21.1** | **20.9** |
| TBH5_10 | 10 | -0.3 | -2.7% | **25.2** | **19.8** | **19.5** |
| TBH5_15 | 10 | -0.3 | -3.0% | **24.1** | **18.9** | **18.6** |
| TBH5_20 | 10 | -0.3 | -3.1% | **23.3** | **18.2** | **17.9** |
| TBH5_25 | 10 | -0.3 | -3.1% | **22.1** | **17.2** | **16.9** |
| TBH5_30 | 10 | -0.3 | -3.1% | **21.3** | **16.5** | **16.2** |
| TBH5_40 | 10 | -0.3 | -2.9% | **20.6** | **15.9** | **15.6** |
| TBH5_50 | 10 | -0.3 | -2.6% | **19.5** | **15.0** | **14.8** |
| TBH5_75 | 10 | -0.2 | -2.3% | **18.8** | **14.5** | **14.2** |
| TBH5_100 | 10 | -0.2 | -2.0% | **18.3** | **14.1** | **13.9** |
| TBH5_125 | 10 | -0.2 | -1.8% | **18.0** | **13.8** | **13.6** |
| TBH5_150 | 10 | -0.2 | -1.6% | **17.7** | **13.5** | **13.4** |
| TBH5_175 | 10 | -0.2 | -1.5% | **17.5** | **13.4** | **13.2** |
| TBH5_200 | 10 | -0.1 | -1.4% | **17.3** | **13.2** | **13.1** |
| WG1_0 | 10 | 0.2 | **1.8%** | **48.6** | **33.8** | **34.0** |
| WG1_5 | 10 | 0.1 | **1.5%** | **44.6** | **30.9** | **31.1** |
| WG1_10 | 10 | 0.1 | **1.3%** | **41.6** | **28.8** | **28.9** |
| WG1_15 | 10 | 0.1 | **1.1%** | **39.1** | **27.1** | **27.2** |
| WG2_0 | 10 | 0.1 | **1.2%** | **40.0** | **28.3** | **28.4** |
| WG3_0 | 10 | 0.1 | **1.4%** | **41.4** | **29.3** | **29.4** |
| WG4_0 | 10 | 0.2 | **1.9%** | **39.6** | **20.0** | **20.2** |
| WG4_5 | 10 | 0.1 | **1.3%** | **34.8** | **19.2** | **19.3** |

Table E-2 Scenario 3d: Predicted 'in-combination' Annual Nitrogen Deposition at Modelled Ecological Receptors (change >1% of critical load)

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| CB1_0 | 10 | -1.2 | -11.7% | **46.5** | **33.4** | **32.3** |
| CB1_5 | 10 | -1.1 | -10.9% | **45.1** | **32.4** | **31.3** |
| CB1_10 | 10 | -1.0 | -10.3% | **44.0** | **31.5** | **30.5** |
| CB1_15 | 10 | -1.0 | -9.7% | **43.0** | **30.8** | **29.8** |
| CB1_20 | 10 | -0.9 | -9.2% | **42.1** | **30.2** | **29.2** |
| CB1_25 | 10 | -0.8 | -8.2% | **40.7** | **29.1** | **28.3** |
| CB1_30 | 10 | -0.7 | -7.3% | **39.5** | **28.3** | **27.5** |
| CB1_40 | 10 | -0.7 | -6.5% | **38.5** | **27.6** | **26.9** |
| CB1_50 | 10 | -0.5 | -5.0% | **36.7** | **26.3** | **25.8** |
| CB1_75 | 10 | -0.4 | -4.1% | **35.5** | **25.4** | **25.0** |
| CB1_100 | 10 | -0.4 | -3.5% | **34.6** | **24.8** | **24.5** |
| CB1_125 | 10 | -0.3 | -3.1% | **33.9** | **24.3** | **24.0** |
| CB1_150 | 10 | -0.3 | -2.8% | **33.3** | **24.0** | **23.7** |
| CB1_175 | 10 | -0.3 | -2.6% | **32.9** | **23.7** | **23.4** |
| CB1_200 | 10 | -0.2 | -2.4% | **32.5** | **23.4** | **23.2** |
| TAP1_0 | 10 | -4.7 | -47.3% | **22.4** | **17.0** | **12.3** |
| TAP1_5 | 10 | -3.4 | -34.4% | **20.4** | **15.4** | **11.9** |
| TAP1_10 | 10 | -2.8 | -27.9% | **19.4** | **14.5** | **11.8** |
| TAP1_15 | 10 | -2.4 | -23.5% | **18.8** | **14.0** | **11.6** |
| TAP1_20 | 10 | -2.0 | -20.3% | **18.3** | **13.6** | **11.5** |
| TAP1_25 | 10 | -1.6 | -15.9% | **17.6** | **13.0** | **11.4** |
| TAP1_30 | 10 | -1.3 | -13.0% | **17.1** | **12.6** | **11.3** |
| TAP1_40 | 10 | -1.1 | -10.9% | **16.8** | **12.4** | **11.3** |
| TAP1_50 | 10 | -0.8 | -7.7% | **16.3** | **12.0** | **11.2** |
| TAP1_75 | 10 | -0.6 | -5.8% | **16.0** | **11.7** | **11.2** |
| TAP1_100 | 10 | -0.5 | -4.5% | **15.8** | **11.6** | **11.1** |
| TAP1_125 | 10 | -0.4 | -3.6% | **15.7** | **11.5** | **11.1** |
| TAP1_150 | 10 | -0.3 | -3.0% | **15.6** | **11.4** | **11.1** |
| TAP1_175 | 10 | -0.2 | -2.4% | **15.5** | **11.3** | **11.1** |
| TAP1_200 | 10 | -0.2 | -2.0% | **15.4** | **11.3** | **11.1** |
| TAP10_0 | 10 | -0.5 | -4.6% | **16.7** | **12.3** | **11.8** |
| TAP10_5 | 10 | -0.2 | -2.0% | **16.1** | **11.8** | **11.6** |
| TAP10_40 | 10 | 0.1 | **1.1%** | **15.3** | **11.2** | **11.3** |
| TAP10_50 | 10 | 0.1 | **1.4%** | **15.2** | **11.1** | **11.3** |
| TAP10_75 | 10 | 0.2 | **1.6%** | **15.1** | **11.1** | **11.2** |
| TAP10_100 | 10 | 0.2 | **1.7%** | **15.1** | **11.0** | **11.2** |
| TAP10_125 | 10 | 0.2 | **1.8%** | **15.1** | **11.0** | **11.2** |
| TAP10_150 | 10 | 0.2 | **1.8%** | **15.0** | **11.0** | **11.2** |
| TAP10_175 | 10 | 0.2 | **1.8%** | **15.0** | **11.0** | **11.2** |
| TAP10_200 | 10 | 0.2 | **1.8%** | **15.0** | **11.0** | **11.1** |
| TAP11_0 | 10 | -0.2 | -2.3% | **16.3** | **12.0** | **11.8** |
| TAP11_0 | 10 | 3.3 | **32.7%** | **48.9** | **41.1** | **44.3** |
| TAP11_5 | 10 | 2.8 | **28.4%** | **44.1** | **36.6** | **39.4** |
| TAP11_10 | 10 | 2.6 | **25.6%** | **41.0** | **33.5** | **36.1** |
| TAP11_15 | 10 | 2.3 | **23.3%** | **38.5** | **31.2** | **33.6** |
| TAP11_20 | 10 | 2.2 | **21.6%** | **36.6** | **29.4** | **31.6** |
| TAP11_25 | 10 | 0.1 | **1.2%** | **15.5** | **11.4** | **11.5** |
| TAP11_25 | 10 | 1.9 | **18.9%** | **33.7** | **26.6** | **28.5** |
| TAP11_30 | 10 | 0.2 | **1.5%** | **15.4** | **11.3** | **11.5** |
| TAP11_30 | 10 | 1.7 | **17.0%** | **31.5** | **24.6** | **26.3** |
| TAP11_40 | 10 | 0.2 | **1.7%** | **15.3** | **11.3** | **11.4** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TAP11_40 | 10 | 1.6 | **15.5%** | **29.9** | **23.1** | **24.7** |
| TAP11_50 | 10 | 0.2 | **2.0%** | **15.3** | **11.2** | **11.4** |
| TAP11_50 | 10 | 1.3 | **13.3%** | **27.2** | **20.7** | **22.0** |
| TAP11_75 | 10 | 0.2 | **2.2%** | **15.2** | **11.1** | **11.4** |
| TAP11_75 | 10 | 1.2 | **12.3%** | **25.6** | **19.3** | **20.5** |
| TAP11_100 | 10 | 0.2 | **2.3%** | **15.2** | **11.1** | **11.3** |
| TAP11_100 | 10 | 1.2 | **12.4%** | **25.0** | **18.8** | **20.0** |
| TAP11_125 | 10 | 0.2 | **2.3%** | **15.1** | **11.1** | **11.3** |
| TAP11_125 | 10 | 1.5 | **14.7%** | **25.4** | **19.2** | **20.7** |
| TAP11_150 | 10 | 0.2 | **2.4%** | **15.1** | **11.1** | **11.3** |
| TAP11_150 | 10 | 2.5 | **25.1%** | **29.7** | **22.9** | **25.4** |
| TAP11_175 | 10 | 0.2 | **2.4%** | **15.1** | **11.1** | **11.3** |
| TAP11_175 | 10 | 1.5 | **15.1%** | **24.8** | **18.7** | **20.2** |
| TAP11_200 | 10 | 0.2 | **2.4%** | **15.1** | **11.0** | **11.3** |
| TAP11_200 | 10 | 1.2 | **11.9%** | **23.0** | **17.2** | **18.4** |
| TAP12_5 | 10 | 0.2 | **2.2%** | **17.6** | **13.1** | **13.3** |
| TAP12_10 | 10 | 0.3 | **3.1%** | **17.4** | **12.9** | **13.2** |
| TAP12_15 | 10 | 0.4 | **3.6%** | **17.3** | **12.8** | **13.2** |
| TAP12_20 | 10 | 0.4 | **4.0%** | **17.2** | **12.7** | **13.1** |
| TAP12_25 | 10 | 0.4 | **4.5%** | **17.1** | **12.6** | **13.1** |
| TAP12_30 | 10 | 0.5 | **4.7%** | **17.0** | **12.6** | **13.0** |
| TAP12_40 | 10 | 0.5 | **4.9%** | **16.9** | **12.5** | **13.0** |
| TAP12_50 | 10 | 0.5 | **5.2%** | **16.8** | **12.4** | **12.9** |
| TAP12_75 | 10 | 0.5 | **5.3%** | **16.7** | **12.4** | **12.9** |
| TAP12_100 | 10 | 0.5 | **5.3%** | **16.6** | **12.3** | **12.8** |
| TAP12_125 | 10 | 0.5 | **5.3%** | **16.6** | **12.3** | **12.8** |
| TAP12_150 | 10 | 0.5 | **5.3%** | **16.5** | **12.2** | **12.7** |
| TAP12_175 | 10 | 0.5 | **5.2%** | **16.5** | **12.2** | **12.7** |
| TAP12_200 | 10 | 0.5 | **5.2%** | **16.4** | **12.1** | **12.7** |
| TAP13_0 | 10 | 3.9 | **38.7%** | **33.3** | **26.9** | **30.7** |
| TAP13_5 | 10 | 3.1 | **30.9%** | **29.5** | **23.4** | **26.5** |
| TAP13_10 | 10 | 2.6 | **26.2%** | **27.1** | **21.3** | **23.9** |
| TAP13_15 | 10 | 2.3 | **23.0%** | **25.5** | **19.9** | **22.2** |
| TAP13_20 | 10 | 2.1 | **20.5%** | **24.3** | **18.8** | **20.9** |
| TAP13_25 | 10 | 1.7 | **17.2%** | **22.6** | **17.3** | **19.1** |
| TAP13_30 | 10 | 1.5 | **14.8%** | **21.4** | **16.3** | **17.8** |
| TAP13_40 | 10 | 1.3 | **13.1%** | **20.5** | **15.6** | **16.9** |
| TAP13_50 | 10 | 1.0 | **10.4%** | **19.1** | **14.4** | **15.4** |
| TAP13_75 | 10 | 0.9 | **8.8%** | **18.3** | **13.7** | **14.6** |
| TAP13_100 | 10 | 0.8 | **7.7%** | **17.7** | **13.2** | **14.0** |
| TAP13_125 | 10 | 0.7 | **6.9%** | **17.3** | **12.9** | **13.6** |
| TAP13_150 | 10 | 0.6 | **6.3%** | **17.0** | **12.6** | **13.2** |
| TAP13_175 | 10 | 0.6 | **5.8%** | **16.7** | **12.4** | **13.0** |
| TAP13_200 | 10 | 0.5 | **5.4%** | **16.5** | **12.2** | **12.8** |
| TAP14_0 | 10 | 5.3 | **52.9%** | **30.5** | **23.5** | **28.8** |
| TAP14_5 | 10 | 4.7 | **47.2%** | **28.8** | **22.0** | **26.7** |
| TAP14_10 | 10 | 4.3 | **42.7%** | **27.5** | **20.8** | **25.1** |
| TAP14_15 | 10 | 3.9 | **39.1%** | **26.4** | **19.9** | **23.8** |
| TAP14_20 | 10 | 3.6 | **36.1%** | **25.5** | **19.1** | **22.7** |
| TAP14_25 | 10 | 3.1 | **31.5%** | **24.1** | **17.9** | **21.1** |
| TAP14_30 | 10 | 2.8 | **28.0%** | **23.1** | **17.1** | **19.9** |
| TAP14_40 | 10 | 2.5 | **25.2%** | **22.3** | **16.4** | **18.9** |
| TAP14_50 | 10 | 2.0 | **20.3%** | **20.7** | **15.2** | **17.2** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TAP14_75 | 10 | 1.7 | **17.1%** | **19.7** | **14.4** | **16.1** |
| TAP14_100 | 10 | 1.5 | **14.8%** | **19.0** | **13.9** | **15.4** |
| TAP14_125 | 10 | 1.3 | **13.1%** | **18.5** | **13.5** | **14.8** |
| TAP14_150 | 10 | 1.2 | **11.8%** | **18.0** | **13.2** | **14.3** |
| TAP14_175 | 10 | 1.1 | **10.7%** | **17.7** | **12.9** | **14.0** |
| TAP14_200 | 10 | 1.0 | **9.8%** | **17.4** | **12.7** | **13.7** |
| TAP2_0 | 10 | -5.1 | -51.3% | **22.4** | **17.1** | **11.9** |
| TAP2_5 | 10 | -4.1 | -41.3% | **20.9** | **15.8** | **11.7** |
| TAP2_10 | 10 | -3.5 | -35.2% | **20.0** | **15.0** | **11.5** |
| TAP2_15 | 10 | -3.1 | -30.9% | **19.3** | **14.5** | **11.4** |
| TAP2_20 | 10 | -2.8 | -27.6% | **18.8** | **14.1** | **11.3** |
| TAP2_25 | 10 | -2.3 | -22.9% | **18.1** | **13.5** | **11.2** |
| TAP2_30 | 10 | -2.0 | -19.7% | **17.6** | **13.0** | **11.1** |
| TAP2_40 | 10 | -1.7 | -17.3% | **17.2** | **12.7** | **11.0** |
| TAP2_50 | 10 | -1.3 | -13.2% | **16.6** | **12.2** | **10.9** |
| TAP2_75 | 10 | -1.1 | -10.8% | **16.2** | **11.9** | **10.8** |
| TAP2_100 | 10 | -0.9 | -9.3% | **16.0** | **11.7** | **10.8** |
| TAP2_125 | 10 | -0.8 | -8.1% | **15.8** | **11.6** | **10.8** |
| TAP2_150 | 10 | -0.7 | -7.3% | **15.7** | **11.5** | **10.8** |
| TAP2_175 | 10 | -0.7 | -6.6% | **15.5** | **11.4** | **10.8** |
| TAP2_200 | 10 | -0.6 | -6.0% | **15.5** | **11.4** | **10.8** |
| TAP3_0 | 10 | 5.6 | **56.0%** | **22.7** | **17.2** | **22.8** |
| TAP3_5 | 10 | 3.7 | **37.3%** | **20.4** | **15.3** | **19.0** |
| TAP3_10 | 10 | 3.0 | **29.7%** | **19.4** | **14.5** | **17.4** |
| TAP3_15 | 10 | 2.5 | **25.0%** | **18.8** | **14.0** | **16.4** |
| TAP3_20 | 10 | 2.2 | **21.8%** | **18.4** | **13.6** | **15.8** |
| TAP3_25 | 10 | 1.8 | **17.6%** | **17.8** | **13.1** | **14.9** |
| TAP3_30 | 10 | 1.5 | **14.9%** | **17.4** | **12.8** | **14.3** |
| TAP3_40 | 10 | 1.3 | **13.1%** | **17.2** | **12.6** | **13.9** |
| TAP3_50 | 10 | 1.0 | **10.2%** | **16.7** | **12.2** | **13.3** |
| TAP3_75 | 10 | 0.8 | **8.5%** | **16.4** | **12.0** | **12.9** |
| TAP3_100 | 10 | 0.7 | **7.3%** | **16.2** | **11.8** | **12.6** |
| TAP3_125 | 10 | 0.7 | **6.5%** | **16.0** | **11.7** | **12.4** |
| TAP3_150 | 10 | 0.6 | **5.9%** | **15.9** | **11.6** | **12.2** |
| TAP3_175 | 10 | 0.5 | **5.4%** | **15.7** | **11.5** | **12.0** |
| TAP3_200 | 10 | 0.5 | **5.0%** | **15.6** | **11.4** | **11.9** |
| TAP4_0 | 10 | 3.0 | **29.5%** | **25.7** | **19.5** | **22.5** |
| TAP4_5 | 10 | 2.4 | **24.5%** | **24.4** | **18.4** | **20.9** |
| TAP4_10 | 10 | 2.1 | **21.3%** | **23.5** | **17.7** | **19.8** |
| TAP4_15 | 10 | 1.9 | **19.1%** | **22.8** | **17.1** | **19.0** |
| TAP4_20 | 10 | 1.7 | **17.4%** | **22.3** | **16.7** | **18.4** |
| TAP4_25 | 10 | 1.5 | **15.1%** | **21.6** | **16.1** | **17.6** |
| TAP4_30 | 10 | 1.4 | **13.6%** | **21.0** | **15.6** | **17.0** |
| TAP4_40 | 10 | 1.2 | **12.5%** | **20.6** | **15.3** | **16.5** |
| TAP4_50 | 10 | 1.1 | **10.5%** | **19.8** | **14.6** | **15.7** |
| TAP4_75 | 10 | 0.9 | **9.2%** | **19.2** | **14.2** | **15.1** |
| TAP4_100 | 10 | 0.8 | **8.2%** | **18.8** | **13.8** | **14.6** |
| TAP4_125 | 10 | 0.7 | **7.4%** | **18.4** | **13.5** | **14.3** |
| TAP4_150 | 10 | 0.7 | **6.8%** | **18.1** | **13.3** | **14.0** |
| TAP4_175 | 10 | 0.6 | **6.3%** | **17.8** | **13.1** | **13.7** |
| TAP4_200 | 10 | 0.6 | **5.8%** | **17.7** | **13.0** | **13.6** |
| TAP5_0 | 10 | -0.5 | -5.2% | **27.9** | **21.5** | **21.0** |
| TAP5_5 | 10 | -0.4 | -4.2% | **26.8** | **20.6** | **20.1** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TAP5_10 | 10 | -0.4 | -3.5% | **26.0** | **19.9** | **19.5** |
| TAP5_15 | 10 | -0.3 | -3.0% | **25.4** | **19.3** | **19.0** |
| TAP5_20 | 10 | -0.3 | -2.5% | **24.8** | **18.8** | **18.6** |
| TAP5_25 | 10 | -0.2 | -1.6% | **24.0** | **18.1** | **17.9** |
| TAP5_75 | 10 | 0.1 | **1.3%** | **20.9** | **15.6** | **15.7** |
| TAP5_100 | 10 | 0.2 | **1.8%** | **20.4** | **15.1** | **15.3** |
| TAP5_125 | 10 | 0.2 | **2.0%** | **20.1** | **14.9** | **15.1** |
| TAP5_150 | 10 | 0.2 | **2.2%** | **19.8** | **14.6** | **14.8** |
| TAP5_175 | 10 | 0.2 | **2.3%** | **19.5** | **14.4** | **14.6** |
| TAP5_200 | 10 | 0.2 | **2.4%** | **19.2** | **14.2** | **14.4** |
| TAP6_0 | 10 | 2.8 | **28.1%** | **46.1** | **37.8** | **40.6** |
| TAP6_5 | 10 | 2.3 | **23.4%** | **41.5** | **33.5** | **35.8** |
| TAP6_10 | 10 | 2.0 | **20.2%** | **38.4** | **30.6** | **32.6** |
| TAP6_15 | 10 | 1.8 | **17.7%** | **36.0** | **28.4** | **30.2** |
| TAP6_20 | 10 | 1.6 | **15.7%** | **34.1** | **26.6** | **28.2** |
| TAP6_25 | 10 | 1.3 | **12.8%** | **31.1** | **24.0** | **25.3** |
| TAP6_30 | 10 | 1.1 | **10.7%** | **29.1** | **22.1** | **23.2** |
| TAP6_40 | 10 | 0.9 | **9.1%** | **27.4** | **20.7** | **21.6** |
| TAP6_50 | 10 | 0.6 | **6.4%** | **24.6** | **18.3** | **19.0** |
| TAP6_75 | 10 | 0.5 | **4.8%** | **22.8** | **16.8** | **17.3** |
| TAP6_100 | 10 | 0.4 | **3.8%** | **21.5** | **15.8** | **16.2** |
| TAP6_125 | 10 | 0.3 | **3.1%** | **20.5** | **15.1** | **15.4** |
| TAP6_150 | 10 | 0.3 | **2.6%** | **19.8** | **14.5** | **14.7** |
| TAP6_175 | 10 | 0.2 | **2.3%** | **19.2** | **14.0** | **14.3** |
| TAP6_200 | 10 | 0.2 | **1.9%** | **18.7** | **13.7** | **13.9** |
| TAP7_0 | 10 | 3.4 | **33.8%** | **47.6** | **39.0** | **42.4** |
| TAP7_5 | 10 | 2.9 | **29.4%** | **43.3** | **35.0** | **37.9** |
| TAP7_10 | 10 | 2.6 | **26.1%** | **40.1** | **32.1** | **34.7** |
| TAP7_15 | 10 | 2.4 | **23.6%** | **37.7** | **29.8** | **32.2** |
| TAP7_20 | 10 | 2.2 | **21.6%** | **35.7** | **28.0** | **30.2** |
| TAP7_25 | 10 | 1.9 | **18.5%** | **32.7** | **25.3** | **27.1** |
| TAP7_30 | 10 | 1.6 | **16.3%** | **30.5** | **23.3** | **24.9** |
| TAP7_40 | 10 | 1.4 | **14.5%** | **28.7** | **21.8** | **23.2** |
| TAP7_50 | 10 | 1.1 | **11.5%** | **25.5** | **19.0** | **20.2** |
| TAP7_75 | 10 | 0.9 | **9.5%** | **23.5** | **17.4** | **18.3** |
| TAP7_100 | 10 | 0.8 | **8.1%** | **22.0** | **16.2** | **17.0** |
| TAP7_125 | 10 | 0.7 | **7.1%** | **21.0** | **15.4** | **16.1** |
| TAP7_150 | 10 | 0.6 | **6.3%** | **20.1** | **14.7** | **15.3** |
| TAP7_175 | 10 | 0.6 | **5.7%** | **19.4** | **14.2** | **14.8** |
| TAP7_200 | 10 | 0.5 | **5.2%** | **18.9** | **13.8** | **14.3** |
| TAP8_0 | 10 | -0.5 | -5.2% | **16.9** | **12.5** | **12.0** |
| TAP8_5 | 10 | -0.3 | -3.1% | **16.5** | **12.1** | **11.8** |
| TAP8_10 | 10 | -0.2 | -2.2% | **16.2** | **11.9** | **11.7** |
| TAP8_15 | 10 | -0.2 | -1.5% | **16.1** | **11.8** | **11.7** |
| TAP8_20 | 10 | -0.1 | -1.1% | **16.0** | **11.7** | **11.6** |
| TAP8_125 | 10 | 0.1 | **1.1%** | **15.7** | **11.5** | **11.6** |
| TAP8_150 | 10 | 0.1 | **1.2%** | **15.7** | **11.5** | **11.6** |
| TAP8_175 | 10 | 0.1 | **1.3%** | **15.8** | **11.5** | **11.7** |
| TAP8_200 | 10 | 0.1 | **1.4%** | **15.8** | **11.6** | **11.7** |
| TAP9_15 | 10 | 0.1 | **1.3%** | **25.3** | **19.1** | **19.2** |
| TAP9_20 | 10 | 0.1 | **1.4%** | **24.3** | **18.3** | **18.4** |
| TAP9_25 | 10 | 0.1 | **1.5%** | **22.8** | **17.1** | **17.2** |
| TAP9_30 | 10 | 0.2 | **1.5%** | **21.7** | **16.1** | **16.3** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TAP9_40 | 10 | 0.2 | **1.5%** | **20.8** | **15.4** | **15.6** |
| TAP9_50 | 10 | 0.1 | **1.5%** | **19.3** | **14.2** | **14.3** |
| TAP9_75 | 10 | 0.1 | **1.4%** | **18.4** | **13.5** | **13.6** |
| TAP9_100 | 10 | 0.1 | **1.4%** | **17.7** | **13.0** | **13.1** |
| TAP9_125 | 10 | 0.1 | **1.4%** | **17.2** | **12.6** | **12.7** |
| TAP9_150 | 10 | 0.1 | **1.3%** | **16.9** | **12.3** | **12.5** |
| TAP9_175 | 10 | 0.1 | **1.3%** | **16.6** | **12.1** | **12.3** |
| TAP9_200 | 10 | 0.1 | **1.3%** | **16.4** | **12.0** | **12.1** |
| TBH10_0 | 10 | 1.1 | **10.9%** | **37.1** | **29.8** | **30.9** |
| TBH10_5 | 10 | 0.8 | **8.5%** | **32.8** | **26.0** | **26.8** |
| TBH10_10 | 10 | 0.7 | **7.4%** | **30.3** | **23.7** | **24.4** |
| TBH10_15 | 10 | 0.7 | **6.8%** | **28.5** | **22.1** | **22.8** |
| TBH10_20 | 10 | 0.6 | **6.4%** | **27.2** | **21.0** | **21.6** |
| TBH10_25 | 10 | 0.6 | **5.9%** | **25.3** | **19.3** | **19.9** |
| TBH10_30 | 10 | 0.6 | **5.6%** | **24.0** | **18.2** | **18.8** |
| TBH10_40 | 10 | 0.5 | **5.4%** | **23.0** | **17.4** | **17.9** |
| TBH10_50 | 10 | 0.5 | **5.0%** | **21.4** | **16.1** | **16.6** |
| TBH10_75 | 10 | 0.5 | **4.8%** | **20.5** | **15.3** | **15.8** |
| TBH10_100 | 10 | 0.5 | **4.6%** | **19.8** | **14.8** | **15.2** |
| TBH10_125 | 10 | 0.4 | **4.4%** | **19.3** | **14.4** | **14.8** |
| TBH10_150 | 10 | 0.4 | **4.2%** | **18.9** | **14.1** | **14.5** |
| TBH10_175 | 10 | 0.4 | **4.1%** | **18.6** | **13.8** | **14.2** |
| TBH10_200 | 10 | 0.4 | **4.0%** | **18.3** | **13.6** | **14.0** |
| TBH11_0 | 10 | 0.3 | **2.7%** | **33.0** | **25.7** | **26.0** |
| TBH11_5 | 10 | 0.3 | **3.1%** | **30.4** | **23.4** | **23.7** |
| TBH11_10 | 10 | 0.3 | **3.3%** | **28.6** | **22.0** | **22.3** |
| TBH11_15 | 10 | 0.3 | **3.4%** | **27.4** | **21.0** | **21.4** |
| TBH11_20 | 10 | 0.3 | **3.4%** | **26.4** | **20.3** | **20.6** |
| TBH11_25 | 10 | 0.3 | **3.5%** | **25.1** | **19.2** | **19.6** |
| TBH11_30 | 10 | 0.3 | **3.5%** | **24.1** | **18.4** | **18.8** |
| TBH11_40 | 10 | 0.4 | **3.5%** | **23.4** | **17.8** | **18.1** |
| TBH11_50 | 10 | 0.3 | **3.5%** | **22.0** | **16.7** | **17.0** |
| TBH11_75 | 10 | 0.3 | **3.4%** | **21.1** | **15.9** | **16.3** |
| TBH11_100 | 10 | 0.3 | **3.4%** | **20.5** | **15.4** | **15.7** |
| TBH11_125 | 10 | 0.3 | **3.3%** | **19.9** | **14.9** | **15.3** |
| TBH11_150 | 10 | 0.3 | **3.3%** | **19.5** | **14.6** | **14.9** |
| TBH11_175 | 10 | 0.3 | **3.2%** | **19.1** | **14.3** | **14.6** |
| TBH11_200 | 10 | 0.3 | **3.1%** | **18.8** | **14.0** | **14.3** |
| TBH12_0 | 10 | 0.2 | **2.0%** | **28.8** | **22.8** | **23.0** |
| TBH12_5 | 10 | 0.2 | **2.2%** | **26.1** | **20.4** | **20.6** |
| TBH12_10 | 10 | 0.2 | **2.3%** | **24.4** | **18.9** | **19.1** |
| TBH12_15 | 10 | 0.2 | **2.4%** | **23.2** | **17.9** | **18.1** |
| TBH12_20 | 10 | 0.2 | **2.4%** | **22.3** | **17.1** | **17.3** |
| TBH12_25 | 10 | 0.3 | **2.5%** | **21.1** | **16.0** | **16.2** |
| TBH12_30 | 10 | 0.3 | **2.5%** | **20.2** | **15.2** | **15.5** |
| TBH12_40 | 10 | 0.3 | **2.6%** | **19.6** | **14.7** | **14.9** |
| TBH12_50 | 10 | 0.3 | **2.6%** | **18.6** | **13.8** | **14.1** |
| TBH12_75 | 10 | 0.3 | **2.6%** | **18.0** | **13.3** | **13.6** |
| TBH12_100 | 10 | 0.3 | **2.6%** | **17.5** | **13.0** | **13.2** |
| TBH12_125 | 10 | 0.3 | **2.6%** | **17.2** | **12.7** | **13.0** |
| TBH12_150 | 10 | 0.3 | **2.6%** | **17.0** | **12.6** | **12.8** |
| TBH12_175 | 10 | 0.3 | **2.6%** | **16.8** | **12.4** | **12.7** |
| TBH12_200 | 10 | 0.3 | **2.6%** | **16.7** | **12.3** | **12.6** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH13_0 | 10 | 0.4 | **4.2%** | **18.4** | **13.5** | **13.9** |
| TBH13_0 | 10 | 0.5 | **4.9%** | **33.7** | **26.4** | **26.9** |
| TBH13_5 | 10 | 0.4 | **4.1%** | **18.3** | **13.5** | **13.9** |
| TBH13_5 | 10 | 0.4 | **4.3%** | **30.9** | **23.9** | **24.4** |
| TBH13_10 | 10 | 0.4 | **4.0%** | **18.3** | **13.4** | **13.8** |
| TBH13_10 | 10 | 0.4 | **3.8%** | **29.0** | **22.2** | **22.6** |
| TBH13_15 | 10 | 0.4 | **3.9%** | **18.2** | **13.4** | **13.8** |
| TBH13_15 | 10 | 0.3 | **3.4%** | **27.5** | **20.9** | **21.3** |
| TBH13_20 | 10 | 0.4 | **3.8%** | **16.2** | **11.9** | **12.3** |
| TBH13_20 | 10 | 0.3 | **3.1%** | **26.3** | **19.9** | **20.2** |
| TBH13_25 | 10 | 0.4 | **3.7%** | **16.1** | **11.9** | **12.2** |
| TBH13_25 | 10 | 0.3 | **2.6%** | **24.5** | **18.4** | **18.6** |
| TBH13_30 | 10 | 0.4 | **3.6%** | **16.1** | **11.8** | **12.2** |
| TBH13_30 | 10 | 0.2 | **2.3%** | **23.2** | **17.3** | **17.5** |
| TBH13_40 | 10 | 0.3 | **3.5%** | **16.0** | **11.8** | **12.1** |
| TBH13_40 | 10 | 0.2 | **2.0%** | **22.2** | **16.5** | **16.7** |
| TBH13_50 | 10 | 0.3 | **3.3%** | **15.9** | **11.7** | **12.0** |
| TBH13_50 | 10 | 0.2 | **1.5%** | **20.5** | **15.1** | **15.2** |
| TBH13_75 | 10 | 0.3 | **3.2%** | **15.9** | **11.7** | **12.0** |
| TBH13_75 | 10 | 0.1 | **1.2%** | **19.4** | **14.2** | **14.3** |
| TBH13_100 | 10 | 0.3 | **3.1%** | **15.8** | **11.6** | **11.9** |
| TBH13_125 | 10 | 0.3 | **3.0%** | **15.8** | **11.6** | **11.9** |
| TBH13_150 | 10 | 0.3 | **2.9%** | **15.8** | **11.6** | **11.9** |
| TBH13_175 | 10 | 0.3 | **2.9%** | **15.8** | **11.6** | **11.8** |
| TBH13_200 | 10 | 0.3 | **2.9%** | **15.7** | **11.5** | **11.8** |
| TBH14_0 | 10 | 1.1 | **10.5%** | **17.8** | **13.1** | **14.1** |
| TBH14_5 | 10 | 0.9 | **8.6%** | **17.4** | **12.8** | **13.7** |
| TBH14_10 | 10 | 0.7 | **7.4%** | **17.2** | **12.7** | **13.4** |
| TBH14_15 | 10 | 0.7 | **6.6%** | **17.1** | **12.6** | **13.2** |
| TBH14_20 | 10 | 0.6 | **6.0%** | **17.0** | **12.5** | **13.1** |
| TBH14_25 | 10 | 0.5 | **5.2%** | **16.9** | **12.4** | **12.9** |
| TBH14_30 | 10 | 0.5 | **4.7%** | **16.8** | **12.3** | **12.8** |
| TBH14_40 | 10 | 0.4 | **4.3%** | **16.8** | **12.3** | **12.7** |
| TBH14_50 | 10 | 0.4 | **3.7%** | **16.7** | **12.3** | **12.6** |
| TBH14_75 | 10 | 0.3 | **3.4%** | **16.7** | **12.3** | **12.6** |
| TBH14_100 | 10 | 0.3 | **3.2%** | **16.8** | **12.3** | **12.6** |
| TBH14_125 | 10 | 0.3 | **3.1%** | **16.8** | **12.3** | **12.6** |
| TBH14_150 | 10 | 0.3 | **3.1%** | **16.9** | **12.4** | **12.7** |
| TBH14_175 | 10 | 0.3 | **3.1%** | **17.0** | **12.4** | **12.7** |
| TBH14_200 | 10 | 0.3 | **3.1%** | **17.1** | **12.5** | **12.8** |
| TBH15_0 | 10 | 1.5 | **14.7%** | **23.4** | **17.7** | **19.2** |
| TBH15_5 | 10 | 1.3 | **12.6%** | **22.2** | **16.7** | **18.0** |
| TBH15_10 | 10 | 1.1 | **11.1%** | **21.3** | **16.0** | **17.1** |
| TBH15_15 | 10 | 1.0 | **10.0%** | **20.7** | **15.5** | **16.5** |
| TBH15_20 | 10 | 0.9 | **9.1%** | **20.2** | **15.1** | **16.0** |
| TBH15_25 | 10 | 0.8 | **7.8%** | **19.5** | **14.5** | **15.2** |
| TBH15_30 | 10 | 0.7 | **6.9%** | **18.9** | **14.0** | **14.7** |
| TBH15_40 | 10 | 0.6 | **6.2%** | **18.5** | **13.7** | **14.3** |
| TBH15_50 | 10 | 0.5 | **5.0%** | **17.8** | **13.1** | **13.6** |
| TBH15_75 | 10 | 0.4 | **4.2%** | **17.3** | **12.7** | **13.1** |
| TBH15_100 | 10 | 0.4 | **3.6%** | **16.9** | **12.5** | **12.8** |
| TBH15_125 | 10 | 0.3 | **3.2%** | **16.7** | **12.3** | **12.6** |
| TBH15_150 | 10 | 0.3 | **2.8%** | **16.5** | **12.1** | **12.4** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH15_175 | 10 | 0.3 | **2.6%** | **16.4** | **12.0** | **12.3** |
| TBH15_200 | 10 | 0.2 | **2.4%** | **16.3** | **11.9** | **12.2** |
| TBH16_0 | 10 | 3.1 | **31.0%** | **23.0** | **17.3** | **20.4** |
| TBH16_5 | 10 | 2.3 | **22.7%** | **21.4** | **16.0** | **18.3** |
| TBH16_10 | 10 | 1.9 | **19.4%** | **20.6** | **15.4** | **17.3** |
| TBH16_15 | 10 | 1.7 | **16.8%** | **20.1** | **14.9** | **16.6** |
| TBH16_20 | 10 | 1.5 | **14.6%** | **19.8** | **14.7** | **16.1** |
| TBH16_25 | 10 | 1.2 | **12.0%** | **19.2** | **14.2** | **15.4** |
| TBH16_30 | 10 | 1.1 | **10.5%** | **18.8** | **13.9** | **15.0** |
| TBH16_40 | 10 | 0.9 | **9.2%** | **18.6** | **13.7** | **14.6** |
| TBH16_50 | 10 | 0.7 | **7.2%** | **18.1** | **13.3** | **14.1** |
| TBH16_75 | 10 | 0.6 | **6.0%** | **17.8** | **13.1** | **13.7** |
| TBH16_100 | 10 | 0.5 | **5.3%** | **17.6** | **12.9** | **13.5** |
| TBH16_125 | 10 | 0.5 | **4.7%** | **17.4** | **12.8** | **13.3** |
| TBH16_150 | 10 | 0.4 | **4.3%** | **17.3** | **12.7** | **13.1** |
| TBH16_175 | 10 | 0.4 | **4.0%** | **17.1** | **12.6** | **13.0** |
| TBH16_200 | 10 | 0.4 | **3.7%** | **17.0** | **12.5** | **12.9** |
| TBH17_0 | 10 | 1.3 | **12.9%** | **21.0** | **15.8** | **17.1** |
| TBH17_5 | 10 | 1.2 | **12.1%** | **20.6** | **15.5** | **16.7** |
| TBH17_10 | 10 | 1.2 | **11.5%** | **20.3** | **15.2** | **16.4** |
| TBH17_15 | 10 | 1.1 | **11.0%** | **20.0** | **15.0** | **16.1** |
| TBH17_20 | 10 | 1.1 | **10.6%** | **19.8** | **14.8** | **15.9** |
| TBH17_25 | 10 | 1.0 | **9.9%** | **19.4** | **14.5** | **15.5** |
| TBH17_30 | 10 | 0.9 | **9.4%** | **19.1** | **14.2** | **15.1** |
| TBH17_40 | 10 | 0.9 | **8.9%** | **18.9** | **14.0** | **14.9** |
| TBH17_50 | 10 | 0.8 | **8.0%** | **18.4** | **13.6** | **14.4** |
| TBH17_75 | 10 | 0.7 | **7.4%** | **18.0** | **13.3** | **14.1** |
| TBH17_100 | 10 | 0.7 | **7.0%** | **17.8** | **13.1** | **13.8** |
| TBH17_125 | 10 | 0.7 | **6.6%** | **17.6** | **13.0** | **13.7** |
| TBH17_150 | 10 | 0.6 | **6.4%** | **17.5** | **12.9** | **13.5** |
| TBH17_175 | 10 | 0.6 | **6.1%** | **17.3** | **12.8** | **13.4** |
| TBH17_200 | 10 | 0.6 | **5.9%** | **17.2** | **12.7** | **13.3** |
| TBH18_0 | 10 | 1.9 | **19.0%** | **29.4** | **23.0** | **24.9** |
| TBH18_5 | 10 | 1.5 | **14.9%** | **26.3** | **20.3** | **21.8** |
| TBH18_10 | 10 | 1.3 | **12.5%** | **24.4** | **18.6** | **19.9** |
| TBH18_15 | 10 | 1.1 | **10.9%** | **23.1** | **17.5** | **18.6** |
| TBH18_20 | 10 | 1.0 | **9.7%** | **22.1** | **16.7** | **17.6** |
| TBH18_25 | 10 | 0.8 | **8.1%** | **20.7** | **15.5** | **16.3** |
| TBH18_30 | 10 | 0.7 | **7.0%** | **19.8** | **14.7** | **15.4** |
| TBH18_40 | 10 | 0.6 | **6.2%** | **19.1** | **14.1** | **14.7** |
| TBH18_50 | 10 | 0.5 | **5.0%** | **17.9** | **13.2** | **13.7** |
| TBH18_75 | 10 | 0.4 | **4.3%** | **17.2** | **12.7** | **13.1** |
| TBH18_100 | 10 | 0.4 | **3.8%** | **16.8** | **12.3** | **12.7** |
| TBH18_125 | 10 | 0.3 | **3.5%** | **16.4** | **12.1** | **12.4** |
| TBH18_150 | 10 | 0.3 | **3.2%** | **16.2** | **11.9** | **12.2** |
| TBH18_175 | 10 | 0.3 | **3.0%** | **16.0** | **11.7** | **12.0** |
| TBH18_200 | 10 | 0.3 | **2.9%** | **15.8** | **11.6** | **11.9** |
| TBH19_0 | 10 | 2.5 | **24.7%** | **21.6** | **16.2** | **18.7** |
| TBH19_5 | 10 | 1.4 | **14.2%** | **18.5** | **13.7** | **15.2** |
| TBH19_10 | 10 | 1.1 | **10.5%** | **17.5** | **12.9** | **13.9** |
| TBH19_15 | 10 | 0.8 | **8.5%** | **16.9** | **12.4** | **13.3** |
| TBH19_20 | 10 | 0.7 | **7.2%** | **16.5** | **12.1** | **12.8** |
| TBH19_25 | 10 | 0.6 | **5.6%** | **16.0** | **11.7** | **12.3** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH19_30 | 10 | 0.5 | **4.6%** | **15.7** | **11.5** | **12.0** |
| TBH19_40 | 10 | 0.4 | **4.0%** | **15.5** | **11.4** | **11.8** |
| TBH19_50 | 10 | 0.3 | **3.0%** | **15.2** | **11.1** | **11.4** |
| TBH19_75 | 10 | 0.2 | **2.5%** | **15.1** | **11.0** | **11.3** |
| TBH19_100 | 10 | 0.2 | **2.2%** | **15.0** | **10.9** | **11.2** |
| TBH19_125 | 10 | 0.2 | **1.9%** | **14.9** | **10.9** | **11.1** |
| TBH19_150 | 10 | 0.2 | **1.7%** | **14.8** | **10.8** | **11.0** |
| TBH19_175 | 10 | 0.2 | **1.6%** | **14.8** | **10.8** | **11.0** |
| TBH19_200 | 10 | 0.2 | **1.5%** | **14.8** | **10.8** | **10.9** |
| TBH20_0 | 10 | 0.7 | **6.5%** | **16.2** | **11.9** | **12.6** |
| TBH20_5 | 10 | 1.6 | **15.9%** | **19.0** | **14.1** | **15.7** |
| TBH20_10 | 10 | 1.3 | **12.9%** | **18.1** | **13.4** | **14.7** |
| TBH20_15 | 10 | 1.1 | **11.0%** | **17.6** | **13.0** | **14.1** |
| TBH20_20 | 10 | 1.0 | **9.6%** | **17.1** | **12.7** | **13.6** |
| TBH20_25 | 10 | 0.8 | **7.7%** | **16.6** | **12.2** | **13.0** |
| TBH20_30 | 10 | 0.7 | **6.5%** | **16.2** | **11.9** | **12.6** |
| TBH20_40 | 10 | 0.6 | **5.7%** | **16.0** | **11.8** | **12.3** |
| TBH20_50 | 10 | 0.4 | **4.3%** | **15.6** | **11.4** | **11.9** |
| TBH20_75 | 10 | 0.4 | **3.6%** | **15.4** | **11.3** | **11.6** |
| TBH20_100 | 10 | 0.3 | **3.1%** | **15.2** | **11.1** | **11.4** |
| TBH20_125 | 10 | 0.3 | **2.7%** | **15.1** | **11.1** | **11.3** |
| TBH20_150 | 10 | 0.2 | **2.4%** | **15.0** | **11.0** | **11.2** |
| TBH20_175 | 10 | 0.2 | **2.2%** | **15.0** | **10.9** | **11.2** |
| TBH20_200 | 10 | 0.2 | **2.1%** | **14.9** | **10.9** | **11.1** |
| TBH21_0 | 10 | 1.0 | **10.4%** | **18.4** | **13.7** | **14.7** |
| TBH21_5 | 10 | 0.9 | **9.5%** | **18.2** | **13.5** | **14.4** |
| TBH21_10 | 10 | 0.9 | **8.8%** | **18.0** | **13.3** | **14.2** |
| TBH21_15 | 10 | 0.8 | **8.2%** | **17.8** | **13.1** | **14.0** |
| TBH21_20 | 10 | 0.8 | **7.6%** | **17.6** | **13.0** | **13.8** |
| TBH21_25 | 10 | 0.7 | **6.8%** | **17.4** | **12.8** | **13.5** |
| TBH21_30 | 10 | 0.6 | **6.1%** | **17.2** | **12.7** | **13.3** |
| TBH21_40 | 10 | 0.6 | **5.6%** | **17.0** | **12.5** | **13.1** |
| TBH21_50 | 10 | 0.5 | **4.6%** | **16.8** | **12.3** | **12.8** |
| TBH21_75 | 10 | 0.4 | **3.9%** | **16.6** | **12.2** | **12.6** |
| TBH21_100 | 10 | 0.3 | **3.5%** | **16.4** | **12.0** | **12.4** |
| TBH21_125 | 10 | 0.3 | **3.1%** | **16.3** | **12.0** | **12.3** |
| TBH21_150 | 10 | 0.3 | **2.8%** | **16.2** | **11.9** | **12.2** |
| TBH21_175 | 10 | 0.3 | **2.5%** | **16.1** | **11.8** | **12.1** |
| TBH21_200 | 10 | 0.2 | **2.3%** | **16.1** | **11.8** | **12.0** |
| TBH22_0 | 10 | 1.6 | **15.6%** | **23.7** | **17.7** | **19.2** |
| TBH22_5 | 10 | 1.1 | **11.3%** | **21.8** | **16.2** | **17.3** |
| TBH22_10 | 10 | 0.9 | **9.3%** | **21.0** | **15.5** | **16.4** |
| TBH22_15 | 10 | 0.8 | **8.1%** | **20.4** | **15.1** | **15.9** |
| TBH22_20 | 10 | 0.7 | **7.2%** | **20.1** | **14.8** | **15.5** |
| TBH22_25 | 10 | 0.6 | **5.9%** | **19.5** | **14.3** | **14.9** |
| TBH22_30 | 10 | 0.5 | **5.1%** | **19.1** | **14.1** | **14.6** |
| TBH22_40 | 10 | 0.4 | **4.5%** | **18.9** | **13.8** | **14.3** |
| TBH22_50 | 10 | 0.4 | **3.6%** | **18.5** | **13.5** | **13.9** |
| TBH22_75 | 10 | 0.3 | **3.0%** | **18.2** | **13.3** | **13.6** |
| TBH22_100 | 10 | 0.3 | **2.6%** | **18.0** | **13.2** | **13.5** |
| TBH22_125 | 10 | 0.2 | **2.3%** | **17.9** | **13.1** | **13.3** |
| TBH22_150 | 10 | 0.2 | **2.1%** | **17.8** | **13.0** | **13.3** |
| TBH22_175 | 10 | 0.2 | **2.0%** | **17.7** | **13.0** | **13.2** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH22_200 | 10 | 0.2 | **1.8%** | **17.7** | **12.9** | **13.1** |
| TBH23_0 | 10 | 1.1 | **10.6%** | **21.5** | **16.0** | **17.0** |
| TBH23_5 | 10 | 0.7 | **7.1%** | **20.0** | **14.8** | **15.5** |
| TBH23_10 | 10 | 0.6 | **5.7%** | **19.4** | **14.3** | **14.8** |
| TBH23_15 | 10 | 0.5 | **4.8%** | **19.0** | **14.0** | **14.4** |
| TBH23_20 | 10 | 0.4 | **4.2%** | **18.7** | **13.7** | **14.2** |
| TBH23_25 | 10 | 0.3 | **3.4%** | **18.4** | **13.5** | **13.8** |
| TBH23_30 | 10 | 0.3 | **2.9%** | **18.1** | **13.3** | **13.6** |
| TBH23_40 | 10 | 0.2 | **2.5%** | **18.0** | **13.2** | **13.4** |
| TBH23_50 | 10 | 0.2 | **2.0%** | **17.7** | **13.0** | **13.2** |
| TBH23_75 | 10 | 0.2 | **1.7%** | **17.6** | **12.9** | **13.0** |
| TBH23_100 | 10 | 0.1 | **1.5%** | **17.5** | **12.8** | **13.0** |
| TBH23_125 | 10 | 0.1 | **1.3%** | **17.5** | **12.8** | **12.9** |
| TBH23_150 | 10 | 0.1 | **1.2%** | **17.4** | **12.7** | **12.8** |
| TBH23_175 | 10 | 0.1 | **1.1%** | **17.4** | **12.7** | **12.8** |
| TBH23_200 | 10 | 0.1 | **1.1%** | **17.3** | **12.7** | **12.8** |
| TBH24_0 | 10 | 1.4 | **13.5%** | **27.2** | **20.6** | **21.9** |
| TBH24_5 | 10 | 0.9 | **9.1%** | **23.2** | **17.2** | **18.1** |
| TBH24_10 | 10 | 0.7 | **7.3%** | **21.5** | **15.8** | **16.6** |
| TBH24_15 | 10 | 0.6 | **6.3%** | **20.4** | **15.1** | **15.7** |
| TBH24_20 | 10 | 0.6 | **5.5%** | **19.7** | **14.5** | **15.1** |
| TBH24_25 | 10 | 0.5 | **4.6%** | **18.8** | **13.8** | **14.3** |
| TBH24_30 | 10 | 0.4 | **4.0%** | **18.2** | **13.4** | **13.8** |
| TBH24_40 | 10 | 0.4 | **3.6%** | **17.8** | **13.1** | **13.4** |
| TBH24_50 | 10 | 0.3 | **3.0%** | **17.2** | **12.6** | **12.9** |
| TBH24_75 | 10 | 0.3 | **2.6%** | **16.8** | **12.3** | **12.6** |
| TBH24_100 | 10 | 0.2 | **2.3%** | **16.6** | **12.1** | **12.4** |
| TBH24_125 | 10 | 0.2 | **2.1%** | **16.4** | **12.0** | **12.2** |
| TBH24_150 | 10 | 0.2 | **2.0%** | **16.3** | **11.9** | **12.1** |
| TBH24_175 | 10 | 0.2 | **1.9%** | **16.1** | **11.8** | **12.0** |
| TBH24_200 | 10 | 0.2 | **1.8%** | **16.1** | **11.8** | **11.9** |
| TBH3_0 | 10 | 0.7 | **7.0%** | **22.3** | **17.0** | **17.7** |
| TBH3_5 | 10 | 0.5 | **4.7%** | **19.5** | **14.6** | **15.1** |
| TBH3_10 | 10 | 0.4 | **3.8%** | **18.4** | **13.7** | **14.1** |
| TBH3_15 | 10 | 0.3 | **3.3%** | **17.8** | **13.2** | **13.5** |
| TBH3_20 | 10 | 0.3 | **2.9%** | **17.3** | **12.8** | **13.1** |
| TBH3_25 | 10 | 0.3 | **2.5%** | **16.8** | **12.4** | **12.7** |
| TBH3_30 | 10 | 0.2 | **2.2%** | **16.5** | **12.2** | **12.4** |
| TBH3_40 | 10 | 0.2 | **2.0%** | **16.3** | **12.0** | **12.2** |
| TBH3_50 | 10 | 0.2 | **1.8%** | **15.9** | **11.7** | **11.9** |
| TBH3_75 | 10 | 0.2 | **1.6%** | **15.7** | **11.6** | **11.7** |
| TBH3_100 | 10 | 0.1 | **1.5%** | **15.6** | **11.5** | **11.6** |
| TBH3_125 | 10 | 0.1 | **1.4%** | **15.5** | **11.4** | **11.5** |
| TBH3_150 | 10 | 0.1 | **1.3%** | **15.4** | **11.3** | **11.5** |
| TBH3_175 | 10 | 0.1 | **1.3%** | **15.4** | **11.3** | **11.4** |
| TBH3_200 | 10 | 0.1 | **1.2%** | **15.4** | **11.3** | **11.4** |
| TBH4_0 | 10 | 2.3 | **23.2%** | **23.7** | **18.2** | **20.5** |
| TBH4_5 | 10 | 1.7 | **16.5%** | **21.2** | **16.0** | **17.7** |
| TBH4_10 | 10 | 1.3 | **13.2%** | **19.9** | **15.0** | **16.3** |
| TBH4_15 | 10 | 1.1 | **11.1%** | **19.1** | **14.3** | **15.4** |
| TBH4_20 | 10 | 1.0 | **9.7%** | **18.6** | **13.9** | **14.8** |
| TBH4_25 | 10 | 0.8 | **7.9%** | **17.9** | **13.3** | **14.1** |
| TBH4_30 | 10 | 0.7 | **6.7%** | **17.4** | **12.9** | **13.6** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH4_40 | 10 | 0.6 | **5.9%** | **17.1** | **12.7** | **13.3** |
| TBH4_50 | 10 | 0.5 | **4.7%** | **16.7** | **12.3** | **12.7** |
| TBH4_75 | 10 | 0.4 | **4.0%** | **16.4** | **12.1** | **12.5** |
| TBH4_100 | 10 | 0.4 | **3.5%** | **16.2** | **11.9** | **12.3** |
| TBH4_125 | 10 | 0.3 | **3.2%** | **16.1** | **11.8** | **12.1** |
| TBH4_150 | 10 | 0.3 | **3.0%** | **16.0** | **11.8** | **12.1** |
| TBH4_175 | 10 | 0.3 | **2.8%** | **15.9** | **11.7** | **12.0** |
| TBH4_200 | 10 | 0.3 | **2.6%** | **15.9** | **11.7** | **11.9** |
| TBH5_0 | 10 | 0.3 | **2.6%** | **29.2** | **22.8** | **23.1** |
| TBH5_5 | 10 | 0.2 | **2.1%** | **26.7** | **20.7** | **20.9** |
| TBH5_10 | 10 | 0.2 | **1.9%** | **25.2** | **19.3** | **19.5** |
| TBH5_15 | 10 | 0.2 | **1.8%** | **24.1** | **18.4** | **18.6** |
| TBH5_20 | 10 | 0.2 | **1.8%** | **23.3** | **17.7** | **17.9** |
| TBH5_25 | 10 | 0.2 | **1.9%** | **22.1** | **16.7** | **16.9** |
| TBH5_30 | 10 | 0.2 | **2.1%** | **21.3** | **16.0** | **16.2** |
| TBH5_40 | 10 | 0.2 | **2.2%** | **20.6** | **15.4** | **15.6** |
| TBH5_50 | 10 | 0.3 | **2.6%** | **19.5** | **14.5** | **14.8** |
| TBH5_75 | 10 | 0.3 | **2.7%** | **18.8** | **14.0** | **14.2** |
| TBH5_100 | 10 | 0.3 | **2.8%** | **18.3** | **13.6** | **13.9** |
| TBH5_125 | 10 | 0.3 | **2.8%** | **18.0** | **13.3** | **13.6** |
| TBH5_150 | 10 | 0.3 | **2.8%** | **17.7** | **13.1** | **13.4** |
| TBH5_175 | 10 | 0.3 | **2.8%** | **17.5** | **12.9** | **13.2** |
| TBH5_200 | 10 | 0.3 | **2.8%** | **17.3** | **12.8** | **13.1** |
| TBH6_0 | 10 | 1.4 | **14.2%** | **23.8** | **17.7** | **19.1** |
| TBH6_5 | 10 | 1.2 | **12.3%** | **22.8** | **16.9** | **18.1** |
| TBH6_10 | 10 | 1.1 | **10.9%** | **21.9** | **16.2** | **17.3** |
| TBH6_15 | 10 | 1.0 | **9.8%** | **21.3** | **15.7** | **16.7** |
| TBH6_20 | 10 | 0.9 | **9.0%** | **20.7** | **15.3** | **16.2** |
| TBH6_25 | 10 | 0.8 | **7.7%** | **19.9** | **14.6** | **15.4** |
| TBH6_30 | 10 | 0.7 | **6.8%** | **19.3** | **14.1** | **14.8** |
| TBH6_40 | 10 | 0.6 | **6.1%** | **18.8** | **13.8** | **14.4** |
| TBH6_50 | 10 | 0.5 | **4.9%** | **18.0** | **13.1** | **13.6** |
| TBH6_75 | 10 | 0.4 | **4.2%** | **17.4** | **12.7** | **13.2** |
| TBH6_100 | 10 | 0.4 | **3.7%** | **17.0** | **12.5** | **12.8** |
| TBH6_125 | 10 | 0.3 | **3.3%** | **16.7** | **12.2** | **12.6** |
| TBH6_150 | 10 | 0.3 | **3.0%** | **16.5** | **12.1** | **12.4** |
| TBH6_175 | 10 | 0.3 | **2.8%** | **16.3** | **11.9** | **12.2** |
| TBH6_200 | 10 | 0.3 | **2.6%** | **16.2** | **11.8** | **12.1** |
| TBH7_0 | 10 | 1.3 | **13.0%** | **24.2** | **18.0** | **19.3** |
| TBH7_5 | 10 | 1.0 | **10.4%** | **22.4** | **16.5** | **17.6** |
| TBH7_10 | 10 | 0.9 | **8.8%** | **21.3** | **15.6** | **16.5** |
| TBH7_15 | 10 | 0.8 | **7.7%** | **20.5** | **15.0** | **15.8** |
| TBH7_20 | 10 | 0.7 | **6.9%** | **19.8** | **14.5** | **15.2** |
| TBH7_25 | 10 | 0.6 | **5.7%** | **18.9** | **13.8** | **14.4** |
| TBH7_30 | 10 | 0.5 | **4.9%** | **18.3** | **13.4** | **13.8** |
| TBH7_40 | 10 | 0.4 | **4.4%** | **17.9** | **13.0** | **13.5** |
| TBH7_50 | 10 | 0.4 | **3.5%** | **17.1** | **12.5** | **12.8** |
| TBH7_75 | 10 | 0.3 | **3.0%** | **16.7** | **12.1** | **12.5** |
| TBH7_100 | 10 | 0.3 | **2.7%** | **16.4** | **11.9** | **12.2** |
| TBH7_125 | 10 | 0.2 | **2.4%** | **16.1** | **11.8** | **12.0** |
| TBH7_150 | 10 | 0.2 | **2.3%** | **16.0** | **11.7** | **11.9** |
| TBH7_175 | 10 | 0.2 | **2.1%** | **15.8** | **11.6** | **11.8** |
| TBH7_200 | 10 | 0.2 | **2.0%** | **15.7** | **11.5** | **11.7** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH8_0 | 10 | 1.7 | **16.6%** | **20.6** | **15.5** | **17.2** |
| TBH8_5 | 10 | 1.1 | **10.5%** | **18.6** | **13.8** | **14.8** |
| TBH8_10 | 10 | 0.8 | **8.3%** | **17.8** | **13.2** | **14.0** |
| TBH8_15 | 10 | 0.7 | **7.1%** | **17.4** | **12.8** | **13.6** |
| TBH8_20 | 10 | 0.6 | **6.3%** | **17.1** | **12.6** | **13.3** |
| TBH8_25 | 10 | 0.5 | **5.3%** | **16.8** | **12.4** | **12.9** |
| TBH8_30 | 10 | 0.5 | **4.6%** | **16.6** | **12.2** | **12.7** |
| TBH8_40 | 10 | 0.4 | **4.2%** | **16.4** | **12.1** | **12.5** |
| TBH8_50 | 10 | 0.4 | **3.7%** | **16.3** | **11.9** | **12.3** |
| TBH8_75 | 10 | 0.3 | **3.3%** | **16.2** | **11.9** | **12.2** |
| TBH8_100 | 10 | 0.3 | **3.2%** | **16.1** | **11.8** | **12.1** |
| TBH8_125 | 10 | 0.3 | **3.1%** | **16.1** | **11.8** | **12.1** |
| TBH8_150 | 10 | 0.3 | **3.0%** | **16.1** | **11.8** | **12.1** |
| TBH8_175 | 10 | 0.3 | **2.9%** | **16.1** | **11.8** | **12.1** |
| TBH8_200 | 10 | 0.3 | **2.9%** | **16.1** | **11.8** | **12.1** |
| TBH9_0 | 10 | 0.9 | **9.1%** | **22.5** | **16.9** | **17.8** |
| TBH9_0 | 10 | 1.3 | **12.7%** | **25.0** | **18.8** | **20.1** |
| TBH9_5 | 10 | 1.0 | **10.2%** | **23.5** | **17.6** | **18.6** |
| TBH9_10 | 10 | 0.9 | **9.1%** | **22.6** | **16.9** | **17.8** |
| TBH9_15 | 10 | 0.8 | **8.4%** | **22.0** | **16.5** | **17.3** |
| TBH9_20 | 10 | 0.8 | **8.0%** | **21.6** | **16.2** | **17.0** |
| TBH9_25 | 10 | 0.7 | **7.4%** | **21.2** | **15.8** | **16.5** |
| TBH9_30 | 10 | 0.7 | **7.1%** | **20.9** | **15.6** | **16.3** |
| TBH9_40 | 10 | 0.7 | **7.0%** | **20.8** | **15.6** | **16.3** |
| TBH9_50 | 10 | 0.7 | **6.9%** | **21.0** | **15.7** | **16.4** |
| TBH9_75 | 10 | 0.7 | **7.1%** | **21.5** | **16.2** | **16.9** |
| TBH9_100 | 10 | 0.8 | **7.7%** | **22.5** | **17.0** | **17.8** |
| TBH9_125 | 10 | 0.9 | **8.9%** | **24.4** | **18.6** | **19.5** |
| TBH9_150 | 10 | 1.0 | **10.2%** | **26.4** | **20.4** | **21.4** |
| TBH9_175 | 10 | 1.0 | **10.4%** | **26.8** | **20.7** | **21.7** |
| TBH9_200 | 10 | 1.0 | **10.4%** | **26.9** | **20.7** | **21.8** |
| WFG4_0 | 10 | -2.7 | -26.9% | **28.8** | **21.0** | **18.3** |
| WG1_0 | 10 | -1.8 | -17.6% | **48.6** | **35.7** | **34.0** |
| WG1_5 | 10 | -1.5 | -14.7% | **44.6** | **32.6** | **31.1** |
| WG1_10 | 10 | -1.2 | -12.4% | **41.6** | **30.1** | **28.9** |
| WG1_15 | 10 | -1.1 | -10.7% | **39.1** | **28.3** | **27.2** |
| WG1_20 | 10 | -0.9 | -9.4% | **37.2** | **26.8** | **25.9** |
| WG1_25 | 10 | -0.7 | -7.4% | **34.4** | **24.8** | **24.0** |
| WG1_30 | 10 | -0.6 | -6.1% | **32.5** | **23.4** | **22.8** |
| WG1_40 | 10 | -0.5 | -5.2% | **31.1** | **22.4** | **21.9** |
| WG1_50 | 10 | -0.4 | -3.7% | **29.0** | **20.9** | **20.5** |
| WG1_75 | 10 | -0.3 | -2.9% | **27.8** | **20.1** | **19.8** |
| WG1_100 | 10 | -0.2 | -2.4% | **27.0** | **19.6** | **19.3** |
| WG1_125 | 10 | -0.2 | -2.1% | **26.5** | **19.2** | **19.0** |
| WG1_150 | 10 | -0.2 | -1.8% | **26.2** | **19.0** | **18.8** |
| WG1_175 | 10 | -0.2 | -1.7% | **25.9** | **18.8** | **18.6** |
| WG1_200 | 10 | -0.1 | -1.5% | **25.7** | **18.6** | **18.5** |
| WG2_0 | 10 | -1.3 | -12.9% | **40.0** | **29.7** | **28.4** |
| WG2_5 | 10 | -0.9 | -9.1% | **35.5** | **26.1** | **25.2** |
| WG2_10 | 10 | -0.7 | -7.2% | **33.1** | **24.2** | **23.5** |
| WG2_15 | 10 | -0.6 | -6.0% | **31.5** | **23.0** | **22.4** |
| WG2_20 | 10 | -0.5 | -5.2% | **30.4** | **22.2** | **21.7** |
| WG2_25 | 10 | -0.4 | -4.0% | **29.0** | **21.1** | **20.7** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| WG2_30 | 10 | -0.3 | -3.3% | **28.1** | **20.4** | **20.1** |
| WG2_40 | 10 | -0.3 | -2.8% | **27.4** | **19.9** | **19.7** |
| WG2_50 | 10 | -0.2 | -2.0% | **26.4** | **19.2** | **19.0** |
| WG2_75 | 10 | -0.2 | -1.6% | **25.8** | **18.8** | **18.6** |
| WG2_100 | 10 | -0.1 | -1.3% | **25.4** | **18.5** | **18.3** |
| WG2_125 | 10 | -0.1 | -1.1% | **25.1** | **18.3** | **18.2** |
| WG3_0 | 10 | -1.4 | -14.1% | **41.4** | **30.9** | **29.4** |
| WG3_5 | 10 | -1.0 | -10.0% | **36.5** | **26.9** | **25.9** |
| WG3_10 | 10 | -0.8 | -7.9% | **33.8** | **24.8** | **24.0** |
| WG3_15 | 10 | -0.7 | -6.5% | **32.1** | **23.5** | **22.8** |
| WG3_20 | 10 | -0.6 | -5.6% | **30.9** | **22.5** | **22.0** |
| WG3_25 | 10 | -0.4 | -4.4% | **29.3** | **21.4** | **20.9** |
| WG3_30 | 10 | -0.4 | -3.6% | **28.3** | **20.6** | **20.2** |
| WG3_40 | 10 | -0.3 | -3.1% | **27.6** | **20.1** | **19.8** |
| WG3_50 | 10 | -0.2 | -2.3% | **26.6** | **19.3** | **19.1** |
| WG3_75 | 10 | -0.2 | -1.8% | **26.0** | **18.9** | **18.7** |
| WG3_100 | 10 | -0.2 | -1.5% | **25.6** | **18.6** | **18.4** |
| WG3_125 | 10 | -0.1 | -1.3% | **25.3** | **18.4** | **18.3** |
| WG3_150 | 10 | -0.1 | -1.2% | **25.1** | **18.2** | **18.1** |
| WG4_0 | 10 | -9.1 | -90.6% | **39.6** | **29.2** | **20.2** |
| WG4_5 | 10 | -6.2 | -61.6% | **34.8** | **25.5** | **19.3** |
| WG4_10 | 10 | -4.8 | -48.1% | **32.5** | **23.7** | **18.9** |
| WG4_15 | 10 | -4.0 | -39.8% | **31.1** | **22.7** | **18.7** |
| WG4_20 | 10 | -3.4 | -34.1% | **30.1** | **21.9** | **18.5** |
| WG4_25 | 10 | -2.7 | -26.8% | **28.8** | **21.0** | **18.3** |
| WG4_30 | 10 | -2.2 | -22.2% | **28.0** | **20.4** | **18.1** |
| WG4_40 | 10 | -1.9 | -19.0% | **27.4** | **20.0** | **18.1** |
| WG4_50 | 10 | -1.4 | -14.2% | **26.6** | **19.3** | **17.9** |
| WG4_75 | 10 | -1.1 | -11.3% | **26.1** | **19.0** | **17.8** |
| WG4_100 | 10 | -1.0 | -9.5% | **25.8** | **18.7** | **17.8** |
| WG4_125 | 10 | -0.8 | -8.3% | **25.5** | **18.6** | **17.7** |
| WG4_150 | 10 | -0.7 | -7.3% | **25.3** | **18.4** | **17.7** |
| WG4_175 | 10 | -0.6 | -6.5% | **25.2** | **18.3** | **17.7** |
| WG4_200 | 10 | -0.6 | -5.9% | **25.1** | **18.2** | **17.7** |
| WG5_0 | 10 | -2.7 | -27.4% | **45.1** | **33.7** | **30.9** |
| WG5_5 | 10 | -2.3 | -22.6% | **41.0** | **30.4** | **28.1** |
| WG5_10 | 10 | -2.0 | -20.1% | **38.7** | **28.6** | **26.6** |
| WG5_15 | 10 | -1.8 | -18.4% | **37.3** | **27.5** | **25.6** |
| WG5_20 | 10 | -1.7 | -17.3% | **36.3** | **26.6** | **24.9** |
| WG5_25 | 10 | -1.6 | -15.8% | **34.8** | **25.5** | **23.9** |
| WG5_30 | 10 | -1.5 | -14.7% | **33.7** | **24.7** | **23.2** |
| WG5_40 | 10 | -1.4 | -14.0% | **32.9** | **24.1** | **22.7** |
| WG5_50 | 10 | -1.3 | -12.7% | **31.5** | **23.0** | **21.7** |
| WG5_75 | 10 | -1.2 | -11.8% | **30.5** | **22.3** | **21.1** |
| WG5_100 | 10 | -1.1 | -11.3% | **29.8** | **21.8** | **20.6** |
| WG5_125 | 10 | -1.1 | -11.0% | **29.2** | **21.3** | **20.2** |
| WG5_150 | 10 | -1.1 | -11.0% | **28.8** | **21.0** | **19.9** |
| WG5_175 | 10 | -1.1 | -11.4% | **28.5** | **20.7** | **19.6** |
| WG5_200 | 10 | -1.3 | -12.5% | **28.3** | **20.6** | **19.4** |

Table E-3 Scenario 6a: Predicted 'in isolation' Annual Nitrogen Deposition at Modelled Ecological Receptors (Change >1% of Critical Load)

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| CB1_0 | 10 | -0.4 | -4.3% | **46.5** | **32.7** | **32.3** |
| CB1_5 | 10 | -0.4 | -3.8% | **45.1** | **31.7** | **31.3** |
| CB1_10 | 10 | -0.3 | -3.5% | **44.0** | **30.8** | **30.5** |
| CB1_15 | 10 | -0.3 | -3.2% | **43.0** | **30.1** | **29.8** |
| CB1_20 | 10 | -0.3 | -2.9% | **42.1** | **29.5** | **29.2** |
| CB1_25 | 10 | -0.3 | -2.6% | **40.7** | **28.6** | **28.3** |
| CB1_30 | 10 | -0.2 | -2.3% | **39.5** | **27.8** | **27.5** |
| CB1_40 | 10 | -0.2 | -2.2% | **38.5** | **27.1** | **26.9** |
| CB1_50 | 10 | -0.2 | -1.8% | **36.7** | **26.0** | **25.8** |
| CB1_75 | 10 | -0.2 | -1.6% | **35.5** | **25.2** | **25.0** |
| CB1_100 | 10 | -0.1 | -1.4% | **34.6** | **24.6** | **24.5** |
| CB1_125 | 10 | -0.1 | -1.2% | **33.9** | **24.2** | **24.0** |
| CB1_150 | 10 | -0.1 | -1.1% | **33.3** | **23.8** | **23.7** |
| TAP11_0 | 10 | 1.0 | **10.0%** | **48.9** | **43.3** | **44.3** |
| TAP11_5 | 10 | 0.8 | **8.4%** | **44.1** | **38.6** | **39.4** |
| TAP11_10 | 10 | 0.7 | **7.4%** | **41.0** | **35.4** | **36.1** |
| TAP11_15 | 10 | 0.7 | **6.6%** | **38.5** | **32.9** | **33.6** |
| TAP11_20 | 10 | 0.6 | **6.0%** | **36.6** | **31.0** | **31.6** |
| TAP11_25 | 10 | 0.5 | **5.1%** | **33.7** | **28.0** | **28.5** |
| TAP11_30 | 10 | 0.4 | **4.4%** | **31.5** | **25.9** | **26.3** |
| TAP11_40 | 10 | 0.4 | **3.9%** | **29.9** | **24.3** | **24.7** |
| TAP11_50 | 10 | 0.3 | **3.1%** | **27.2** | **21.7** | **22.0** |
| TAP11_75 | 10 | 0.2 | **2.5%** | **25.6** | **20.3** | **20.5** |
| TAP11_100 | 10 | 0.2 | **2.1%** | **25.0** | **19.8** | **20.0** |
| TAP11_125 | 10 | 0.2 | **1.7%** | **25.4** | **20.5** | **20.7** |
| TAP11_150 | 10 | 0.1 | **1.3%** | **29.7** | **25.3** | **25.4** |
| TAP11_175 | 10 | 0.1 | **1.3%** | **24.8** | **20.1** | **20.2** |
| TAP11_200 | 10 | 0.1 | **1.3%** | **23.0** | **18.3** | **18.4** |
| TAP13_0 | 10 | 0.3 | **2.6%** | **33.3** | **30.5** | **30.7** |
| TAP13_5 | 10 | 0.2 | **2.1%** | **29.5** | **26.3** | **26.5** |
| TAP13_10 | 10 | 0.2 | **1.8%** | **27.1** | **23.7** | **23.9** |
| TAP13_15 | 10 | 0.2 | **1.6%** | **25.5** | **22.0** | **22.2** |
| TAP13_20 | 10 | 0.1 | **1.4%** | **24.3** | **20.7** | **20.9** |
| TAP13_25 | 10 | 0.1 | **1.2%** | **22.6** | **18.9** | **19.1** |
| TAP14_0 | 10 | 0.5 | **4.7%** | **30.5** | **28.3** | **28.8** |
| TAP14_5 | 10 | 0.4 | **4.2%** | **28.8** | **26.3** | **26.7** |
| TAP14_10 | 10 | 0.4 | **3.8%** | **27.5** | **24.7** | **25.1** |
| TAP14_15 | 10 | 0.4 | **3.5%** | **26.4** | **23.4** | **23.8** |
| TAP14_20 | 10 | 0.3 | **3.2%** | **25.5** | **22.4** | **22.7** |
| TAP14_25 | 10 | 0.3 | **2.8%** | **24.1** | **20.8** | **21.1** |
| TAP14_30 | 10 | 0.3 | **2.5%** | **23.1** | **19.6** | **19.9** |
| TAP14_40 | 10 | 0.2 | **2.3%** | **22.3** | **18.7** | **18.9** |
| TAP14_50 | 10 | 0.2 | **1.8%** | **20.7** | **17.0** | **17.2** |
| TAP14_75 | 10 | 0.2 | **1.6%** | **19.7** | **16.0** | **16.1** |
| TAP14_100 | 10 | 0.1 | **1.3%** | **19.0** | **15.2** | **15.4** |
| TAP14_125 | 10 | 0.1 | **1.2%** | **18.5** | **14.7** | **14.8** |
| TAP14_150 | 10 | 0.1 | **1.1%** | **18.0** | **14.2** | **14.3** |
| TAP4_0 | 10 | 0.1 | **1.3%** | **25.7** | **22.4** | **22.5** |
| TAP4_5 | 10 | 0.1 | **1.3%** | **24.4** | **20.7** | **20.9** |
| TAP4_10 | 10 | 0.1 | **1.2%** | **23.5** | **19.7** | **19.8** |
| TAP4_15 | 10 | 0.1 | **1.2%** | **22.8** | **18.9** | **19.0** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TAP4_20 | 10 | 0.1 | **1.2%** | **22.3** | **18.3** | **18.4** |
| TAP4_25 | 10 | 0.1 | **1.1%** | **21.6** | **17.5** | **17.6** |
| TAP4_30 | 10 | 0.1 | **1.1%** | **21.0** | **16.9** | **17.0** |
| TAP4_40 | 10 | 0.1 | **1.1%** | **20.6** | **16.4** | **16.5** |
| TAP5_0 | 10 | 0.1 | **1.4%** | **27.9** | **20.9** | **21.0** |
| TAP5_5 | 10 | 0.1 | **1.4%** | **26.8** | **20.0** | **20.1** |
| TAP5_10 | 10 | 0.1 | **1.3%** | **26.0** | **19.4** | **19.5** |
| TAP5_15 | 10 | 0.1 | **1.3%** | **25.4** | **18.9** | **19.0** |
| TAP5_20 | 10 | 0.1 | **1.2%** | **24.8** | **18.5** | **18.6** |
| TAP5_25 | 10 | 0.1 | **1.2%** | **24.0** | **17.8** | **17.9** |
| TAP5_30 | 10 | 0.1 | **1.2%** | **23.3** | **17.3** | **17.4** |
| TAP5_40 | 10 | 0.1 | **1.1%** | **22.7** | **16.9** | **17.0** |
| TAP5_50 | 10 | 0.1 | **1.1%** | **21.7** | **16.1** | **16.2** |
| TAP6_0 | 10 | 0.8 | **7.9%** | **46.1** | **39.8** | **40.6** |
| TAP6_5 | 10 | 0.7 | **6.7%** | **41.5** | **35.2** | **35.8** |
| TAP6_10 | 10 | 0.6 | **5.9%** | **38.4** | **32.0** | **32.6** |
| TAP6_15 | 10 | 0.5 | **5.3%** | **36.0** | **29.6** | **30.2** |
| TAP6_20 | 10 | 0.5 | **4.8%** | **34.1** | **27.7** | **28.2** |
| TAP6_25 | 10 | 0.4 | **4.0%** | **31.1** | **24.9** | **25.3** |
| TAP6_30 | 10 | 0.3 | **3.5%** | **29.1** | **22.8** | **23.2** |
| TAP6_40 | 10 | 0.3 | **3.0%** | **27.4** | **21.3** | **21.6** |
| TAP6_50 | 10 | 0.2 | **2.3%** | **24.6** | **18.7** | **19.0** |
| TAP6_75 | 10 | 0.2 | **1.9%** | **22.8** | **17.1** | **17.3** |
| TAP6_100 | 10 | 0.2 | **1.6%** | **21.5** | **16.0** | **16.2** |
| TAP6_125 | 10 | 0.1 | **1.3%** | **20.5** | **15.2** | **15.4** |
| TAP6_150 | 10 | 0.1 | **1.2%** | **19.8** | **14.6** | **14.7** |
| TAP6_175 | 10 | 0.1 | **1.1%** | **19.2** | **14.2** | **14.3** |
| TAP7_0 | 10 | 0.8 | **8.3%** | **47.6** | **41.5** | **42.4** |
| TAP7_5 | 10 | 0.7 | **7.2%** | **43.3** | **37.2** | **37.9** |
| TAP7_10 | 10 | 0.6 | **6.4%** | **40.1** | **34.1** | **34.7** |
| TAP7_15 | 10 | 0.6 | **5.8%** | **37.7** | **31.6** | **32.2** |
| TAP7_20 | 10 | 0.5 | **5.2%** | **35.7** | **29.7** | **30.2** |
| TAP7_25 | 10 | 0.4 | **4.4%** | **32.7** | **26.7** | **27.1** |
| TAP7_30 | 10 | 0.4 | **3.9%** | **30.5** | **24.5** | **24.9** |
| TAP7_40 | 10 | 0.3 | **3.4%** | **28.7** | **22.9** | **23.2** |
| TAP7_50 | 10 | 0.3 | **2.7%** | **25.5** | **19.9** | **20.2** |
| TAP7_75 | 10 | 0.2 | **2.2%** | **23.5** | **18.1** | **18.3** |
| TAP7_100 | 10 | 0.2 | **1.8%** | **22.0** | **16.8** | **17.0** |
| TAP7_125 | 10 | 0.2 | **1.6%** | **21.0** | **15.9** | **16.1** |
| TAP7_150 | 10 | 0.1 | **1.4%** | **20.1** | **15.2** | **15.3** |
| TAP7_175 | 10 | 0.1 | **1.2%** | **19.4** | **14.6** | **14.8** |
| TAP7_200 | 10 | 0.1 | **1.1%** | **18.9** | **14.2** | **14.3** |
| TBH10_0 | 10 | -0.1 | -1.1% | **37.1** | **31.0** | **30.9** |
| TBH10_5 | 10 | -0.1 | -1.1% | **32.8** | **26.9** | **26.8** |
| TBH11_0 | 10 | -0.3 | -3.4% | **33.0** | **26.3** | **26.0** |
| TBH11_5 | 10 | -0.3 | -2.5% | **30.4** | **24.0** | **23.7** |
| TBH11_10 | 10 | -0.2 | -1.9% | **28.6** | **22.5** | **22.3** |
| TBH11_15 | 10 | -0.2 | -1.6% | **27.4** | **21.5** | **21.4** |
| TBH11_20 | 10 | -0.1 | -1.4% | **26.4** | **20.8** | **20.6** |
| TBH13_0 | 10 | -0.1 | -1.3% | **33.7** | **27.0** | **26.9** |
| TBH13_5 | 10 | -0.1 | -1.1% | **30.9** | **24.5** | **24.4** |
| TBH14_0 | 10 | 0.1 | **1.4%** | **17.8** | **14.0** | **14.1** |
| TBH14_5 | 10 | 0.1 | **1.1%** | **17.4** | **13.6** | **13.7** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH16_10 | 10 | 0.1 | **1.1%** | **20.6** | **17.2** | **17.3** |
| TBH18_0 | 10 | 0.2 | **1.6%** | **29.4** | **24.7** | **24.9** |
| TBH18_5 | 10 | 0.1 | **1.1%** | **26.3** | **21.6** | **21.8** |
| TBH19_0 | 10 | 1.3 | **12.6%** | **21.6** | **17.4** | **18.7** |
| TBH19_5 | 10 | 0.7 | **7.1%** | **18.5** | **14.5** | **15.2** |
| TBH19_10 | 10 | 0.5 | **5.2%** | **17.5** | **13.4** | **13.9** |
| TBH19_15 | 10 | 0.4 | **4.1%** | **16.9** | **12.9** | **13.3** |
| TBH19_20 | 10 | 0.3 | **3.5%** | **16.5** | **12.5** | **12.8** |
| TBH19_25 | 10 | 0.3 | **2.6%** | **16.0** | **12.0** | **12.3** |
| TBH19_30 | 10 | 0.2 | **2.1%** | **15.7** | **11.8** | **12.0** |
| TBH19_40 | 10 | 0.2 | **1.8%** | **15.5** | **11.6** | **11.8** |
| TBH19_50 | 10 | 0.1 | **1.3%** | **15.2** | **11.3** | **11.4** |
| TBH20_0 | 10 | 0.3 | **3.1%** | **16.2** | **12.3** | **12.6** |
| TBH20_5 | 10 | 0.8 | **8.0%** | **19.0** | **14.9** | **15.7** |
| TBH20_10 | 10 | 0.6 | **6.5%** | **18.1** | **14.1** | **14.7** |
| TBH20_15 | 10 | 0.5 | **5.5%** | **17.6** | **13.5** | **14.1** |
| TBH20_20 | 10 | 0.5 | **4.7%** | **17.1** | **13.1** | **13.6** |
| TBH20_25 | 10 | 0.4 | **3.8%** | **16.6** | **12.6** | **13.0** |
| TBH20_30 | 10 | 0.3 | **3.1%** | **16.2** | **12.3** | **12.6** |
| TBH20_40 | 10 | 0.3 | **2.7%** | **16.0** | **12.0** | **12.3** |
| TBH20_50 | 10 | 0.2 | **2.0%** | **15.6** | **11.7** | **11.9** |
| TBH20_75 | 10 | 0.2 | **1.6%** | **15.4** | **11.5** | **11.6** |
| TBH20_100 | 10 | 0.1 | **1.3%** | **15.2** | **11.3** | **11.4** |
| TBH20_125 | 10 | 0.1 | **1.2%** | **15.1** | **11.2** | **11.3** |
| TBH21_0 | 10 | 0.5 | **5.1%** | **18.4** | **14.2** | **14.7** |
| TBH21_5 | 10 | 0.5 | **4.7%** | **18.2** | **13.9** | **14.4** |
| TBH21_10 | 10 | 0.4 | **4.3%** | **18.0** | **13.7** | **14.2** |
| TBH21_15 | 10 | 0.4 | **4.0%** | **17.8** | **13.6** | **14.0** |
| TBH21_20 | 10 | 0.4 | **3.7%** | **17.6** | **13.4** | **13.8** |
| TBH21_25 | 10 | 0.3 | **3.3%** | **17.4** | **13.2** | **13.5** |
| TBH21_30 | 10 | 0.3 | **2.9%** | **17.2** | **13.0** | **13.3** |
| TBH21_40 | 10 | 0.3 | **2.6%** | **17.0** | **12.8** | **13.1** |
| TBH21_50 | 10 | 0.2 | **2.2%** | **16.8** | **12.6** | **12.8** |
| TBH21_75 | 10 | 0.2 | **1.8%** | **16.6** | **12.4** | **12.6** |
| TBH21_100 | 10 | 0.2 | **1.5%** | **16.4** | **12.2** | **12.4** |
| TBH21_125 | 10 | 0.1 | **1.3%** | **16.3** | **12.1** | **12.3** |
| TBH21_150 | 10 | 0.1 | **1.2%** | **16.2** | **12.0** | **12.2** |
| TBH22_0 | 10 | 0.1 | **1.4%** | **23.7** | **19.1** | **19.2** |
| TBH24_0 | 10 | 0.2 | **2.0%** | **27.2** | **21.7** | **21.9** |
| TBH24_5 | 10 | 0.1 | **1.3%** | **23.2** | **18.0** | **18.1** |
| TBH3_0 | 10 | -0.4 | -3.8% | **22.3** | **18.1** | **17.7** |
| TBH3_5 | 10 | -0.2 | -2.4% | **19.5** | **15.3** | **15.1** |
| TBH3_10 | 10 | -0.2 | -1.8% | **18.4** | **14.3** | **14.1** |
| TBH3_15 | 10 | -0.1 | -1.5% | **17.8** | **13.7** | **13.5** |
| TBH3_20 | 10 | -0.1 | -1.3% | **17.3** | **13.3** | **13.1** |
| TBH4_0 | 10 | 0.4 | **4.3%** | **23.7** | **20.1** | **20.5** |
| TBH4_5 | 10 | 0.3 | **3.0%** | **21.2** | **17.4** | **17.7** |
| TBH4_10 | 10 | 0.2 | **2.3%** | **19.9** | **16.1** | **16.3** |
| TBH4_15 | 10 | 0.2 | **1.9%** | **19.1** | **15.3** | **15.4** |
| TBH4_20 | 10 | 0.2 | **1.6%** | **18.6** | **14.7** | **14.8** |
| TBH4_25 | 10 | 0.1 | **1.3%** | **17.9** | **13.9** | **14.1** |
| TBH5_0 | 10 | -0.1 | -1.4% | **29.2** | **23.2** | **23.1** |
| TBH5_5 | 10 | -0.2 | -2.3% | **26.7** | **21.1** | **20.9** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | **Absolute Change** | **Change as % of Critical Load** | **Base Year** | **Future Year DM** | **Future year DS** |
| TBH5_10 | 10 | -0.3 | -2.7% | **25.2** | **19.8** | **19.5** |
| TBH5_15 | 10 | -0.3 | -3.0% | **24.1** | **18.9** | **18.6** |
| TBH5_20 | 10 | -0.3 | -3.1% | **23.3** | **18.2** | **17.9** |
| TBH5_25 | 10 | -0.3 | -3.1% | **22.1** | **17.2** | **16.9** |
| TBH5_30 | 10 | -0.3 | -3.1% | **21.3** | **16.5** | **16.2** |
| TBH5_40 | 10 | -0.3 | -2.9% | **20.6** | **15.9** | **15.6** |
| TBH5_50 | 10 | -0.3 | -2.6% | **19.5** | **15.0** | **14.8** |
| TBH5_75 | 10 | -0.2 | -2.3% | **18.8** | **14.5** | **14.2** |
| TBH5_100 | 10 | -0.2 | -2.0% | **18.3** | **14.1** | **13.9** |
| TBH5_125 | 10 | -0.2 | -1.8% | **18.0** | **13.8** | **13.6** |
| TBH5_150 | 10 | -0.2 | -1.6% | **17.7** | **13.5** | **13.4** |
| TBH5_175 | 10 | -0.2 | -1.5% | **17.5** | **13.4** | **13.2** |
| TBH5_200 | 10 | -0.1 | -1.4% | **17.3** | **13.2** | **13.1** |
| WG1_0 | 10 | 0.2 | **1.8%** | **48.6** | **33.8** | **34.0** |
| WG1_5 | 10 | 0.1 | **1.5%** | **44.6** | **30.9** | **31.1** |
| WG1_10 | 10 | 0.1 | **1.3%** | **41.6** | **28.8** | **28.9** |
| WG1_15 | 10 | 0.1 | **1.1%** | **39.1** | **27.1** | **27.2** |
| WG2_0 | 10 | 0.1 | **1.2%** | **40.0** | **28.3** | **28.4** |
| WG3_0 | 10 | 0.1 | **1.4%** | **41.4** | **29.3** | **29.4** |
| WG4_0 | 10 | 0.2 | **1.9%** | **39.6** | **20.0** | **20.2** |
| WG4_5 | 10 | 0.1 | **1.3%** | **34.8** | **19.2** | **19.3** |

Table E-4 Scenario 6a: Predicted 'in combination' Annual Nitrogen Deposition at Modelled Ecological Receptors (Change >1% of Critical Load)

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year - DN | Future year DS |
| CB1_0 | 10 | -1.2 | -11.7% | **46.5** | **33.4** | **32.3** |
| CB1_5 | 10 | -1.1 | -10.9% | **45.1** | **32.4** | **31.3** |
| CB1_10 | 10 | -1.0 | -10.3% | **44.0** | **31.5** | **30.5** |
| CB1_15 | 10 | -1.0 | -9.7% | **43.0** | **30.8** | **29.8** |
| CB1_20 | 10 | -0.9 | -9.2% | **42.1** | **30.2** | **29.2** |
| CB1_25 | 10 | -0.8 | -8.2% | **40.7** | **29.1** | **28.3** |
| CB1_30 | 10 | -0.7 | -7.3% | **39.5** | **28.3** | **27.5** |
| CB1_40 | 10 | -0.7 | -6.5% | **38.5** | **27.6** | **26.9** |
| CB1_50 | 10 | -0.5 | -5.0% | **36.7** | **26.3** | **25.8** |
| CB1_75 | 10 | -0.4 | -4.1% | **35.5** | **25.4** | **25.0** |
| CB1_100 | 10 | -0.4 | -3.5% | **34.6** | **24.8** | **24.5** |
| CB1_125 | 10 | -0.3 | -3.1% | **33.9** | **24.3** | **24.0** |
| CB1_150 | 10 | -0.3 | -2.8% | **33.3** | **24.0** | **23.7** |
| CB1_175 | 10 | -0.3 | -2.6% | **32.9** | **23.7** | **23.4** |
| CB1_200 | 10 | -0.2 | -2.4% | **32.5** | **23.4** | **23.2** |
| TAP1_0 | 10 | -4.7 | -47.3% | **22.4** | **17.0** | **12.3** |
| TAP1_5 | 10 | -3.4 | -34.4% | **20.4** | **15.4** | **11.9** |
| TAP1_10 | 10 | -2.8 | -27.9% | **19.4** | **14.5** | **11.8** |
| TAP1_15 | 10 | -2.4 | -23.5% | **18.8** | **14.0** | **11.6** |
| TAP1_20 | 10 | -2.0 | -20.3% | **18.3** | **13.6** | **11.5** |
| TAP1_25 | 10 | -1.6 | -15.9% | **17.6** | **13.0** | **11.4** |
| TAP1_30 | 10 | -1.3 | -13.0% | **17.1** | **12.6** | **11.3** |
| TAP1_40 | 10 | -1.1 | -10.9% | **16.8** | **12.4** | **11.3** |
| TAP1_50 | 10 | -0.8 | -7.7% | **16.3** | **12.0** | **11.2** |
| TAP1_75 | 10 | -0.6 | -5.8% | **16.0** | **11.7** | **11.2** |
| TAP1_100 | 10 | -0.5 | -4.5% | **15.8** | **11.6** | **11.1** |
| TAP1_125 | 10 | -0.4 | -3.6% | **15.7** | **11.5** | **11.1** |
| TAP1_150 | 10 | -0.3 | -3.0% | **15.6** | **11.4** | **11.1** |
| TAP1_175 | 10 | -0.2 | -2.4% | **15.5** | **11.3** | **11.1** |
| TAP1_200 | 10 | -0.2 | -2.0% | **15.4** | **11.3** | **11.1** |
| TAP10_0 | 10 | -0.5 | -4.6% | **16.7** | **12.3** | **11.8** |
| TAP10_5 | 10 | -0.2 | -2.0% | **16.1** | **11.8** | **11.6** |
| TAP10_40 | 10 | 0.1 | **1.1%** | **15.3** | **11.2** | **11.3** |
| TAP10_50 | 10 | 0.1 | **1.4%** | **15.2** | **11.1** | **11.3** |
| TAP10_75 | 10 | 0.2 | **1.6%** | **15.1** | **11.1** | **11.2** |
| TAP10_100 | 10 | 0.2 | **1.7%** | **15.1** | **11.0** | **11.2** |
| TAP10_125 | 10 | 0.2 | **1.8%** | **15.1** | **11.0** | **11.2** |
| TAP10_150 | 10 | 0.2 | **1.8%** | **15.0** | **11.0** | **11.2** |
| TAP10_175 | 10 | 0.2 | **1.8%** | **15.0** | **11.0** | **11.2** |
| TAP10_200 | 10 | 0.2 | **1.8%** | **15.0** | **11.0** | **11.1** |
| TAP11_0 | 10 | -0.2 | -2.3% | **16.3** | **12.0** | **11.8** |
| TAP11_0 | 10 | 3.3 | **32.7%** | **48.9** | **41.1** | **44.3** |
| TAP11_5 | 10 | 2.8 | **28.4%** | **44.1** | **36.6** | **39.4** |
| TAP11_10 | 10 | 2.6 | **25.6%** | **41.0** | **33.5** | **36.1** |
| TAP11_15 | 10 | 2.3 | **23.3%** | **38.5** | **31.2** | **33.6** |
| TAP11_20 | 10 | 2.2 | **21.6%** | **36.6** | **29.4** | **31.6** |
| TAP11_25 | 10 | 0.1 | **1.2%** | **15.5** | **11.4** | **11.5** |
| TAP11_25 | 10 | 1.9 | **18.9%** | **33.7** | **26.6** | **28.5** |
| TAP11_30 | 10 | 0.2 | **1.5%** | **15.4** | **11.3** | **11.5** |
| TAP11_30 | 10 | 1.7 | **17.0%** | **31.5** | **24.6** | **26.3** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year - DN | Future year DS |
| TAP11_40 | 10 | 0.2 | **1.7%** | **15.3** | **11.3** | **11.4** |
| TAP11_40 | 10 | 1.6 | **15.5%** | **29.9** | **23.1** | **24.7** |
| TAP11_50 | 10 | 0.2 | **2.0%** | **15.3** | **11.2** | **11.4** |
| TAP11_50 | 10 | 1.3 | **13.3%** | **27.2** | **20.7** | **22.0** |
| TAP11_75 | 10 | 0.2 | **2.2%** | **15.2** | **11.1** | **11.4** |
| TAP11_75 | 10 | 1.2 | **12.3%** | **25.6** | **19.3** | **20.5** |
| TAP11_100 | 10 | 0.2 | **2.3%** | **15.2** | **11.1** | **11.3** |
| TAP11_100 | 10 | 1.2 | **12.4%** | **25.0** | **18.8** | **20.0** |
| TAP11_125 | 10 | 0.2 | **2.3%** | **15.1** | **11.1** | **11.3** |
| TAP11_125 | 10 | 1.5 | **14.7%** | **25.4** | **19.2** | **20.7** |
| TAP11_150 | 10 | 0.2 | **2.4%** | **15.1** | **11.1** | **11.3** |
| TAP11_150 | 10 | 2.5 | **25.1%** | **29.7** | **22.9** | **25.4** |
| TAP11_175 | 10 | 0.2 | **2.4%** | **15.1** | **11.1** | **11.3** |
| TAP11_175 | 10 | 1.5 | **15.1%** | **24.8** | **18.7** | **20.2** |
| TAP11_200 | 10 | 0.2 | **2.4%** | **15.1** | **11.0** | **11.3** |
| TAP11_200 | 10 | 1.2 | **11.9%** | **23.0** | **17.2** | **18.4** |
| TAP12_5 | 10 | 0.2 | **2.2%** | **17.6** | **13.1** | **13.3** |
| TAP12_10 | 10 | 0.3 | **3.1%** | **17.4** | **12.9** | **13.2** |
| TAP12_15 | 10 | 0.4 | **3.6%** | **17.3** | **12.8** | **13.2** |
| TAP12_20 | 10 | 0.4 | **4.0%** | **17.2** | **12.7** | **13.1** |
| TAP12_25 | 10 | 0.4 | **4.5%** | **17.1** | **12.6** | **13.1** |
| TAP12_30 | 10 | 0.5 | **4.7%** | **17.0** | **12.6** | **13.0** |
| TAP12_40 | 10 | 0.5 | **4.9%** | **16.9** | **12.5** | **13.0** |
| TAP12_50 | 10 | 0.5 | **5.2%** | **16.8** | **12.4** | **12.9** |
| TAP12_75 | 10 | 0.5 | **5.3%** | **16.7** | **12.4** | **12.9** |
| TAP12_100 | 10 | 0.5 | **5.3%** | **16.6** | **12.3** | **12.8** |
| TAP12_125 | 10 | 0.5 | **5.3%** | **16.6** | **12.3** | **12.8** |
| TAP12_150 | 10 | 0.5 | **5.3%** | **16.5** | **12.2** | **12.7** |
| TAP12_175 | 10 | 0.5 | **5.2%** | **16.5** | **12.2** | **12.7** |
| TAP12_200 | 10 | 0.5 | **5.2%** | **16.4** | **12.1** | **12.7** |
| TAP13_0 | 10 | 3.9 | **38.7%** | **33.3** | **26.9** | **30.7** |
| TAP13_5 | 10 | 3.1 | **30.9%** | **29.5** | **23.4** | **26.5** |
| TAP13_10 | 10 | 2.6 | **26.2%** | **27.1** | **21.3** | **23.9** |
| TAP13_15 | 10 | 2.3 | **23.0%** | **25.5** | **19.9** | **22.2** |
| TAP13_20 | 10 | 2.1 | **20.5%** | **24.3** | **18.8** | **20.9** |
| TAP13_25 | 10 | 1.7 | **17.2%** | **22.6** | **17.3** | **19.1** |
| TAP13_30 | 10 | 1.5 | **14.8%** | **21.4** | **16.3** | **17.8** |
| TAP13_40 | 10 | 1.3 | **13.1%** | **20.5** | **15.6** | **16.9** |
| TAP13_50 | 10 | 1.0 | **10.4%** | **19.1** | **14.4** | **15.4** |
| TAP13_75 | 10 | 0.9 | **8.8%** | **18.3** | **13.7** | **14.6** |
| TAP13_100 | 10 | 0.8 | **7.7%** | **17.7** | **13.2** | **14.0** |
| TAP13_125 | 10 | 0.7 | **6.9%** | **17.3** | **12.9** | **13.6** |
| TAP13_150 | 10 | 0.6 | **6.3%** | **17.0** | **12.6** | **13.2** |
| TAP13_175 | 10 | 0.6 | **5.8%** | **16.7** | **12.4** | **13.0** |
| TAP13_200 | 10 | 0.5 | **5.4%** | **16.5** | **12.2** | **12.8** |
| TAP14_0 | 10 | 5.3 | **52.9%** | **30.5** | **23.5** | **28.8** |
| TAP14_5 | 10 | 4.7 | **47.2%** | **28.8** | **22.0** | **26.7** |
| TAP14_10 | 10 | 4.3 | **42.7%** | **27.5** | **20.8** | **25.1** |
| TAP14_15 | 10 | 3.9 | **39.1%** | **26.4** | **19.9** | **23.8** |
| TAP14_20 | 10 | 3.6 | **36.1%** | **25.5** | **19.1** | **22.7** |
| TAP14_25 | 10 | 3.1 | **31.5%** | **24.1** | **17.9** | **21.1** |
| TAP14_30 | 10 | 2.8 | **28.0%** | **23.1** | **17.1** | **19.9** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year - DN | Future year DS |
| TAP14_40 | 10 | 2.5 | **25.2%** | **22.3** | **16.4** | **18.9** |
| TAP14_50 | 10 | 2.0 | **20.3%** | **20.7** | **15.2** | **17.2** |
| TAP14_75 | 10 | 1.7 | **17.1%** | **19.7** | **14.4** | **16.1** |
| TAP14_100 | 10 | 1.5 | **14.8%** | **19.0** | **13.9** | **15.4** |
| TAP14_125 | 10 | 1.3 | **13.1%** | **18.5** | **13.5** | **14.8** |
| TAP14_150 | 10 | 1.2 | **11.8%** | **18.0** | **13.2** | **14.3** |
| TAP14_175 | 10 | 1.1 | **10.7%** | **17.7** | **12.9** | **14.0** |
| TAP14_200 | 10 | 1.0 | **9.8%** | **17.4** | **12.7** | **13.7** |
| TAP2_0 | 10 | -5.1 | -51.3% | **22.4** | **17.1** | **11.9** |
| TAP2_5 | 10 | -4.1 | -41.3% | **20.9** | **15.8** | **11.7** |
| TAP2_10 | 10 | -3.5 | -35.2% | **20.0** | **15.0** | **11.5** |
| TAP2_15 | 10 | -3.1 | -30.9% | **19.3** | **14.5** | **11.4** |
| TAP2_20 | 10 | -2.8 | -27.6% | **18.8** | **14.1** | **11.3** |
| TAP2_25 | 10 | -2.3 | -22.9% | **18.1** | **13.5** | **11.2** |
| TAP2_30 | 10 | -2.0 | -19.7% | **17.6** | **13.0** | **11.1** |
| TAP2_40 | 10 | -1.7 | -17.3% | **17.2** | **12.7** | **11.0** |
| TAP2_50 | 10 | -1.3 | -13.2% | **16.6** | **12.2** | **10.9** |
| TAP2_75 | 10 | -1.1 | -10.8% | **16.2** | **11.9** | **10.8** |
| TAP2_100 | 10 | -0.9 | -9.3% | **16.0** | **11.7** | **10.8** |
| TAP2_125 | 10 | -0.8 | -8.1% | **15.8** | **11.6** | **10.8** |
| TAP2_150 | 10 | -0.7 | -7.3% | **15.7** | **11.5** | **10.8** |
| TAP2_175 | 10 | -0.7 | -6.6% | **15.5** | **11.4** | **10.8** |
| TAP2_200 | 10 | -0.6 | -6.0% | **15.5** | **11.4** | **10.8** |
| TAP3_0 | 10 | 5.6 | **56.0%** | **22.7** | **17.2** | **22.8** |
| TAP3_5 | 10 | 3.7 | **37.3%** | **20.4** | **15.3** | **19.0** |
| TAP3_10 | 10 | 3.0 | **29.7%** | **19.4** | **14.5** | **17.4** |
| TAP3_15 | 10 | 2.5 | **25.0%** | **18.8** | **14.0** | **16.4** |
| TAP3_20 | 10 | 2.2 | **21.8%** | **18.4** | **13.6** | **15.8** |
| TAP3_25 | 10 | 1.8 | **17.6%** | **17.8** | **13.1** | **14.9** |
| TAP3_30 | 10 | 1.5 | **14.9%** | **17.4** | **12.8** | **14.3** |
| TAP3_40 | 10 | 1.3 | **13.1%** | **17.2** | **12.6** | **13.9** |
| TAP3_50 | 10 | 1.0 | **10.2%** | **16.7** | **12.2** | **13.3** |
| TAP3_75 | 10 | 0.8 | **8.5%** | **16.4** | **12.0** | **12.9** |
| TAP3_100 | 10 | 0.7 | **7.3%** | **16.2** | **11.8** | **12.6** |
| TAP3_125 | 10 | 0.7 | **6.5%** | **16.0** | **11.7** | **12.4** |
| TAP3_150 | 10 | 0.6 | **5.9%** | **15.9** | **11.6** | **12.2** |
| TAP3_175 | 10 | 0.5 | **5.4%** | **15.7** | **11.5** | **12.0** |
| TAP3_200 | 10 | 0.5 | **5.0%** | **15.6** | **11.4** | **11.9** |
| TAP4_0 | 10 | 3.0 | **29.5%** | **25.7** | **19.5** | **22.5** |
| TAP4_5 | 10 | 2.4 | **24.5%** | **24.4** | **18.4** | **20.9** |
| TAP4_10 | 10 | 2.1 | **21.3%** | **23.5** | **17.7** | **19.8** |
| TAP4_15 | 10 | 1.9 | **19.1%** | **22.8** | **17.1** | **19.0** |
| TAP4_20 | 10 | 1.7 | **17.4%** | **22.3** | **16.7** | **18.4** |
| TAP4_25 | 10 | 1.5 | **15.1%** | **21.6** | **16.1** | **17.6** |
| TAP4_30 | 10 | 1.4 | **13.6%** | **21.0** | **15.6** | **17.0** |
| TAP4_40 | 10 | 1.2 | **12.5%** | **20.6** | **15.3** | **16.5** |
| TAP4_50 | 10 | 1.1 | **10.5%** | **19.8** | **14.6** | **15.7** |
| TAP4_75 | 10 | 0.9 | **9.2%** | **19.2** | **14.2** | **15.1** |
| TAP4_100 | 10 | 0.8 | **8.2%** | **18.8** | **13.8** | **14.6** |
| TAP4_125 | 10 | 0.7 | **7.4%** | **18.4** | **13.5** | **14.3** |
| TAP4_150 | 10 | 0.7 | **6.8%** | **18.1** | **13.3** | **14.0** |
| TAP4_175 | 10 | 0.6 | **6.3%** | **17.8** | **13.1** | **13.7** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year - DN | Future year DS |
| TAP4_200 | 10 | 0.6 | **5.8%** | **17.7** | **13.0** | **13.6** |
| TAP5_0 | 10 | -0.5 | -5.2% | **27.9** | **21.5** | **21.0** |
| TAP5_5 | 10 | -0.4 | -4.2% | **26.8** | **20.6** | **20.1** |
| TAP5_10 | 10 | -0.4 | -3.5% | **26.0** | **19.9** | **19.5** |
| TAP5_15 | 10 | -0.3 | -3.0% | **25.4** | **19.3** | **19.0** |
| TAP5_20 | 10 | -0.3 | -2.5% | **24.8** | **18.8** | **18.6** |
| TAP5_25 | 10 | -0.2 | -1.6% | **24.0** | **18.1** | **17.9** |
| TAP5_75 | 10 | 0.1 | **1.3%** | **20.9** | **15.6** | **15.7** |
| TAP5_100 | 10 | 0.2 | **1.8%** | **20.4** | **15.1** | **15.3** |
| TAP5_125 | 10 | 0.2 | **2.0%** | **20.1** | **14.9** | **15.1** |
| TAP5_150 | 10 | 0.2 | **2.2%** | **19.8** | **14.6** | **14.8** |
| TAP5_175 | 10 | 0.2 | **2.3%** | **19.5** | **14.4** | **14.6** |
| TAP5_200 | 10 | 0.2 | **2.4%** | **19.2** | **14.2** | **14.4** |
| TAP6_0 | 10 | 2.8 | **28.1%** | **46.1** | **37.8** | **40.6** |
| TAP6_5 | 10 | 2.3 | **23.4%** | **41.5** | **33.5** | **35.8** |
| TAP6_10 | 10 | 2.0 | **20.2%** | **38.4** | **30.6** | **32.6** |
| TAP6_15 | 10 | 1.8 | **17.7%** | **36.0** | **28.4** | **30.2** |
| TAP6_20 | 10 | 1.6 | **15.7%** | **34.1** | **26.6** | **28.2** |
| TAP6_25 | 10 | 1.3 | **12.8%** | **31.1** | **24.0** | **25.3** |
| TAP6_30 | 10 | 1.1 | **10.7%** | **29.1** | **22.1** | **23.2** |
| TAP6_40 | 10 | 0.9 | **9.1%** | **27.4** | **20.7** | **21.6** |
| TAP6_50 | 10 | 0.6 | **6.4%** | **24.6** | **18.3** | **19.0** |
| TAP6_75 | 10 | 0.5 | **4.8%** | **22.8** | **16.8** | **17.3** |
| TAP6_100 | 10 | 0.4 | **3.8%** | **21.5** | **15.8** | **16.2** |
| TAP6_125 | 10 | 0.3 | **3.1%** | **20.5** | **15.1** | **15.4** |
| TAP6_150 | 10 | 0.3 | **2.6%** | **19.8** | **14.5** | **14.7** |
| TAP6_175 | 10 | 0.2 | **2.3%** | **19.2** | **14.0** | **14.3** |
| TAP6_200 | 10 | 0.2 | **1.9%** | **18.7** | **13.7** | **13.9** |
| TAP7_0 | 10 | 3.4 | **33.8%** | **47.6** | **39.0** | **42.4** |
| TAP7_5 | 10 | 2.9 | **29.4%** | **43.3** | **35.0** | **37.9** |
| TAP7_10 | 10 | 2.6 | **26.1%** | **40.1** | **32.1** | **34.7** |
| TAP7_15 | 10 | 2.4 | **23.6%** | **37.7** | **29.8** | **32.2** |
| TAP7_20 | 10 | 2.2 | **21.6%** | **35.7** | **28.0** | **30.2** |
| TAP7_25 | 10 | 1.9 | **18.5%** | **32.7** | **25.3** | **27.1** |
| TAP7_30 | 10 | 1.6 | **16.3%** | **30.5** | **23.3** | **24.9** |
| TAP7_40 | 10 | 1.4 | **14.5%** | **28.7** | **21.8** | **23.2** |
| TAP7_50 | 10 | 1.1 | **11.5%** | **25.5** | **19.0** | **20.2** |
| TAP7_75 | 10 | 0.9 | **9.5%** | **23.5** | **17.4** | **18.3** |
| TAP7_100 | 10 | 0.8 | **8.1%** | **22.0** | **16.2** | **17.0** |
| TAP7_125 | 10 | 0.7 | **7.1%** | **21.0** | **15.4** | **16.1** |
| TAP7_150 | 10 | 0.6 | **6.3%** | **20.1** | **14.7** | **15.3** |
| TAP7_175 | 10 | 0.6 | **5.7%** | **19.4** | **14.2** | **14.8** |
| TAP7_200 | 10 | 0.5 | **5.2%** | **18.9** | **13.8** | **14.3** |
| TAP8_0 | 10 | -0.5 | -5.2% | **16.9** | **12.5** | **12.0** |
| TAP8_5 | 10 | -0.3 | -3.1% | **16.5** | **12.1** | **11.8** |
| TAP8_10 | 10 | -0.2 | -2.2% | **16.2** | **11.9** | **11.7** |
| TAP8_15 | 10 | -0.2 | -1.5% | **16.1** | **11.8** | **11.7** |
| TAP8_20 | 10 | -0.1 | -1.1% | **16.0** | **11.7** | **11.6** |
| TAP8_125 | 10 | 0.1 | **1.1%** | **15.7** | **11.5** | **11.6** |
| TAP8_150 | 10 | 0.1 | **1.2%** | **15.7** | **11.5** | **11.6** |
| TAP8_175 | 10 | 0.1 | **1.3%** | **15.8** | **11.5** | **11.7** |
| TAP8_200 | 10 | 0.1 | **1.4%** | **15.8** | **11.6** | **11.7** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year - DN | Future year DS |
| TAP9_15 | 10 | 0.1 | **1.3%** | **25.3** | **19.1** | **19.2** |
| TAP9_20 | 10 | 0.1 | **1.4%** | **24.3** | **18.3** | **18.4** |
| TAP9_25 | 10 | 0.1 | **1.5%** | **22.8** | **17.1** | **17.2** |
| TAP9_30 | 10 | 0.2 | **1.5%** | **21.7** | **16.1** | **16.3** |
| TAP9_40 | 10 | 0.2 | **1.5%** | **20.8** | **15.4** | **15.6** |
| TAP9_50 | 10 | 0.1 | **1.5%** | **19.3** | **14.2** | **14.3** |
| TAP9_75 | 10 | 0.1 | **1.4%** | **18.4** | **13.5** | **13.6** |
| TAP9_100 | 10 | 0.1 | **1.4%** | **17.7** | **13.0** | **13.1** |
| TAP9_125 | 10 | 0.1 | **1.4%** | **17.2** | **12.6** | **12.7** |
| TAP9_150 | 10 | 0.1 | **1.3%** | **16.9** | **12.3** | **12.5** |
| TAP9_175 | 10 | 0.1 | **1.3%** | **16.6** | **12.1** | **12.3** |
| TAP9_200 | 10 | 0.1 | **1.3%** | **16.4** | **12.0** | **12.1** |
| TBH10_0 | 10 | 1.1 | **10.9%** | **37.1** | **29.8** | **30.9** |
| TBH10_5 | 10 | 0.8 | **8.5%** | **32.8** | **26.0** | **26.8** |
| TBH10_10 | 10 | 0.7 | **7.4%** | **30.3** | **23.7** | **24.4** |
| TBH10_15 | 10 | 0.7 | **6.8%** | **28.5** | **22.1** | **22.8** |
| TBH10_20 | 10 | 0.6 | **6.4%** | **27.2** | **21.0** | **21.6** |
| TBH10_25 | 10 | 0.6 | **5.9%** | **25.3** | **19.3** | **19.9** |
| TBH10_30 | 10 | 0.6 | **5.6%** | **24.0** | **18.2** | **18.8** |
| TBH10_40 | 10 | 0.5 | **5.4%** | **23.0** | **17.4** | **17.9** |
| TBH10_50 | 10 | 0.5 | **5.0%** | **21.4** | **16.1** | **16.6** |
| TBH10_75 | 10 | 0.5 | **4.8%** | **20.5** | **15.3** | **15.8** |
| TBH10_100 | 10 | 0.5 | **4.6%** | **19.8** | **14.8** | **15.2** |
| TBH10_125 | 10 | 0.4 | **4.4%** | **19.3** | **14.4** | **14.8** |
| TBH10_150 | 10 | 0.4 | **4.2%** | **18.9** | **14.1** | **14.5** |
| TBH10_175 | 10 | 0.4 | **4.1%** | **18.6** | **13.8** | **14.2** |
| TBH10_200 | 10 | 0.4 | **4.0%** | **18.3** | **13.6** | **14.0** |
| TBH11_0 | 10 | 0.3 | **2.7%** | **33.0** | **25.7** | **26.0** |
| TBH11_5 | 10 | 0.3 | **3.1%** | **30.4** | **23.4** | **23.7** |
| TBH11_10 | 10 | 0.3 | **3.3%** | **28.6** | **22.0** | **22.3** |
| TBH11_15 | 10 | 0.3 | **3.4%** | **27.4** | **21.0** | **21.4** |
| TBH11_20 | 10 | 0.3 | **3.4%** | **26.4** | **20.3** | **20.6** |
| TBH11_25 | 10 | 0.3 | **3.5%** | **25.1** | **19.2** | **19.6** |
| TBH11_30 | 10 | 0.3 | **3.5%** | **24.1** | **18.4** | **18.8** |
| TBH11_40 | 10 | 0.4 | **3.5%** | **23.4** | **17.8** | **18.1** |
| TBH11_50 | 10 | 0.3 | **3.5%** | **22.0** | **16.7** | **17.0** |
| TBH11_75 | 10 | 0.3 | **3.4%** | **21.1** | **15.9** | **16.3** |
| TBH11_100 | 10 | 0.3 | **3.4%** | **20.5** | **15.4** | **15.7** |
| TBH11_125 | 10 | 0.3 | **3.3%** | **19.9** | **14.9** | **15.3** |
| TBH11_150 | 10 | 0.3 | **3.3%** | **19.5** | **14.6** | **14.9** |
| TBH11_175 | 10 | 0.3 | **3.2%** | **19.1** | **14.3** | **14.6** |
| TBH11_200 | 10 | 0.3 | **3.1%** | **18.8** | **14.0** | **14.3** |
| TBH12_0 | 10 | 0.2 | **2.0%** | **28.8** | **22.8** | **23.0** |
| TBH12_5 | 10 | 0.2 | **2.2%** | **26.1** | **20.4** | **20.6** |
| TBH12_10 | 10 | 0.2 | **2.3%** | **24.4** | **18.9** | **19.1** |
| TBH12_15 | 10 | 0.2 | **2.4%** | **23.2** | **17.9** | **18.1** |
| TBH12_20 | 10 | 0.2 | **2.4%** | **22.3** | **17.1** | **17.3** |
| TBH12_25 | 10 | 0.3 | **2.5%** | **21.1** | **16.0** | **16.2** |
| TBH12_30 | 10 | 0.3 | **2.5%** | **20.2** | **15.2** | **15.5** |
| TBH12_40 | 10 | 0.3 | **2.6%** | **19.6** | **14.7** | **14.9** |
| TBH12_50 | 10 | 0.3 | **2.6%** | **18.6** | **13.8** | **14.1** |
| TBH12_75 | 10 | 0.3 | **2.6%** | **18.0** | **13.3** | **13.6** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year - DN | Future year DS |
| TBH12_100 | 10 | 0.3 | **2.6%** | **17.5** | **13.0** | **13.2** |
| TBH12_125 | 10 | 0.3 | **2.6%** | **17.2** | **12.7** | **13.0** |
| TBH12_150 | 10 | 0.3 | **2.6%** | **17.0** | **12.6** | **12.8** |
| TBH12_175 | 10 | 0.3 | **2.6%** | **16.8** | **12.4** | **12.7** |
| TBH12_200 | 10 | 0.3 | **2.6%** | **16.7** | **12.3** | **12.6** |
| TBH13_0 | 10 | 0.4 | **4.2%** | **18.4** | **13.5** | **13.9** |
| TBH13_0 | 10 | 0.5 | **4.9%** | **33.7** | **26.4** | **26.9** |
| TBH13_5 | 10 | 0.4 | **4.1%** | **18.3** | **13.5** | **13.9** |
| TBH13_5 | 10 | 0.4 | **4.3%** | **30.9** | **23.9** | **24.4** |
| TBH13_10 | 10 | 0.4 | **4.0%** | **18.3** | **13.4** | **13.8** |
| TBH13_10 | 10 | 0.4 | **3.8%** | **29.0** | **22.2** | **22.6** |
| TBH13_15 | 10 | 0.4 | **3.9%** | **18.2** | **13.4** | **13.8** |
| TBH13_15 | 10 | 0.3 | **3.4%** | **27.5** | **20.9** | **21.3** |
| TBH13_20 | 10 | 0.4 | **3.8%** | **16.2** | **11.9** | **12.3** |
| TBH13_20 | 10 | 0.3 | **3.1%** | **26.3** | **19.9** | **20.2** |
| TBH13_25 | 10 | 0.4 | **3.7%** | **16.1** | **11.9** | **12.2** |
| TBH13_25 | 10 | 0.3 | **2.6%** | **24.5** | **18.4** | **18.6** |
| TBH13_30 | 10 | 0.4 | **3.6%** | **16.1** | **11.8** | **12.2** |
| TBH13_30 | 10 | 0.2 | **2.3%** | **23.2** | **17.3** | **17.5** |
| TBH13_40 | 10 | 0.3 | **3.5%** | **16.0** | **11.8** | **12.1** |
| TBH13_40 | 10 | 0.2 | **2.0%** | **22.2** | **16.5** | **16.7** |
| TBH13_50 | 10 | 0.3 | **3.3%** | **15.9** | **11.7** | **12.0** |
| TBH13_50 | 10 | 0.2 | **1.5%** | **20.5** | **15.1** | **15.2** |
| TBH13_75 | 10 | 0.3 | **3.2%** | **15.9** | **11.7** | **12.0** |
| TBH13_75 | 10 | 0.1 | **1.2%** | **19.4** | **14.2** | **14.3** |
| TBH13_100 | 10 | 0.3 | **3.1%** | **15.8** | **11.6** | **11.9** |
| TBH13_125 | 10 | 0.3 | **3.0%** | **15.8** | **11.6** | **11.9** |
| TBH13_150 | 10 | 0.3 | **2.9%** | **15.8** | **11.6** | **11.9** |
| TBH13_175 | 10 | 0.3 | **2.9%** | **15.8** | **11.6** | **11.8** |
| TBH13_200 | 10 | 0.3 | **2.9%** | **15.7** | **11.5** | **11.8** |
| TBH14_0 | 10 | 1.1 | **10.5%** | **17.8** | **13.1** | **14.1** |
| TBH14_5 | 10 | 0.9 | **8.6%** | **17.4** | **12.8** | **13.7** |
| TBH14_10 | 10 | 0.7 | **7.4%** | **17.2** | **12.7** | **13.4** |
| TBH14_15 | 10 | 0.7 | **6.6%** | **17.1** | **12.6** | **13.2** |
| TBH14_20 | 10 | 0.6 | **6.0%** | **17.0** | **12.5** | **13.1** |
| TBH14_25 | 10 | 0.5 | **5.2%** | **16.9** | **12.4** | **12.9** |
| TBH14_30 | 10 | 0.5 | **4.7%** | **16.8** | **12.3** | **12.8** |
| TBH14_40 | 10 | 0.4 | **4.3%** | **16.8** | **12.3** | **12.7** |
| TBH14_50 | 10 | 0.4 | **3.7%** | **16.7** | **12.3** | **12.6** |
| TBH14_75 | 10 | 0.3 | **3.4%** | **16.7** | **12.3** | **12.6** |
| TBH14_100 | 10 | 0.3 | **3.2%** | **16.8** | **12.3** | **12.6** |
| TBH14_125 | 10 | 0.3 | **3.1%** | **16.8** | **12.3** | **12.6** |
| TBH14_150 | 10 | 0.3 | **3.1%** | **16.9** | **12.4** | **12.7** |
| TBH14_175 | 10 | 0.3 | **3.1%** | **17.0** | **12.4** | **12.7** |
| TBH14_200 | 10 | 0.3 | **3.1%** | **17.1** | **12.5** | **12.8** |
| TBH15_0 | 10 | 1.5 | **14.7%** | **23.4** | **17.7** | **19.2** |
| TBH15_5 | 10 | 1.3 | **12.6%** | **22.2** | **16.7** | **18.0** |
| TBH15_10 | 10 | 1.1 | **11.1%** | **21.3** | **16.0** | **17.1** |
| TBH15_15 | 10 | 1.0 | **10.0%** | **20.7** | **15.5** | **16.5** |
| TBH15_20 | 10 | 0.9 | **9.1%** | **20.2** | **15.1** | **16.0** |
| TBH15_25 | 10 | 0.8 | **7.8%** | **19.5** | **14.5** | **15.2** |
| TBH15_30 | 10 | 0.7 | **6.9%** | **18.9** | **14.0** | **14.7** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year - DN | Future year DS |
| TBH15_40 | 10 | 0.6 | **6.2%** | **18.5** | **13.7** | **14.3** |
| TBH15_50 | 10 | 0.5 | **5.0%** | **17.8** | **13.1** | **13.6** |
| TBH15_75 | 10 | 0.4 | **4.2%** | **17.3** | **12.7** | **13.1** |
| TBH15_100 | 10 | 0.4 | **3.6%** | **16.9** | **12.5** | **12.8** |
| TBH15_125 | 10 | 0.3 | **3.2%** | **16.7** | **12.3** | **12.6** |
| TBH15_150 | 10 | 0.3 | **2.8%** | **16.5** | **12.1** | **12.4** |
| TBH15_175 | 10 | 0.3 | **2.6%** | **16.4** | **12.0** | **12.3** |
| TBH15_200 | 10 | 0.2 | **2.4%** | **16.3** | **11.9** | **12.2** |
| TBH16_0 | 10 | 3.1 | **31.0%** | **23.0** | **17.3** | **20.4** |
| TBH16_5 | 10 | 2.3 | **22.7%** | **21.4** | **16.0** | **18.3** |
| TBH16_10 | 10 | 1.9 | **19.4%** | **20.6** | **15.4** | **17.3** |
| TBH16_15 | 10 | 1.7 | **16.8%** | **20.1** | **14.9** | **16.6** |
| TBH16_20 | 10 | 1.5 | **14.6%** | **19.8** | **14.7** | **16.1** |
| TBH16_25 | 10 | 1.2 | **12.0%** | **19.2** | **14.2** | **15.4** |
| TBH16_30 | 10 | 1.1 | **10.5%** | **18.8** | **13.9** | **15.0** |
| TBH16_40 | 10 | 0.9 | **9.2%** | **18.6** | **13.7** | **14.6** |
| TBH16_50 | 10 | 0.7 | **7.2%** | **18.1** | **13.3** | **14.1** |
| TBH16_75 | 10 | 0.6 | **6.0%** | **17.8** | **13.1** | **13.7** |
| TBH16_100 | 10 | 0.5 | **5.3%** | **17.6** | **12.9** | **13.5** |
| TBH16_125 | 10 | 0.5 | **4.7%** | **17.4** | **12.8** | **13.3** |
| TBH16_150 | 10 | 0.4 | **4.3%** | **17.3** | **12.7** | **13.1** |
| TBH16_175 | 10 | 0.4 | **4.0%** | **17.1** | **12.6** | **13.0** |
| TBH16_200 | 10 | 0.4 | **3.7%** | **17.0** | **12.5** | **12.9** |
| TBH17_0 | 10 | 1.3 | **12.9%** | **21.0** | **15.8** | **17.1** |
| TBH17_5 | 10 | 1.2 | **12.1%** | **20.6** | **15.5** | **16.7** |
| TBH17_10 | 10 | 1.2 | **11.5%** | **20.3** | **15.2** | **16.4** |
| TBH17_15 | 10 | 1.1 | **11.0%** | **20.0** | **15.0** | **16.1** |
| TBH17_20 | 10 | 1.1 | **10.6%** | **19.8** | **14.8** | **15.9** |
| TBH17_25 | 10 | 1.0 | **9.9%** | **19.4** | **14.5** | **15.5** |
| TBH17_30 | 10 | 0.9 | **9.4%** | **19.1** | **14.2** | **15.1** |
| TBH17_40 | 10 | 0.9 | **8.9%** | **18.9** | **14.0** | **14.9** |
| TBH17_50 | 10 | 0.8 | **8.0%** | **18.4** | **13.6** | **14.4** |
| TBH17_75 | 10 | 0.7 | **7.4%** | **18.0** | **13.3** | **14.1** |
| TBH17_100 | 10 | 0.7 | **7.0%** | **17.8** | **13.1** | **13.8** |
| TBH17_125 | 10 | 0.7 | **6.6%** | **17.6** | **13.0** | **13.7** |
| TBH17_150 | 10 | 0.6 | **6.4%** | **17.5** | **12.9** | **13.5** |
| TBH17_175 | 10 | 0.6 | **6.1%** | **17.3** | **12.8** | **13.4** |
| TBH17_200 | 10 | 0.6 | **5.9%** | **17.2** | **12.7** | **13.3** |
| TBH18_0 | 10 | 1.9 | **19.0%** | **29.4** | **23.0** | **24.9** |
| TBH18_5 | 10 | 1.5 | **14.9%** | **26.3** | **20.3** | **21.8** |
| TBH18_10 | 10 | 1.3 | **12.5%** | **24.4** | **18.6** | **19.9** |
| TBH18_15 | 10 | 1.1 | **10.9%** | **23.1** | **17.5** | **18.6** |
| TBH18_20 | 10 | 1.0 | **9.7%** | **22.1** | **16.7** | **17.6** |
| TBH18_25 | 10 | 0.8 | **8.1%** | **20.7** | **15.5** | **16.3** |
| TBH18_30 | 10 | 0.7 | **7.0%** | **19.8** | **14.7** | **15.4** |
| TBH18_40 | 10 | 0.6 | **6.2%** | **19.1** | **14.1** | **14.7** |
| TBH18_50 | 10 | 0.5 | **5.0%** | **17.9** | **13.2** | **13.7** |
| TBH18_75 | 10 | 0.4 | **4.3%** | **17.2** | **12.7** | **13.1** |
| TBH18_100 | 10 | 0.4 | **3.8%** | **16.8** | **12.3** | **12.7** |
| TBH18_125 | 10 | 0.3 | **3.5%** | **16.4** | **12.1** | **12.4** |
| TBH18_150 | 10 | 0.3 | **3.2%** | **16.2** | **11.9** | **12.2** |
| TBH18_175 | 10 | 0.3 | **3.0%** | **16.0** | **11.7** | **12.0** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year - DN | Future year DS |
| TBH18_200 | 10 | 0.3 | **2.9%** | **15.8** | **11.6** | **11.9** |
| TBH19_0 | 10 | 2.5 | **24.7%** | **21.6** | **16.2** | **18.7** |
| TBH19_5 | 10 | 1.4 | **14.2%** | **18.5** | **13.7** | **15.2** |
| TBH19_10 | 10 | 1.1 | **10.5%** | **17.5** | **12.9** | **13.9** |
| TBH19_15 | 10 | 0.8 | **8.5%** | **16.9** | **12.4** | **13.3** |
| TBH19_20 | 10 | 0.7 | **7.2%** | **16.5** | **12.1** | **12.8** |
| TBH19_25 | 10 | 0.6 | **5.6%** | **16.0** | **11.7** | **12.3** |
| TBH19_30 | 10 | 0.5 | **4.6%** | **15.7** | **11.5** | **12.0** |
| TBH19_40 | 10 | 0.4 | **4.0%** | **15.5** | **11.4** | **11.8** |
| TBH19_50 | 10 | 0.3 | **3.0%** | **15.2** | **11.1** | **11.4** |
| TBH19_75 | 10 | 0.2 | **2.5%** | **15.1** | **11.0** | **11.3** |
| TBH19_100 | 10 | 0.2 | **2.2%** | **15.0** | **10.9** | **11.2** |
| TBH19_125 | 10 | 0.2 | **1.9%** | **14.9** | **10.9** | **11.1** |
| TBH19_150 | 10 | 0.2 | **1.7%** | **14.8** | **10.8** | **11.0** |
| TBH19_175 | 10 | 0.2 | **1.6%** | **14.8** | **10.8** | **11.0** |
| TBH19_200 | 10 | 0.2 | **1.5%** | **14.8** | **10.8** | **10.9** |
| TBH20_0 | 10 | 0.7 | **6.5%** | **16.2** | **11.9** | **12.6** |
| TBH20_5 | 10 | 1.6 | **15.9%** | **19.0** | **14.1** | **15.7** |
| TBH20_10 | 10 | 1.3 | **12.9%** | **18.1** | **13.4** | **14.7** |
| TBH20_15 | 10 | 1.1 | **11.0%** | **17.6** | **13.0** | **14.1** |
| TBH20_20 | 10 | 1.0 | **9.6%** | **17.1** | **12.7** | **13.6** |
| TBH20_25 | 10 | 0.8 | **7.7%** | **16.6** | **12.2** | **13.0** |
| TBH20_30 | 10 | 0.7 | **6.5%** | **16.2** | **11.9** | **12.6** |
| TBH20_40 | 10 | 0.6 | **5.7%** | **16.0** | **11.8** | **12.3** |
| TBH20_50 | 10 | 0.4 | **4.3%** | **15.6** | **11.4** | **11.9** |
| TBH20_75 | 10 | 0.4 | **3.6%** | **15.4** | **11.3** | **11.6** |
| TBH20_100 | 10 | 0.3 | **3.1%** | **15.2** | **11.1** | **11.4** |
| TBH20_125 | 10 | 0.3 | **2.7%** | **15.1** | **11.1** | **11.3** |
| TBH20_150 | 10 | 0.2 | **2.4%** | **15.0** | **11.0** | **11.2** |
| TBH20_175 | 10 | 0.2 | **2.2%** | **15.0** | **10.9** | **11.2** |
| TBH20_200 | 10 | 0.2 | **2.1%** | **14.9** | **10.9** | **11.1** |
| TBH21_0 | 10 | 1.0 | **10.4%** | **18.4** | **13.7** | **14.7** |
| TBH21_5 | 10 | 0.9 | **9.5%** | **18.2** | **13.5** | **14.4** |
| TBH21_10 | 10 | 0.9 | **8.8%** | **18.0** | **13.3** | **14.2** |
| TBH21_15 | 10 | 0.8 | **8.2%** | **17.8** | **13.1** | **14.0** |
| TBH21_20 | 10 | 0.8 | **7.6%** | **17.6** | **13.0** | **13.8** |
| TBH21_25 | 10 | 0.7 | **6.8%** | **17.4** | **12.8** | **13.5** |
| TBH21_30 | 10 | 0.6 | **6.1%** | **17.2** | **12.7** | **13.3** |
| TBH21_40 | 10 | 0.6 | **5.6%** | **17.0** | **12.5** | **13.1** |
| TBH21_50 | 10 | 0.5 | **4.6%** | **16.8** | **12.3** | **12.8** |
| TBH21_75 | 10 | 0.4 | **3.9%** | **16.6** | **12.2** | **12.6** |
| TBH21_100 | 10 | 0.3 | **3.5%** | **16.4** | **12.0** | **12.4** |
| TBH21_125 | 10 | 0.3 | **3.1%** | **16.3** | **12.0** | **12.3** |
| TBH21_150 | 10 | 0.3 | **2.8%** | **16.2** | **11.9** | **12.2** |
| TBH21_175 | 10 | 0.3 | **2.5%** | **16.1** | **11.8** | **12.1** |
| TBH21_200 | 10 | 0.2 | **2.3%** | **16.1** | **11.8** | **12.0** |
| TBH22_0 | 10 | 1.6 | **15.6%** | **23.7** | **17.7** | **19.2** |
| TBH22_5 | 10 | 1.1 | **11.3%** | **21.8** | **16.2** | **17.3** |
| TBH22_10 | 10 | 0.9 | **9.3%** | **21.0** | **15.5** | **16.4** |
| TBH22_15 | 10 | 0.8 | **8.1%** | **20.4** | **15.1** | **15.9** |
| TBH22_20 | 10 | 0.7 | **7.2%** | **20.1** | **14.8** | **15.5** |
| TBH22_25 | 10 | 0.6 | **5.9%** | **19.5** | **14.3** | **14.9** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year - DN | Future year DS |
| TBH22_30 | 10 | 0.5 | **5.1%** | **19.1** | **14.1** | **14.6** |
| TBH22_40 | 10 | 0.4 | **4.5%** | **18.9** | **13.8** | **14.3** |
| TBH22_50 | 10 | 0.4 | **3.6%** | **18.5** | **13.5** | **13.9** |
| TBH22_75 | 10 | 0.3 | **3.0%** | **18.2** | **13.3** | **13.6** |
| TBH22_100 | 10 | 0.3 | **2.6%** | **18.0** | **13.2** | **13.5** |
| TBH22_125 | 10 | 0.2 | **2.3%** | **17.9** | **13.1** | **13.3** |
| TBH22_150 | 10 | 0.2 | **2.1%** | **17.8** | **13.0** | **13.3** |
| TBH22_175 | 10 | 0.2 | **2.0%** | **17.7** | **13.0** | **13.2** |
| TBH22_200 | 10 | 0.2 | **1.8%** | **17.7** | **12.9** | **13.1** |
| TBH23_0 | 10 | 1.1 | **10.6%** | **21.5** | **16.0** | **17.0** |
| TBH23_5 | 10 | 0.7 | **7.1%** | **20.0** | **14.8** | **15.5** |
| TBH23_10 | 10 | 0.6 | **5.7%** | **19.4** | **14.3** | **14.8** |
| TBH23_15 | 10 | 0.5 | **4.8%** | **19.0** | **14.0** | **14.4** |
| TBH23_20 | 10 | 0.4 | **4.2%** | **18.7** | **13.7** | **14.2** |
| TBH23_25 | 10 | 0.3 | **3.4%** | **18.4** | **13.5** | **13.8** |
| TBH23_30 | 10 | 0.3 | **2.9%** | **18.1** | **13.3** | **13.6** |
| TBH23_40 | 10 | 0.2 | **2.5%** | **18.0** | **13.2** | **13.4** |
| TBH23_50 | 10 | 0.2 | **2.0%** | **17.7** | **13.0** | **13.2** |
| TBH23_75 | 10 | 0.2 | **1.7%** | **17.6** | **12.9** | **13.0** |
| TBH23_100 | 10 | 0.1 | **1.5%** | **17.5** | **12.8** | **13.0** |
| TBH23_125 | 10 | 0.1 | **1.3%** | **17.5** | **12.8** | **12.9** |
| TBH23_150 | 10 | 0.1 | **1.2%** | **17.4** | **12.7** | **12.8** |
| TBH23_175 | 10 | 0.1 | **1.1%** | **17.4** | **12.7** | **12.8** |
| TBH23_200 | 10 | 0.1 | **1.1%** | **17.3** | **12.7** | **12.8** |
| TBH24_0 | 10 | 1.4 | **13.5%** | **27.2** | **20.6** | **21.9** |
| TBH24_5 | 10 | 0.9 | **9.1%** | **23.2** | **17.2** | **18.1** |
| TBH24_10 | 10 | 0.7 | **7.3%** | **21.5** | **15.8** | **16.6** |
| TBH24_15 | 10 | 0.6 | **6.3%** | **20.4** | **15.1** | **15.7** |
| TBH24_20 | 10 | 0.6 | **5.5%** | **19.7** | **14.5** | **15.1** |
| TBH24_25 | 10 | 0.5 | **4.6%** | **18.8** | **13.8** | **14.3** |
| TBH24_30 | 10 | 0.4 | **4.0%** | **18.2** | **13.4** | **13.8** |
| TBH24_40 | 10 | 0.4 | **3.6%** | **17.8** | **13.1** | **13.4** |
| TBH24_50 | 10 | 0.3 | **3.0%** | **17.2** | **12.6** | **12.9** |
| TBH24_75 | 10 | 0.3 | **2.6%** | **16.8** | **12.3** | **12.6** |
| TBH24_100 | 10 | 0.2 | **2.3%** | **16.6** | **12.1** | **12.4** |
| TBH24_125 | 10 | 0.2 | **2.1%** | **16.4** | **12.0** | **12.2** |
| TBH24_150 | 10 | 0.2 | **2.0%** | **16.3** | **11.9** | **12.1** |
| TBH24_175 | 10 | 0.2 | **1.9%** | **16.1** | **11.8** | **12.0** |
| TBH24_200 | 10 | 0.2 | **1.8%** | **16.1** | **11.8** | **11.9** |
| TBH3_0 | 10 | 0.7 | **7.0%** | **22.3** | **17.0** | **17.7** |
| TBH3_5 | 10 | 0.5 | **4.7%** | **19.5** | **14.6** | **15.1** |
| TBH3_10 | 10 | 0.4 | **3.8%** | **18.4** | **13.7** | **14.1** |
| TBH3_15 | 10 | 0.3 | **3.3%** | **17.8** | **13.2** | **13.5** |
| TBH3_20 | 10 | 0.3 | **2.9%** | **17.3** | **12.8** | **13.1** |
| TBH3_25 | 10 | 0.3 | **2.5%** | **16.8** | **12.4** | **12.7** |
| TBH3_30 | 10 | 0.2 | **2.2%** | **16.5** | **12.2** | **12.4** |
| TBH3_40 | 10 | 0.2 | **2.0%** | **16.3** | **12.0** | **12.2** |
| TBH3_50 | 10 | 0.2 | **1.8%** | **15.9** | **11.7** | **11.9** |
| TBH3_75 | 10 | 0.2 | **1.6%** | **15.7** | **11.6** | **11.7** |
| TBH3_100 | 10 | 0.1 | **1.5%** | **15.6** | **11.5** | **11.6** |
| TBH3_125 | 10 | 0.1 | **1.4%** | **15.5** | **11.4** | **11.5** |
| TBH3_150 | 10 | 0.1 | **1.3%** | **15.4** | **11.3** | **11.5** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year - DN | Future year DS |
| TBH3_175 | 10 | 0.1 | **1.3%** | **15.4** | **11.3** | **11.4** |
| TBH3_200 | 10 | 0.1 | **1.2%** | **15.4** | **11.3** | **11.4** |
| TBH4_0 | 10 | 2.3 | **23.2%** | **23.7** | **18.2** | **20.5** |
| TBH4_5 | 10 | 1.7 | **16.5%** | **21.2** | **16.0** | **17.7** |
| TBH4_10 | 10 | 1.3 | **13.2%** | **19.9** | **15.0** | **16.3** |
| TBH4_15 | 10 | 1.1 | **11.1%** | **19.1** | **14.3** | **15.4** |
| TBH4_20 | 10 | 1.0 | **9.7%** | **18.6** | **13.9** | **14.8** |
| TBH4_25 | 10 | 0.8 | **7.9%** | **17.9** | **13.3** | **14.1** |
| TBH4_30 | 10 | 0.7 | **6.7%** | **17.4** | **12.9** | **13.6** |
| TBH4_40 | 10 | 0.6 | **5.9%** | **17.1** | **12.7** | **13.3** |
| TBH4_50 | 10 | 0.5 | **4.7%** | **16.7** | **12.3** | **12.7** |
| TBH4_75 | 10 | 0.4 | **4.0%** | **16.4** | **12.1** | **12.5** |
| TBH4_100 | 10 | 0.4 | **3.5%** | **16.2** | **11.9** | **12.3** |
| TBH4_125 | 10 | 0.3 | **3.2%** | **16.1** | **11.8** | **12.1** |
| TBH4_150 | 10 | 0.3 | **3.0%** | **16.0** | **11.8** | **12.1** |
| TBH4_175 | 10 | 0.3 | **2.8%** | **15.9** | **11.7** | **12.0** |
| TBH4_200 | 10 | 0.3 | **2.6%** | **15.9** | **11.7** | **11.9** |
| TBH5_0 | 10 | 0.3 | **2.6%** | **29.2** | **22.8** | **23.1** |
| TBH5_5 | 10 | 0.2 | **2.1%** | **26.7** | **20.7** | **20.9** |
| TBH5_10 | 10 | 0.2 | **1.9%** | **25.2** | **19.3** | **19.5** |
| TBH5_15 | 10 | 0.2 | **1.8%** | **24.1** | **18.4** | **18.6** |
| TBH5_20 | 10 | 0.2 | **1.8%** | **23.3** | **17.7** | **17.9** |
| TBH5_25 | 10 | 0.2 | **1.9%** | **22.1** | **16.7** | **16.9** |
| TBH5_30 | 10 | 0.2 | **2.1%** | **21.3** | **16.0** | **16.2** |
| TBH5_40 | 10 | 0.2 | **2.2%** | **20.6** | **15.4** | **15.6** |
| TBH5_50 | 10 | 0.3 | **2.6%** | **19.5** | **14.5** | **14.8** |
| TBH5_75 | 10 | 0.3 | **2.7%** | **18.8** | **14.0** | **14.2** |
| TBH5_100 | 10 | 0.3 | **2.8%** | **18.3** | **13.6** | **13.9** |
| TBH5_125 | 10 | 0.3 | **2.8%** | **18.0** | **13.3** | **13.6** |
| TBH5_150 | 10 | 0.3 | **2.8%** | **17.7** | **13.1** | **13.4** |
| TBH5_175 | 10 | 0.3 | **2.8%** | **17.5** | **12.9** | **13.2** |
| TBH5_200 | 10 | 0.3 | **2.8%** | **17.3** | **12.8** | **13.1** |
| TBH6_0 | 10 | 1.4 | **14.2%** | **23.8** | **17.7** | **19.1** |
| TBH6_5 | 10 | 1.2 | **12.3%** | **22.8** | **16.9** | **18.1** |
| TBH6_10 | 10 | 1.1 | **10.9%** | **21.9** | **16.2** | **17.3** |
| TBH6_15 | 10 | 1.0 | **9.8%** | **21.3** | **15.7** | **16.7** |
| TBH6_20 | 10 | 0.9 | **9.0%** | **20.7** | **15.3** | **16.2** |
| TBH6_25 | 10 | 0.8 | **7.7%** | **19.9** | **14.6** | **15.4** |
| TBH6_30 | 10 | 0.7 | **6.8%** | **19.3** | **14.1** | **14.8** |
| TBH6_40 | 10 | 0.6 | **6.1%** | **18.8** | **13.8** | **14.4** |
| TBH6_50 | 10 | 0.5 | **4.9%** | **18.0** | **13.1** | **13.6** |
| TBH6_75 | 10 | 0.4 | **4.2%** | **17.4** | **12.7** | **13.2** |
| TBH6_100 | 10 | 0.4 | **3.7%** | **17.0** | **12.5** | **12.8** |
| TBH6_125 | 10 | 0.3 | **3.3%** | **16.7** | **12.2** | **12.6** |
| TBH6_150 | 10 | 0.3 | **3.0%** | **16.5** | **12.1** | **12.4** |
| TBH6_175 | 10 | 0.3 | **2.8%** | **16.3** | **11.9** | **12.2** |
| TBH6_200 | 10 | 0.3 | **2.6%** | **16.2** | **11.8** | **12.1** |
| TBH7_0 | 10 | 1.3 | **13.0%** | **24.2** | **18.0** | **19.3** |
| TBH7_5 | 10 | 1.0 | **10.4%** | **22.4** | **16.5** | **17.6** |
| TBH7_10 | 10 | 0.9 | **8.8%** | **21.3** | **15.6** | **16.5** |
| TBH7_15 | 10 | 0.8 | **7.7%** | **20.5** | **15.0** | **15.8** |
| TBH7_20 | 10 | 0.7 | **6.9%** | **19.8** | **14.5** | **15.2** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | **Absolute Change** | **Change as % of Critical Load** | **Base Year** | **Future Year - DN** | **Future year DS** |
| TBH7_25 | 10 | 0.6 | **5.7%** | **18.9** | **13.8** | **14.4** |
| TBH7_30 | 10 | 0.5 | **4.9%** | **18.3** | **13.4** | **13.8** |
| TBH7_40 | 10 | 0.4 | **4.4%** | **17.9** | **13.0** | **13.5** |
| TBH7_50 | 10 | 0.4 | **3.5%** | **17.1** | **12.5** | **12.8** |
| TBH7_75 | 10 | 0.3 | **3.0%** | **16.7** | **12.1** | **12.5** |
| TBH7_100 | 10 | 0.3 | **2.7%** | **16.4** | **11.9** | **12.2** |
| TBH7_125 | 10 | 0.2 | **2.4%** | **16.1** | **11.8** | **12.0** |
| TBH7_150 | 10 | 0.2 | **2.3%** | **16.0** | **11.7** | **11.9** |
| TBH7_175 | 10 | 0.2 | **2.1%** | **15.8** | **11.6** | **11.8** |
| TBH7_200 | 10 | 0.2 | **2.0%** | **15.7** | **11.5** | **11.7** |
| TBH8_0 | 10 | 1.7 | **16.6%** | **20.6** | **15.5** | **17.2** |
| TBH8_5 | 10 | 1.1 | **10.5%** | **18.6** | **13.8** | **14.8** |
| TBH8_10 | 10 | 0.8 | **8.3%** | **17.8** | **13.2** | **14.0** |
| TBH8_15 | 10 | 0.7 | **7.1%** | **17.4** | **12.8** | **13.6** |
| TBH8_20 | 10 | 0.6 | **6.3%** | **17.1** | **12.6** | **13.3** |
| TBH8_25 | 10 | 0.5 | **5.3%** | **16.8** | **12.4** | **12.9** |
| TBH8_30 | 10 | 0.5 | **4.6%** | **16.6** | **12.2** | **12.7** |
| TBH8_40 | 10 | 0.4 | **4.2%** | **16.4** | **12.1** | **12.5** |
| TBH8_50 | 10 | 0.4 | **3.7%** | **16.3** | **11.9** | **12.3** |
| TBH8_75 | 10 | 0.3 | **3.3%** | **16.2** | **11.9** | **12.2** |
| TBH8_100 | 10 | 0.3 | **3.2%** | **16.1** | **11.8** | **12.1** |
| TBH8_125 | 10 | 0.3 | **3.1%** | **16.1** | **11.8** | **12.1** |
| TBH8_150 | 10 | 0.3 | **3.0%** | **16.1** | **11.8** | **12.1** |
| TBH8_175 | 10 | 0.3 | **2.9%** | **16.1** | **11.8** | **12.1** |
| TBH8_200 | 10 | 0.3 | **2.9%** | **16.1** | **11.8** | **12.1** |
| TBH9_0 | 10 | 0.9 | **9.1%** | **22.5** | **16.9** | **17.8** |
| TBH9_0 | 10 | 1.3 | **12.7%** | **25.0** | **18.8** | **20.1** |
| TBH9_5 | 10 | 1.0 | **10.2%** | **23.5** | **17.6** | **18.6** |
| TBH9_10 | 10 | 0.9 | **9.1%** | **22.6** | **16.9** | **17.8** |
| TBH9_15 | 10 | 0.8 | **8.4%** | **22.0** | **16.5** | **17.3** |
| TBH9_20 | 10 | 0.8 | **8.0%** | **21.6** | **16.2** | **17.0** |
| TBH9_25 | 10 | 0.7 | **7.4%** | **21.2** | **15.8** | **16.5** |
| TBH9_30 | 10 | 0.7 | **7.1%** | **20.9** | **15.6** | **16.3** |
| TBH9_40 | 10 | 0.7 | **7.0%** | **20.8** | **15.6** | **16.3** |
| TBH9_50 | 10 | 0.7 | **6.9%** | **21.0** | **15.7** | **16.4** |
| TBH9_75 | 10 | 0.7 | **7.1%** | **21.5** | **16.2** | **16.9** |
| TBH9_100 | 10 | 0.8 | **7.7%** | **22.5** | **17.0** | **17.8** |
| TBH9_125 | 10 | 0.9 | **8.9%** | **24.4** | **18.6** | **19.5** |
| TBH9_150 | 10 | 1.0 | **10.2%** | **26.4** | **20.4** | **21.4** |
| TBH9_175 | 10 | 1.0 | **10.4%** | **26.8** | **20.7** | **21.7** |
| TBH9_200 | 10 | 1.0 | **10.4%** | **26.9** | **20.7** | **21.8** |
| WFG4_0 | 10 | -2.7 | -26.9% | **28.8** | **21.0** | **18.3** |
| WG1_0 | 10 | -1.8 | -17.6% | **48.6** | **35.7** | **34.0** |
| WG1_5 | 10 | -1.5 | -14.7% | **44.6** | **32.6** | **31.1** |
| WG1_10 | 10 | -1.2 | -12.4% | **41.6** | **30.1** | **28.9** |
| WG1_15 | 10 | -1.1 | -10.7% | **39.1** | **28.3** | **27.2** |
| WG1_20 | 10 | -0.9 | -9.4% | **37.2** | **26.8** | **25.9** |
| WG1_25 | 10 | -0.7 | -7.4% | **34.4** | **24.8** | **24.0** |
| WG1_30 | 10 | -0.6 | -6.1% | **32.5** | **23.4** | **22.8** |
| WG1_40 | 10 | -0.5 | -5.2% | **31.1** | **22.4** | **21.9** |
| WG1_50 | 10 | -0.4 | -3.7% | **29.0** | **20.9** | **20.5** |
| WG1_75 | 10 | -0.3 | -2.9% | **27.8** | **20.1** | **19.8** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year - DN | Future year DS |
| WG1_100 | 10 | -0.2 | -2.4% | **27.0** | **19.6** | **19.3** |
| WG1_125 | 10 | -0.2 | -2.1% | **26.5** | **19.2** | **19.0** |
| WG1_150 | 10 | -0.2 | -1.8% | **26.2** | **19.0** | **18.8** |
| WG1_175 | 10 | -0.2 | -1.7% | **25.9** | **18.8** | **18.6** |
| WG1_200 | 10 | -0.1 | -1.5% | **25.7** | **18.6** | **18.5** |
| WG2_0 | 10 | -1.3 | -12.9% | **40.0** | **29.7** | **28.4** |
| WG2_5 | 10 | -0.9 | -9.1% | **35.5** | **26.1** | **25.2** |
| WG2_10 | 10 | -0.7 | -7.2% | **33.1** | **24.2** | **23.5** |
| WG2_15 | 10 | -0.6 | -6.0% | **31.5** | **23.0** | **22.4** |
| WG2_20 | 10 | -0.5 | -5.2% | **30.4** | **22.2** | **21.7** |
| WG2_25 | 10 | -0.4 | -4.0% | **29.0** | **21.1** | **20.7** |
| WG2_30 | 10 | -0.3 | -3.3% | **28.1** | **20.4** | **20.1** |
| WG2_40 | 10 | -0.3 | -2.8% | **27.4** | **19.9** | **19.7** |
| WG2_50 | 10 | -0.2 | -2.0% | **26.4** | **19.2** | **19.0** |
| WG2_75 | 10 | -0.2 | -1.6% | **25.8** | **18.8** | **18.6** |
| WG2_100 | 10 | -0.1 | -1.3% | **25.4** | **18.5** | **18.3** |
| WG2_125 | 10 | -0.1 | -1.1% | **25.1** | **18.3** | **18.2** |
| WG3_0 | 10 | -1.4 | -14.1% | **41.4** | **30.9** | **29.4** |
| WG3_5 | 10 | -1.0 | -10.0% | **36.5** | **26.9** | **25.9** |
| WG3_10 | 10 | -0.8 | -7.9% | **33.8** | **24.8** | **24.0** |
| WG3_15 | 10 | -0.7 | -6.5% | **32.1** | **23.5** | **22.8** |
| WG3_20 | 10 | -0.6 | -5.6% | **30.9** | **22.5** | **22.0** |
| WG3_25 | 10 | -0.4 | -4.4% | **29.3** | **21.4** | **20.9** |
| WG3_30 | 10 | -0.4 | -3.6% | **28.3** | **20.6** | **20.2** |
| WG3_40 | 10 | -0.3 | -3.1% | **27.6** | **20.1** | **19.8** |
| WG3_50 | 10 | -0.2 | -2.3% | **26.6** | **19.3** | **19.1** |
| WG3_75 | 10 | -0.2 | -1.8% | **26.0** | **18.9** | **18.7** |
| WG3_100 | 10 | -0.2 | -1.5% | **25.6** | **18.6** | **18.4** |
| WG3_125 | 10 | -0.1 | -1.3% | **25.3** | **18.4** | **18.3** |
| WG3_150 | 10 | -0.1 | -1.2% | **25.1** | **18.2** | **18.1** |
| WG4_0 | 10 | -9.1 | -90.6% | **39.6** | **29.2** | **20.2** |
| WG4_5 | 10 | -6.2 | -61.6% | **34.8** | **25.5** | **19.3** |
| WG4_10 | 10 | -4.8 | -48.1% | **32.5** | **23.7** | **18.9** |
| WG4_15 | 10 | -4.0 | -39.8% | **31.1** | **22.7** | **18.7** |
| WG4_20 | 10 | -3.4 | -34.1% | **30.1** | **21.9** | **18.5** |
| WG4_25 | 10 | -2.7 | -26.8% | **28.8** | **21.0** | **18.3** |
| WG4_30 | 10 | -2.2 | -22.2% | **28.0** | **20.4** | **18.1** |
| WG4_40 | 10 | -1.9 | -19.0% | **27.4** | **20.0** | **18.1** |
| WG4_50 | 10 | -1.4 | -14.2% | **26.6** | **19.3** | **17.9** |
| WG4_75 | 10 | -1.1 | -11.3% | **26.1** | **19.0** | **17.8** |
| WG4_100 | 10 | -1.0 | -9.5% | **25.8** | **18.7** | **17.8** |
| WG4_125 | 10 | -0.8 | -8.3% | **25.5** | **18.6** | **17.7** |
| WG4_150 | 10 | -0.7 | -7.3% | **25.3** | **18.4** | **17.7** |
| WG4_175 | 10 | -0.6 | -6.5% | **25.2** | **18.3** | **17.7** |
| WG4_200 | 10 | -0.6 | -5.9% | **25.1** | **18.2** | **17.7** |
| WG5_0 | 10 | -2.7 | -27.4% | **45.1** | **33.7** | **30.9** |
| WG5_5 | 10 | -2.3 | -22.6% | **41.0** | **30.4** | **28.1** |
| WG5_10 | 10 | -2.0 | -20.1% | **38.7** | **28.6** | **26.6** |
| WG5_15 | 10 | -1.8 | -18.4% | **37.3** | **27.5** | **25.6** |
| WG5_20 | 10 | -1.7 | -17.3% | **36.3** | **26.6** | **24.9** |
| WG5_25 | 10 | -1.6 | -15.8% | **34.8** | **25.5** | **23.9** |
| WG5_30 | 10 | -1.5 | -14.7% | **33.7** | **24.7** | **23.2** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year - DN | Future year DS |
| WG5_40 | 10 | -1.4 | -14.0% | **32.9** | **24.1** | **22.7** |
| WG5_50 | 10 | -1.3 | -12.7% | **31.5** | **23.0** | **21.7** |
| WG5_75 | 10 | -1.2 | -11.8% | **30.5** | **22.3** | **21.1** |
| WG5_100 | 10 | -1.1 | -11.3% | **29.8** | **21.8** | **20.6** |
| WG5_125 | 10 | -1.1 | -11.0% | **29.2** | **21.3** | **20.2** |
| WG5_150 | 10 | -1.1 | -11.0% | **28.8** | **21.0** | **19.9** |
| WG5_175 | 10 | -1.1 | -11.4% | **28.5** | **20.7** | **19.6** |
| WG5_200 | 10 | -1.3 | -12.5% | **28.3** | **20.6** | **19.4** |

Table E-5 Scenario 7a: Predicted 'in isolation' Annual Nitrogen Deposition at Modelled Ecological Receptors (Change >1% of Critical Load)

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH1_0 | 10 | -2.7 | -26.8% | **40.9** | **33.7** | **31.0** |
| TBH1_5 | 10 | -2.2 | -22.3% | **36.3** | **29.7** | **27.4** |
| TBH1_10 | 10 | -2.0 | -19.5% | **33.5** | **27.1** | **25.2** |
| TBH1_15 | 10 | -1.7 | -17.4% | **31.4** | **25.3** | **23.6** |
| TBH1_20 | 10 | -1.6 | -15.6% | **29.8** | **23.9** | **22.4** |
| TBH1_25 | 10 | -1.3 | -12.8% | **27.5** | **21.9** | **20.6** |
| TBH1_30 | 10 | -1.1 | -10.7% | **25.9** | **20.5** | **19.4** |
| TBH1_40 | 10 | -0.9 | -9.0% | **24.7** | **19.4** | **18.5** |
| TBH1_50 | 10 | -0.6 | -6.1% | **22.6** | **17.7** | **17.1** |
| TBH1_75 | 10 | -0.4 | -4.5% | **21.3** | **16.6** | **16.1** |
| TBH1_100 | 10 | -0.3 | -3.4% | **20.5** | **15.8** | **15.5** |
| TBH1_125 | 10 | -0.3 | -2.7% | **19.8** | **15.2** | **15.0** |
| TBH1_150 | 10 | -0.2 | -2.2% | **19.3** | **14.8** | **14.6** |
| TBH1_175 | 10 | -0.2 | -1.8% | **18.9** | **14.4** | **14.3** |
| TBH1_200 | 10 | -0.2 | -1.5% | **18.6** | **14.1** | **14.0** |
| TBH2_0 | 10 | -1.4 | -14.2% | **31.1** | **25.0** | **23.5** |
| TBH2_5 | 10 | -1.2 | -11.8% | **28.7** | **22.9** | **21.7** |
| TBH2_10 | 10 | -1.0 | -9.9% | **27.0** | **21.4** | **20.4** |
| TBH2_15 | 10 | -0.8 | -8.5% | **25.7** | **20.3** | **19.5** |
| TBH2_20 | 10 | -0.7 | -7.3% | **24.7** | **19.4** | **18.7** |
| TBH2_25 | 10 | -0.6 | -5.6% | **23.2** | **18.2** | **17.6** |
| TBH2_30 | 10 | -0.4 | -4.5% | **22.2** | **17.3** | **16.9** |
| TBH2_40 | 10 | -0.4 | -3.6% | **21.4** | **16.6** | **16.3** |
| TBH2_50 | 10 | -0.2 | -2.3% | **20.1** | **15.5** | **15.3** |
| TBH2_75 | 10 | -0.2 | -1.6% | **19.3** | **14.8** | **14.7** |
| TBH2_100 | 10 | -0.1 | -1.2% | **18.7** | **14.3** | **14.2** |
| TBH26_0 | 10 | -0.3 | -3.1% | **26.0** | **21.3** | **21.0** |
| TBH26_5 | 10 | -0.4 | -4.3% | **25.0** | **20.3** | **19.9** |
| TBH26_10 | 10 | -0.5 | -4.8% | **24.2** | **19.5** | **19.0** |
| TBH26_15 | 10 | -0.5 | -4.8% | **23.5** | **18.8** | **18.4** |
| TBH26_20 | 10 | -0.5 | -4.7% | **22.9** | **18.3** | **17.8** |
| TBH26_25 | 10 | -0.4 | -4.4% | **22.0** | **17.4** | **17.0** |
| TBH26_30 | 10 | -0.4 | -4.0% | **21.3** | **16.7** | **16.3** |
| TBH26_40 | 10 | -0.4 | -3.7% | **20.7** | **16.2** | **15.8** |
| TBH26_50 | 10 | -0.3 | -3.0% | **19.7** | **15.2** | **14.9** |
| TBH26_75 | 10 | -0.2 | -2.5% | **19.0** | **14.6** | **14.4** |
| TBH26_100 | 10 | -0.2 | -2.1% | **18.5** | **14.2** | **14.0** |
| TBH26_125 | 10 | -0.2 | -1.9% | **18.2** | **13.9** | **13.7** |
| TBH26_150 | 10 | -0.2 | -1.7% | **17.9** | **13.6** | **13.5** |
| TBH26_175 | 10 | -0.1 | -1.5% | **17.7** | **13.5** | **13.3** |
| TBH26_200 | 10 | -0.1 | -1.3% | **17.6** | **13.3** | **13.2** |
| TBH27_0 | 10 | -0.7 | -6.7% | **24.9** | **19.5** | **18.8** |
| TBH27_5 | 10 | -0.6 | -5.8% | **23.6** | **18.4** | **17.9** |
| TBH27_10 | 10 | -0.5 | -5.2% | **22.7** | **17.7** | **17.2** |
| TBH27_15 | 10 | -0.5 | -4.7% | **22.0** | **17.1** | **16.7** |
| TBH27_20 | 10 | -0.4 | -4.3% | **21.5** | **16.7** | **16.2** |
| TBH27_25 | 10 | -0.4 | -3.7% | **20.6** | **16.0** | **15.6** |
| TBH27_30 | 10 | -0.3 | -3.3% | **20.1** | **15.5** | **15.2** |
| TBH27_40 | 10 | -0.3 | -3.0% | **19.6** | **15.2** | **14.9** |
| TBH27_50 | 10 | -0.2 | -2.4% | **18.9** | **14.6** | **14.4** |
| TBH27_75 | 10 | -0.2 | -2.1% | **18.5** | **14.3** | **14.1** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH27_100 | 10 | -0.2 | -1.8% | **18.2** | **14.0** | **13.9** |
| TBH27_125 | 10 | -0.2 | -1.7% | **18.0** | **13.9** | **13.7** |
| TBH27_150 | 10 | -0.2 | -1.5% | **17.8** | **13.7** | **13.6** |
| TBH27_175 | 10 | -0.1 | -1.4% | **17.7** | **13.6** | **13.4** |
| TBH27_200 | 10 | -0.1 | -1.3% | **17.5** | **13.5** | **13.3** |
| TBH28_0 | 10 | -1.5 | -15.3% | **22.3** | **18.3** | **16.8** |
| TBH28_5 | 10 | -1.1 | -11.2% | **20.5** | **16.5** | **15.4** |
| TBH28_10 | 10 | -0.9 | -9.0% | **19.5** | **15.5** | **14.6** |
| TBH28_15 | 10 | -0.8 | -7.6% | **18.9** | **14.9** | **14.1** |
| TBH28_20 | 10 | -0.7 | -6.6% | **18.5** | **14.4** | **13.7** |
| TBH28_25 | 10 | -0.5 | -5.3% | **17.9** | **13.8** | **13.3** |
| TBH28_30 | 10 | -0.4 | -4.5% | **17.5** | **13.4** | **13.0** |
| TBH28_40 | 10 | -0.4 | -3.9% | **17.3** | **13.2** | **12.8** |
| TBH28_50 | 10 | -0.3 | -3.1% | **17.0** | **12.9** | **12.5** |
| TBH28_75 | 10 | -0.3 | -2.7% | **16.9** | **12.7** | **12.4** |
| TBH28_100 | 10 | -0.3 | -2.5% | **16.9** | **12.7** | **12.5** |
| TBH28_125 | 10 | -0.2 | -2.5% | **17.0** | **12.8** | **12.5** |
| TBH28_150 | 10 | -0.3 | -2.7% | **17.3** | **13.0** | **12.7** |
| TBH28_175 | 10 | -0.3 | -3.1% | **17.8** | **13.4** | **13.1** |
| TBH28_200 | 10 | -0.4 | -4.0% | **18.8** | **14.2** | **13.8** |
| TBH29_0 | 10 | -1.6 | -15.8% | **22.9** | **19.0** | **17.4** |
| TBH29_5 | 10 | -1.1 | -11.3% | **21.0** | **17.0** | **15.9** |
| TBH29_10 | 10 | -0.9 | -8.9% | **19.9** | **15.9** | **15.0** |
| TBH29_15 | 10 | -0.7 | -7.3% | **19.2** | **15.2** | **14.4** |
| TBH29_20 | 10 | -0.6 | -6.3% | **18.7** | **14.7** | **14.0** |
| TBH29_25 | 10 | -0.5 | -4.8% | **18.0** | **14.0** | **13.5** |
| TBH29_30 | 10 | -0.4 | -3.8% | **17.6** | **13.5** | **13.2** |
| TBH29_40 | 10 | -0.3 | -3.2% | **17.3** | **13.2** | **12.9** |
| TBH29_50 | 10 | -0.2 | -2.2% | **16.7** | **12.7** | **12.5** |
| TBH29_75 | 10 | -0.2 | -1.6% | **16.4** | **12.4** | **12.2** |
| TBH29_100 | 10 | -0.1 | -1.2% | **16.2** | **12.2** | **12.1** |
| TBH3_0 | 10 | -0.4 | -3.7% | **24.7** | **20.5** | **20.1** |
| TBH3_5 | 10 | -0.2 | -2.0% | **20.1** | **15.9** | **15.7** |
| TBH3_10 | 10 | -0.1 | -1.5% | **18.7** | **14.6** | **14.4** |
| TBH3_15 | 10 | -0.1 | -1.2% | **17.9** | **13.8** | **13.7** |
| TBH3_20 | 10 | -0.1 | -1.1% | **17.5** | **13.4** | **13.3** |
| TBH30_5 | 10 | -0.1 | -1.1% | **22.6** | **17.5** | **17.4** |
| TBH31_0 | 10 | -0.6 | -5.7% | **22.0** | **16.8** | **16.3** |
| TBH31_5 | 10 | -0.5 | -5.0% | **21.3** | **16.2** | **15.7** |
| TBH31_10 | 10 | -0.4 | -4.4% | **20.6** | **15.7** | **15.2** |
| TBH31_15 | 10 | -0.4 | -4.0% | **20.0** | **15.3** | **14.9** |
| TBH31_20 | 10 | -0.4 | -3.6% | **19.6** | **14.9** | **14.5** |
| TBH31_25 | 10 | -0.3 | -3.1% | **18.9** | **14.3** | **14.0** |
| TBH31_30 | 10 | -0.3 | -2.7% | **18.3** | **13.8** | **13.6** |
| TBH31_40 | 10 | -0.2 | -2.3% | **17.8** | **13.5** | **13.2** |
| TBH31_50 | 10 | -0.2 | -1.8% | **17.0** | **12.8** | **12.6** |
| TBH31_75 | 10 | -0.1 | -1.4% | **16.4** | **12.3** | **12.1** |
| TBH31_100 | 10 | -0.1 | -1.1% | **15.9** | **11.9** | **11.8** |
| TBH32_0 | 10 | -0.5 | -5.4% | **20.8** | **15.7** | **15.1** |
| TBH32_5 | 10 | -0.5 | -4.5% | **19.9** | **15.0** | **14.5** |
| TBH32_10 | 10 | -0.4 | -4.0% | **19.3** | **14.5** | **14.1** |
| TBH32_15 | 10 | -0.4 | -3.5% | **18.8** | **14.2** | **13.8** |
| TBH32_20 | 10 | -0.3 | -3.2% | **18.5** | **13.9** | **13.6** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH32_25 | 10 | -0.3 | -2.7% | **17.9** | **13.5** | **13.2** |
| TBH32_30 | 10 | -0.2 | -2.3% | **17.5** | **13.2** | **12.9** |
| TBH32_40 | 10 | -0.2 | -2.0% | **17.2** | **12.9** | **12.7** |
| TBH32_50 | 10 | -0.2 | -1.6% | **16.7** | **12.5** | **12.4** |
| TBH32_75 | 10 | -0.1 | -1.2% | **16.2** | **12.2** | **12.0** |
| TBH33_0 | 10 | -0.5 | -5.4% | **19.8** | **15.0** | **14.4** |
| TBH33_5 | 10 | -0.3 | -3.5% | **18.8** | **14.2** | **13.8** |
| TBH33_10 | 10 | -0.3 | -2.5% | **18.2** | **13.7** | **13.5** |
| TBH33_15 | 10 | -0.2 | -2.0% | **17.8** | **13.4** | **13.2** |
| TBH33_20 | 10 | -0.2 | -1.6% | **17.6** | **13.2** | **13.0** |
| TBH33_25 | 10 | -0.1 | -1.2% | **17.2** | **12.9** | **12.7** |
| TBH34_0 | 10 | -1.0 | -9.9% | **24.6** | **18.9** | **17.9** |
| TBH34_5 | 10 | -0.7 | -7.2% | **22.1** | **16.8** | **16.1** |
| TBH34_10 | 10 | -0.6 | -5.8% | **20.9** | **15.8** | **15.2** |
| TBH34_15 | 10 | -0.5 | -4.9% | **20.1** | **15.1** | **14.7** |
| TBH34_20 | 10 | -0.4 | -4.3% | **19.5** | **14.7** | **14.2** |
| TBH34_25 | 10 | -0.3 | -3.4% | **18.7** | **14.0** | **13.7** |
| TBH34_30 | 10 | -0.3 | -2.9% | **18.1** | **13.6** | **13.3** |
| TBH34_40 | 10 | -0.2 | -2.4% | **17.7** | **13.3** | **13.0** |
| TBH34_50 | 10 | -0.2 | -1.8% | **17.1** | **12.8** | **12.6** |
| TBH34_75 | 10 | -0.1 | -1.4% | **16.7** | **12.4** | **12.3** |
| TBH34_100 | 10 | -0.1 | -1.1% | **16.4** | **12.2** | **12.1** |
| TBH1_0 | 10 | -2.7 | -26.8% | **40.9** | **33.7** | **31.0** |
| TBH1_5 | 10 | -2.2 | -22.3% | **36.3** | **29.7** | **27.4** |
| TBH1_10 | 10 | -2.0 | -19.5% | **33.5** | **27.1** | **25.2** |
| TBH1_15 | 10 | -1.7 | -17.4% | **31.4** | **25.3** | **23.6** |
| TBH1_20 | 10 | -1.6 | -15.6% | **29.8** | **23.9** | **22.4** |
| TBH1_25 | 10 | -1.3 | -12.8% | **27.5** | **21.9** | **20.6** |
| TBH1_30 | 10 | -1.1 | -10.7% | **25.9** | **20.5** | **19.4** |
| TBH1_40 | 10 | -0.9 | -9.0% | **24.7** | **19.4** | **18.5** |
| TBH1_50 | 10 | -0.6 | -6.1% | **22.6** | **17.7** | **17.1** |
| TBH1_75 | 10 | -0.4 | -4.5% | **21.3** | **16.6** | **16.1** |
| TBH1_100 | 10 | -0.3 | -3.4% | **20.5** | **15.8** | **15.5** |
| TBH1_125 | 10 | -0.3 | -2.7% | **19.8** | **15.2** | **15.0** |
| TBH1_150 | 10 | -0.2 | -2.2% | **19.3** | **14.8** | **14.6** |
| TBH1_175 | 10 | -0.2 | -1.8% | **18.9** | **14.4** | **14.3** |
| TBH1_200 | 10 | -0.2 | -1.5% | **18.6** | **14.1** | **14.0** |
| TBH2_0 | 10 | -1.4 | -14.2% | **31.1** | **25.0** | **23.5** |
| TBH2_5 | 10 | -1.2 | -11.8% | **28.7** | **22.9** | **21.7** |
| TBH2_10 | 10 | -1.0 | -9.9% | **27.0** | **21.4** | **20.4** |
| TBH2_15 | 10 | -0.8 | -8.5% | **25.7** | **20.3** | **19.5** |
| TBH2_20 | 10 | -0.7 | -7.3% | **24.7** | **19.4** | **18.7** |
| TBH2_25 | 10 | -0.6 | -5.6% | **23.2** | **18.2** | **17.6** |
| TBH2_30 | 10 | -0.4 | -4.5% | **22.2** | **17.3** | **16.9** |
| TBH2_40 | 10 | -0.4 | -3.6% | **21.4** | **16.6** | **16.3** |
| TBH2_50 | 10 | -0.2 | -2.3% | **20.1** | **15.5** | **15.3** |
| TBH2_75 | 10 | -0.2 | -1.6% | **19.3** | **14.8** | **14.7** |
| TBH2_100 | 10 | -0.1 | -1.2% | **18.7** | **14.3** | **14.2** |
| TBH26_0 | 10 | -0.3 | -3.1% | **26.0** | **21.3** | **21.0** |
| TBH26_5 | 10 | -0.4 | -4.3% | **25.0** | **20.3** | **19.9** |
| TBH26_10 | 10 | -0.5 | -4.8% | **24.2** | **19.5** | **19.0** |
| TBH26_15 | 10 | -0.5 | -4.8% | **23.5** | **18.8** | **18.4** |
| TBH26_20 | 10 | -0.5 | -4.7% | **22.9** | **18.3** | **17.8** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH26_25 | 10 | -0.4 | -4.4% | **22.0** | **17.4** | **17.0** |
| TBH26_30 | 10 | -0.4 | -4.0% | **21.3** | **16.7** | **16.3** |
| TBH26_40 | 10 | -0.4 | -3.7% | **20.7** | **16.2** | **15.8** |
| TBH26_50 | 10 | -0.3 | -3.0% | **19.7** | **15.2** | **14.9** |
| TBH26_75 | 10 | -0.2 | -2.5% | **19.0** | **14.6** | **14.4** |
| TBH26_100 | 10 | -0.2 | -2.1% | **18.5** | **14.2** | **14.0** |
| TBH26_125 | 10 | -0.2 | -1.9% | **18.2** | **13.9** | **13.7** |
| TBH26_150 | 10 | -0.2 | -1.7% | **17.9** | **13.6** | **13.5** |
| TBH26_175 | 10 | -0.1 | -1.5% | **17.7** | **13.5** | **13.3** |
| TBH26_200 | 10 | -0.1 | -1.3% | **17.6** | **13.3** | **13.2** |
| TBH27_0 | 10 | -0.7 | -6.7% | **24.9** | **19.5** | **18.8** |
| TBH27_5 | 10 | -0.6 | -5.8% | **23.6** | **18.4** | **17.9** |
| TBH27_10 | 10 | -0.5 | -5.2% | **22.7** | **17.7** | **17.2** |
| TBH27_15 | 10 | -0.5 | -4.7% | **22.0** | **17.1** | **16.7** |
| TBH27_20 | 10 | -0.4 | -4.3% | **21.5** | **16.7** | **16.2** |
| TBH27_25 | 10 | -0.4 | -3.7% | **20.6** | **16.0** | **15.6** |
| TBH27_30 | 10 | -0.3 | -3.3% | **20.1** | **15.5** | **15.2** |
| TBH27_40 | 10 | -0.3 | -3.0% | **19.6** | **15.2** | **14.9** |
| TBH27_50 | 10 | -0.2 | -2.4% | **18.9** | **14.6** | **14.4** |
| TBH27_75 | 10 | -0.2 | -2.1% | **18.5** | **14.3** | **14.1** |
| TBH27_100 | 10 | -0.2 | -1.8% | **18.2** | **14.0** | **13.9** |
| TBH27_125 | 10 | -0.2 | -1.7% | **18.0** | **13.9** | **13.7** |
| TBH27_150 | 10 | -0.2 | -1.5% | **17.8** | **13.7** | **13.6** |
| TBH27_175 | 10 | -0.1 | -1.4% | **17.7** | **13.6** | **13.4** |
| TBH27_200 | 10 | -0.1 | -1.3% | **17.5** | **13.5** | **13.3** |
| TBH28_0 | 10 | -1.5 | -15.3% | **22.3** | **18.3** | **16.8** |
| TBH28_5 | 10 | -1.1 | -11.2% | **20.5** | **16.5** | **15.4** |
| TBH28_10 | 10 | -0.9 | -9.0% | **19.5** | **15.5** | **14.6** |
| TBH28_15 | 10 | -0.8 | -7.6% | **18.9** | **14.9** | **14.1** |
| TBH28_20 | 10 | -0.7 | -6.6% | **18.5** | **14.4** | **13.7** |
| TBH28_25 | 10 | -0.5 | -5.3% | **17.9** | **13.8** | **13.3** |
| TBH28_30 | 10 | -0.4 | -4.5% | **17.5** | **13.4** | **13.0** |
| TBH28_40 | 10 | -0.4 | -3.9% | **17.3** | **13.2** | **12.8** |
| TBH28_50 | 10 | -0.3 | -3.1% | **17.0** | **12.9** | **12.5** |
| TBH28_75 | 10 | -0.3 | -2.7% | **16.9** | **12.7** | **12.4** |
| TBH28_100 | 10 | -0.3 | -2.5% | **16.9** | **12.7** | **12.5** |
| TBH28_125 | 10 | -0.2 | -2.5% | **17.0** | **12.8** | **12.5** |
| TBH28_150 | 10 | -0.3 | -2.7% | **17.3** | **13.0** | **12.7** |
| TBH28_175 | 10 | -0.3 | -3.1% | **17.8** | **13.4** | **13.1** |
| TBH28_200 | 10 | -0.4 | -4.0% | **18.8** | **14.2** | **13.8** |
| TBH29_0 | 10 | -1.6 | -15.8% | **22.9** | **19.0** | **17.4** |
| TBH29_5 | 10 | -1.1 | -11.3% | **21.0** | **17.0** | **15.9** |
| TBH29_10 | 10 | -0.9 | -8.9% | **19.9** | **15.9** | **15.0** |
| TBH29_15 | 10 | -0.7 | -7.3% | **19.2** | **15.2** | **14.4** |
| TBH29_20 | 10 | -0.6 | -6.3% | **18.7** | **14.7** | **14.0** |
| TBH29_25 | 10 | -0.5 | -4.8% | **18.0** | **14.0** | **13.5** |
| TBH29_30 | 10 | -0.4 | -3.8% | **17.6** | **13.5** | **13.2** |
| TBH29_40 | 10 | -0.3 | -3.2% | **17.3** | **13.2** | **12.9** |
| TBH29_50 | 10 | -0.2 | -2.2% | **16.7** | **12.7** | **12.5** |
| TBH29_75 | 10 | -0.2 | -1.6% | **16.4** | **12.4** | **12.2** |
| TBH29_100 | 10 | -0.1 | -1.2% | **16.2** | **12.2** | **12.1** |
| TBH3_0 | 10 | -0.4 | -3.7% | **24.7** | **20.5** | **20.1** |
| TBH3_5 | 10 | -0.2 | -2.0% | **20.1** | **15.9** | **15.7** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | **Absolute Change** | **Change as % of Critical Load** | **Base Year** | **Future Year DM** | **Future year DS** |
| TBH3_10 | 10 | -0.1 | -1.5% | **18.7** | **14.6** | **14.4** |
| TBH3_15 | 10 | -0.1 | -1.2% | **17.9** | **13.8** | **13.7** |
| TBH3_20 | 10 | -0.1 | -1.1% | **17.5** | **13.4** | **13.3** |
| TBH30_5 | 10 | -0.1 | -1.1% | **22.6** | **17.5** | **17.4** |
| TBH31_0 | 10 | -0.6 | -5.7% | **22.0** | **16.8** | **16.3** |
| TBH31_5 | 10 | -0.5 | -5.0% | **21.3** | **16.2** | **15.7** |
| TBH31_10 | 10 | -0.4 | -4.4% | **20.6** | **15.7** | **15.2** |
| TBH31_15 | 10 | -0.4 | -4.0% | **20.0** | **15.3** | **14.9** |
| TBH31_20 | 10 | -0.4 | -3.6% | **19.6** | **14.9** | **14.5** |
| TBH31_25 | 10 | -0.3 | -3.1% | **18.9** | **14.3** | **14.0** |
| TBH31_30 | 10 | -0.3 | -2.7% | **18.3** | **13.8** | **13.6** |
| TBH31_40 | 10 | -0.2 | -2.3% | **17.8** | **13.5** | **13.2** |
| TBH31_50 | 10 | -0.2 | -1.8% | **17.0** | **12.8** | **12.6** |
| TBH31_75 | 10 | -0.1 | -1.4% | **16.4** | **12.3** | **12.1** |
| TBH31_100 | 10 | -0.1 | -1.1% | **15.9** | **11.9** | **11.8** |
| TBH32_0 | 10 | -0.5 | -5.4% | **20.8** | **15.7** | **15.1** |
| TBH32_5 | 10 | -0.5 | -4.5% | **19.9** | **15.0** | **14.5** |
| TBH32_10 | 10 | -0.4 | -4.0% | **19.3** | **14.5** | **14.1** |
| TBH32_15 | 10 | -0.4 | -3.5% | **18.8** | **14.2** | **13.8** |
| TBH32_20 | 10 | -0.3 | -3.2% | **18.5** | **13.9** | **13.6** |
| TBH32_25 | 10 | -0.3 | -2.7% | **17.9** | **13.5** | **13.2** |
| TBH32_30 | 10 | -0.2 | -2.3% | **17.5** | **13.2** | **12.9** |
| TBH32_40 | 10 | -0.2 | -2.0% | **17.2** | **12.9** | **12.7** |
| TBH32_50 | 10 | -0.2 | -1.6% | **16.7** | **12.5** | **12.4** |
| TBH32_75 | 10 | -0.1 | -1.2% | **16.2** | **12.2** | **12.0** |
| TBH33_0 | 10 | -0.5 | -5.4% | **19.8** | **15.0** | **14.4** |
| TBH33_5 | 10 | -0.3 | -3.5% | **18.8** | **14.2** | **13.8** |
| TBH33_10 | 10 | -0.3 | -2.5% | **18.2** | **13.7** | **13.5** |
| TBH33_15 | 10 | -0.2 | -2.0% | **17.8** | **13.4** | **13.2** |
| TBH33_20 | 10 | -0.2 | -1.6% | **17.6** | **13.2** | **13.0** |
| TBH33_25 | 10 | -0.1 | -1.2% | **17.2** | **12.9** | **12.7** |
| TBH34_0 | 10 | -1.0 | -9.9% | **24.6** | **18.9** | **17.9** |
| TBH34_5 | 10 | -0.7 | -7.2% | **22.1** | **16.8** | **16.1** |
| TBH34_10 | 10 | -0.6 | -5.8% | **20.9** | **15.8** | **15.2** |
| TBH34_15 | 10 | -0.5 | -4.9% | **20.1** | **15.1** | **14.7** |
| TBH34_20 | 10 | -0.4 | -4.3% | **19.5** | **14.7** | **14.2** |
| TBH34_25 | 10 | -0.3 | -3.4% | **18.7** | **14.0** | **13.7** |
| TBH34_30 | 10 | -0.3 | -2.9% | **18.1** | **13.6** | **13.3** |
| TBH34_40 | 10 | -0.2 | -2.4% | **17.7** | **13.3** | **13.0** |
| TBH34_50 | 10 | -0.2 | -1.8% | **17.1** | **12.8** | **12.6** |
| TBH34_75 | 10 | -0.1 | -1.4% | **16.7** | **12.4** | **12.3** |
| TBH34_100 | 10 | -0.1 | -1.1% | **16.4** | **12.2** | **12.1** |

Table E-6 Scenario 7a: Predicted 'in combination' Annual Nitrogen Deposition at Modelled Ecological Receptors (Change >1% of Critical Load)

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH1_0 | 10 | -1.9 | -18.9% | **40.9** | **32.9** | **31.0** |
| TBH1_5 | 10 | -1.5 | -14.7% | **36.3** | **28.9** | **27.4** |
| TBH1_10 | 10 | -1.2 | -12.2% | **33.5** | **26.4** | **25.2** |
| TBH1_15 | 10 | -1.0 | -10.2% | **31.4** | **24.6** | **23.6** |
| TBH1_20 | 10 | -0.9 | -8.7% | **29.8** | **23.3** | **22.4** |
| TBH1_25 | 10 | -0.6 | -6.3% | **27.5** | **21.3** | **20.6** |
| TBH1_30 | 10 | -0.5 | -4.5% | **25.9** | **19.9** | **19.4** |
| TBH1_40 | 10 | -0.3 | -3.1% | **24.7** | **18.9** | **18.5** |
| TBH1_100 | 10 | 0.1 | **1.1%** | **20.5** | **15.3** | **15.5** |
| TBH1_125 | 10 | 0.2 | **1.6%** | **19.8** | **14.8** | **15.0** |
| TBH1_150 | 10 | 0.2 | **1.9%** | **19.3** | **14.4** | **14.6** |
| TBH1_175 | 10 | 0.2 | **2.1%** | **18.9** | **14.1** | **14.3** |
| TBH1_200 | 10 | 0.2 | **2.2%** | **18.6** | **13.8** | **14.0** |
| TBH13_0 | 10 | 0.6 | **6.1%** | **32.9** | **25.7** | **26.3** |
| TBH13_10 | 10 | 0.5 | **4.6%** | **28.5** | **21.8** | **22.2** |
| TBH13_15 | 10 | 0.4 | **4.2%** | **27.0** | **20.5** | **20.9** |
| TBH13_20 | 10 | 0.4 | **3.8%** | **25.9** | **19.5** | **19.9** |
| TBH13_25 | 10 | 0.3 | **3.2%** | **24.1** | **18.1** | **18.4** |
| TBH13_30 | 10 | 0.3 | **2.7%** | **22.9** | **17.0** | **17.3** |
| TBH13_40 | 10 | 0.2 | **2.4%** | **21.9** | **16.2** | **16.5** |
| TBH13_50 | 10 | 0.2 | **1.7%** | **20.3** | **14.9** | **15.1** |
| TBH13_75 | 10 | 0.1 | **1.3%** | **19.2** | **14.1** | **14.2** |
| TBH2_0 | 10 | -0.7 | -6.8% | **31.1** | **24.2** | **23.5** |
| TBH2_5 | 10 | -0.5 | -4.7% | **28.7** | **22.2** | **21.7** |
| TBH2_10 | 10 | -0.3 | -3.0% | **27.0** | **20.7** | **20.4** |
| TBH2_15 | 10 | -0.2 | -1.8% | **25.7** | **19.6** | **19.5** |
| TBH2_30 | 10 | 0.1 | **1.5%** | **22.2** | **16.7** | **16.9** |
| TBH2_40 | 10 | 0.2 | **2.1%** | **21.4** | **16.1** | **16.3** |
| TBH2_50 | 10 | 0.3 | **3.1%** | **20.1** | **15.0** | **15.3** |
| TBH2_75 | 10 | 0.4 | **3.6%** | **19.3** | **14.3** | **14.7** |
| TBH2_100 | 10 | 0.4 | **3.9%** | **18.7** | **13.8** | **14.2** |
| TBH2_125 | 10 | 0.4 | **4.0%** | **18.3** | **13.5** | **13.9** |
| TBH2_150 | 10 | 0.4 | **4.0%** | **17.9** | **13.3** | **13.7** |
| TBH2_175 | 10 | 0.4 | **4.0%** | **17.7** | **13.1** | **13.5** |
| TBH2_200 | 10 | 0.4 | **4.0%** | **17.5** | **12.9** | **13.3** |
| TBH25_0 | 10 | 0.6 | **6.4%** | **22.7** | **16.9** | **17.6** |
| TBH25_5 | 10 | 0.6 | **6.1%** | **21.6** | **16.1** | **16.7** |
| TBH25_10 | 10 | 0.6 | **5.8%** | **20.8** | **15.5** | **16.0** |
| TBH25_15 | 10 | 0.6 | **5.5%** | **20.3** | **15.0** | **15.6** |
| TBH25_20 | 10 | 0.5 | **5.3%** | **19.8** | **14.6** | **15.2** |
| TBH25_25 | 10 | 0.5 | **4.9%** | **19.1** | **14.1** | **14.6** |
| TBH25_30 | 10 | 0.5 | **4.6%** | **18.6** | **13.7** | **14.2** |
| TBH25_40 | 10 | 0.4 | **4.4%** | **18.2** | **13.4** | **13.8** |
| TBH25_50 | 10 | 0.4 | **3.9%** | **17.5** | **12.9** | **13.3** |
| TBH25_75 | 10 | 0.4 | **3.6%** | **17.1** | **12.6** | **12.9** |
| TBH25_100 | 10 | 0.3 | **3.4%** | **16.8** | **12.4** | **12.7** |
| TBH25_125 | 10 | 0.3 | **3.2%** | **16.6** | **12.2** | **12.5** |
| TBH25_150 | 10 | 0.3 | **3.1%** | **16.5** | **12.1** | **12.4** |
| TBH25_175 | 10 | 0.3 | **3.0%** | **16.4** | **12.0** | **12.3** |
| TBH25_200 | 10 | 0.3 | **2.9%** | **16.3** | **11.9** | **12.2** |
| TBH26_0 | 10 | 1.3 | **13.1%** | **26.0** | **19.7** | **21.0** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH26_5 | 10 | 1.0 | **10.3%** | **25.0** | **18.8** | **19.9** |
| TBH26_10 | 10 | 0.9 | **8.7%** | **24.2** | **18.2** | **19.0** |
| TBH26_15 | 10 | 0.8 | **7.6%** | **23.5** | **17.6** | **18.4** |
| TBH26_20 | 10 | 0.7 | **6.9%** | **22.9** | **17.1** | **17.8** |
| TBH26_25 | 10 | 0.6 | **5.9%** | **22.0** | **16.4** | **17.0** |
| TBH26_30 | 10 | 0.5 | **5.2%** | **21.3** | **15.8** | **16.3** |
| TBH26_40 | 10 | 0.5 | **4.7%** | **20.7** | **15.3** | **15.8** |
| TBH26_50 | 10 | 0.4 | **4.0%** | **19.7** | **14.5** | **14.9** |
| TBH26_75 | 10 | 0.4 | **3.6%** | **19.0** | **14.0** | **14.4** |
| TBH26_100 | 10 | 0.3 | **3.3%** | **18.5** | **13.6** | **14.0** |
| TBH26_125 | 10 | 0.3 | **3.1%** | **18.2** | **13.4** | **13.7** |
| TBH26_150 | 10 | 0.3 | **3.0%** | **17.9** | **13.2** | **13.5** |
| TBH26_175 | 10 | 0.3 | **2.9%** | **17.7** | **13.0** | **13.3** |
| TBH26_200 | 10 | 0.3 | **2.8%** | **17.6** | **12.9** | **13.2** |
| TBH27_10 | 10 | 0.1 | **1.2%** | **22.7** | **17.1** | **17.2** |
| TBH27_15 | 10 | 0.2 | **1.6%** | **22.0** | **16.5** | **16.7** |
| TBH27_20 | 10 | 0.2 | **1.8%** | **21.5** | **16.1** | **16.2** |
| TBH27_25 | 10 | 0.2 | **2.2%** | **20.6** | **15.4** | **15.6** |
| TBH27_30 | 10 | 0.2 | **2.5%** | **20.1** | **14.9** | **15.2** |
| TBH27_40 | 10 | 0.3 | **2.7%** | **19.6** | **14.6** | **14.9** |
| TBH27_50 | 10 | 0.3 | **3.1%** | **18.9** | **14.1** | **14.4** |
| TBH27_75 | 10 | 0.3 | **3.3%** | **18.5** | **13.7** | **14.1** |
| TBH27_100 | 10 | 0.3 | **3.5%** | **18.2** | **13.5** | **13.9** |
| TBH27_125 | 10 | 0.4 | **3.6%** | **18.0** | **13.3** | **13.7** |
| TBH27_150 | 10 | 0.4 | **3.6%** | **17.8** | **13.2** | **13.6** |
| TBH27_175 | 10 | 0.4 | **3.7%** | **17.7** | **13.1** | **13.4** |
| TBH27_200 | 10 | 0.4 | **3.6%** | **17.5** | **13.0** | **13.3** |
| TBH28_200 | 10 | -0.2 | -1.5% | **18.8** | **14.0** | **13.8** |
| TBH29_5 | 10 | 0.1 | **1.1%** | **21.0** | **15.8** | **15.9** |
| TBH29_10 | 10 | 0.1 | **1.4%** | **19.9** | **14.9** | **15.0** |
| TBH29_15 | 10 | 0.2 | **1.6%** | **19.2** | **14.3** | **14.4** |
| TBH29_20 | 10 | 0.2 | **1.7%** | **18.7** | **13.9** | **14.0** |
| TBH29_25 | 10 | 0.2 | **1.9%** | **18.0** | **13.3** | **13.5** |
| TBH29_30 | 10 | 0.2 | **2.0%** | **17.6** | **13.0** | **13.2** |
| TBH29_40 | 10 | 0.2 | **2.0%** | **17.3** | **12.7** | **12.9** |
| TBH29_50 | 10 | 0.2 | **2.0%** | **16.7** | **12.3** | **12.5** |
| TBH29_75 | 10 | 0.2 | **1.9%** | **16.4** | **12.1** | **12.2** |
| TBH29_100 | 10 | 0.2 | **1.9%** | **16.2** | **11.9** | **12.1** |
| TBH29_125 | 10 | 0.2 | **1.8%** | **16.1** | **11.8** | **12.0** |
| TBH29_150 | 10 | 0.2 | **1.7%** | **16.0** | **11.7** | **11.9** |
| TBH29_175 | 10 | 0.2 | **1.7%** | **15.9** | **11.6** | **11.8** |
| TBH29_200 | 10 | 0.2 | **1.6%** | **15.8** | **11.6** | **11.7** |
| TBH3_0 | 10 | 1.0 | **10.3%** | **24.7** | **19.1** | **20.1** |
| TBH3_5 | 10 | 0.6 | **5.8%** | **20.1** | **15.1** | **15.7** |
| TBH3_10 | 10 | 0.5 | **4.5%** | **18.7** | **13.9** | **14.4** |
| TBH3_15 | 10 | 0.4 | **3.8%** | **17.9** | **13.3** | **13.7** |
| TBH3_20 | 10 | 0.3 | **3.3%** | **17.5** | **12.9** | **13.3** |
| TBH3_25 | 10 | 0.3 | **2.8%** | **16.9** | **12.5** | **12.8** |
| TBH3_30 | 10 | 0.2 | **2.5%** | **16.5** | **12.2** | **12.4** |
| TBH3_40 | 10 | 0.2 | **2.2%** | **16.3** | **12.0** | **12.2** |
| TBH3_50 | 10 | 0.2 | **1.9%** | **15.9** | **11.7** | **11.9** |
| TBH3_75 | 10 | 0.2 | **1.7%** | **15.7** | **11.6** | **11.7** |
| TBH3_100 | 10 | 0.2 | **1.6%** | **15.6** | **11.5** | **11.6** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH3_125 | 10 | 0.1 | **1.5%** | **15.5** | **11.4** | **11.5** |
| TBH3_150 | 10 | 0.1 | **1.4%** | **15.5** | **11.3** | **11.5** |
| TBH3_175 | 10 | 0.1 | **1.3%** | **15.4** | **11.3** | **11.4** |
| TBH3_200 | 10 | 0.1 | **1.3%** | **15.4** | **11.3** | **11.4** |
| TBH30_5 | 10 | 0.4 | **3.7%** | **22.6** | **17.0** | **17.4** |
| TBH30_10 | 10 | 0.3 | **3.4%** | **21.8** | **16.4** | **16.8** |
| TBH30_15 | 10 | 0.3 | **3.1%** | **21.2** | **15.9** | **16.3** |
| TBH30_20 | 10 | 0.3 | **2.9%** | **20.8** | **15.5** | **15.8** |
| TBH30_25 | 10 | 0.3 | **2.6%** | **20.0** | **14.9** | **15.2** |
| TBH30_30 | 10 | 0.2 | **2.4%** | **19.4** | **14.4** | **14.7** |
| TBH30_40 | 10 | 0.2 | **2.2%** | **18.9** | **14.1** | **14.3** |
| TBH30_50 | 10 | 0.2 | **1.9%** | **18.1** | **13.4** | **13.6** |
| TBH30_75 | 10 | 0.2 | **1.8%** | **17.6** | **13.0** | **13.2** |
| TBH30_100 | 10 | 0.2 | **1.6%** | **17.2** | **12.7** | **12.9** |
| TBH30_125 | 10 | 0.2 | **1.6%** | **16.9** | **12.5** | **12.7** |
| TBH30_150 | 10 | 0.2 | **1.5%** | **16.7** | **12.3** | **12.5** |
| TBH30_175 | 10 | 0.1 | **1.5%** | **16.6** | **12.2** | **12.3** |
| TBH30_200 | 10 | 0.1 | **1.4%** | **16.4** | **12.1** | **12.2** |
| TBH31_0 | 10 | -0.2 | -1.5% | **22.0** | **16.4** | **16.3** |
| TBH31_175 | 10 | 0.1 | **1.1%** | **15.3** | **11.2** | **11.3** |
| TBH31_200 | 10 | 0.1 | **1.1%** | **15.2** | **11.2** | **11.3** |
| TBH32_0 | 10 | -0.3 | -2.6% | **20.8** | **15.4** | **15.1** |
| TBH32_5 | 10 | -0.2 | -1.8% | **19.9** | **14.7** | **14.5** |
| TBH32_10 | 10 | -0.1 | -1.3% | **19.3** | **14.3** | **14.1** |
| TBH32_100 | 10 | 0.1 | **1.1%** | **15.8** | **11.6** | **11.7** |
| TBH32_125 | 10 | 0.1 | **1.1%** | **15.5** | **11.4** | **11.5** |
| TBH32_150 | 10 | 0.1 | **1.2%** | **15.3** | **11.2** | **11.3** |
| TBH32_175 | 10 | 0.1 | **1.2%** | **15.2** | **11.1** | **11.3** |
| TBH32_200 | 10 | 0.1 | **1.3%** | **15.1** | **11.1** | **11.2** |
| TBH33_0 | 10 | -0.3 | -3.2% | **19.8** | **14.8** | **14.4** |
| TBH33_5 | 10 | -0.1 | -1.3% | **18.8** | **14.0** | **13.8** |
| TBH33_30 | 10 | 0.1 | **1.3%** | **16.9** | **12.4** | **12.6** |
| TBH33_40 | 10 | 0.1 | **1.4%** | **16.7** | **12.3** | **12.4** |
| TBH33_50 | 10 | 0.2 | **1.6%** | **16.4** | **12.1** | **12.2** |
| TBH33_75 | 10 | 0.2 | **1.7%** | **16.2** | **11.9** | **12.1** |
| TBH33_100 | 10 | 0.2 | **1.8%** | **16.1** | **11.8** | **12.0** |
| TBH33_125 | 10 | 0.2 | **1.8%** | **16.0** | **11.8** | **11.9** |
| TBH33_150 | 10 | 0.2 | **1.9%** | **16.0** | **11.7** | **11.9** |
| TBH33_175 | 10 | 0.2 | **1.9%** | **15.9** | **11.7** | **11.9** |
| TBH33_200 | 10 | 0.2 | **1.9%** | **15.9** | **11.7** | **11.9** |
| TBH34_0 | 10 | -0.9 | -8.5% | **24.6** | **18.8** | **17.9** |
| TBH34_5 | 10 | -0.6 | -5.7% | **22.1** | **16.7** | **16.1** |
| TBH34_10 | 10 | -0.4 | -4.3% | **20.9** | **15.7** | **15.2** |
| TBH34_15 | 10 | -0.3 | -3.4% | **20.1** | **15.0** | **14.7** |
| TBH34_20 | 10 | -0.3 | -2.8% | **19.5** | **14.5** | **14.2** |
| TBH34_25 | 10 | -0.2 | -1.9% | **18.7** | **13.9** | **13.7** |
| TBH34_30 | 10 | -0.1 | -1.3% | **18.1** | **13.4** | **13.3** |
| TBH6_0 | 10 | 1.5 | **14.7%** | **23.8** | **17.7** | **19.2** |
| TBH6_5 | 10 | 1.3 | **12.8%** | **22.8** | **16.9** | **18.1** |
| TBH6_10 | 10 | 1.1 | **11.4%** | **21.9** | **16.2** | **17.4** |
| TBH6_15 | 10 | 1.0 | **10.4%** | **21.3** | **15.7** | **16.7** |
| TBH6_20 | 10 | 0.9 | **9.5%** | **20.7** | **15.3** | **16.2** |
| TBH6_25 | 10 | 0.8 | **8.2%** | **19.9** | **14.6** | **15.5** |

| Receptor | Critical Load | Road Contribution | | Total Concentration | | |
|---|---|---|---|---|---|---|
| | | Absolute Change | Change as % of Critical Load | Base Year | Future Year DM | Future year DS |
| TBH6_30 | 10 | 0.7 | **7.2%** | **19.3** | **14.2** | **14.9** |
| TBH6_40 | 10 | 0.6 | **6.5%** | **18.8** | **13.8** | **14.5** |
| TBH6_50 | 10 | 0.5 | **5.2%** | **18.0** | **13.2** | **13.7** |
| TBH6_75 | 10 | 0.4 | **4.5%** | **17.4** | **12.8** | **13.2** |
| TBH6_100 | 10 | 0.4 | **3.9%** | **17.0** | **12.5** | **12.9** |
| TBH6_125 | 10 | 0.4 | **3.5%** | **16.8** | **12.3** | **12.6** |
| TBH6_150 | 10 | 0.3 | **3.2%** | **16.5** | **12.1** | **12.4** |
| TBH6_175 | 10 | 0.3 | **2.9%** | **16.3** | **12.0** | **12.3** |
| TBH6_200 | 10 | 0.3 | **2.7%** | **16.2** | **11.9** | **12.1** |
| TBH6_75 | 10 | 0.4 | 4.50% | **17.4** | **12.8** | **13.2** |
| TBH6_100 | 10 | 0.4 | 3.90% | **17.0** | **12.5** | **12.9** |
| TBH6_125 | 10 | 0.4 | 3.50% | **16.8** | **12.3** | **12.6** |
| TBH6_150 | 10 | 0.3 | 3.20% | **16.5** | **12.1** | **12.4** |
| TBH6_175 | 10 | 0.3 | 2.90% | **16.3** | **12.0** | **12.3** |
| TBH6_200 | 10 | 0.3 | 2.70% | **16.2** | **11.9** | **12.1** |

# Appendix F Figures

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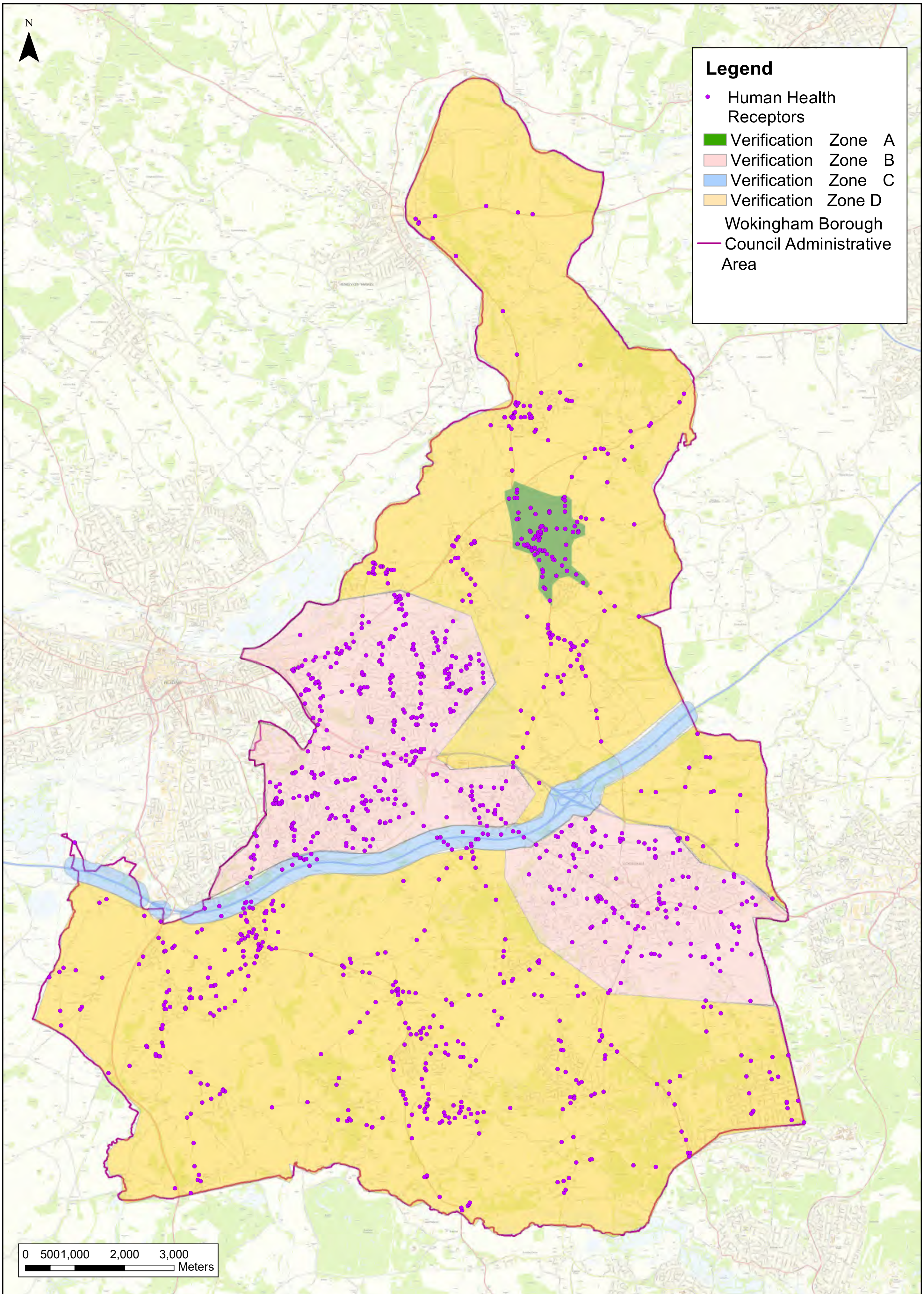


| Stantec | Client: Wokingham Borough Council | **Wokingham Local Plan Update**<br>Human Health receptors and Verification Zones | Service Layer Credits:<br>Contains Ordnance Survey Data © Crown Copyright and Database Right 2021. | 1:97,158 @ A4<br>Date: 13/01/2023<br>Drawn: DF<br>Checked: PB<br>Figure 4.1 Rev A |
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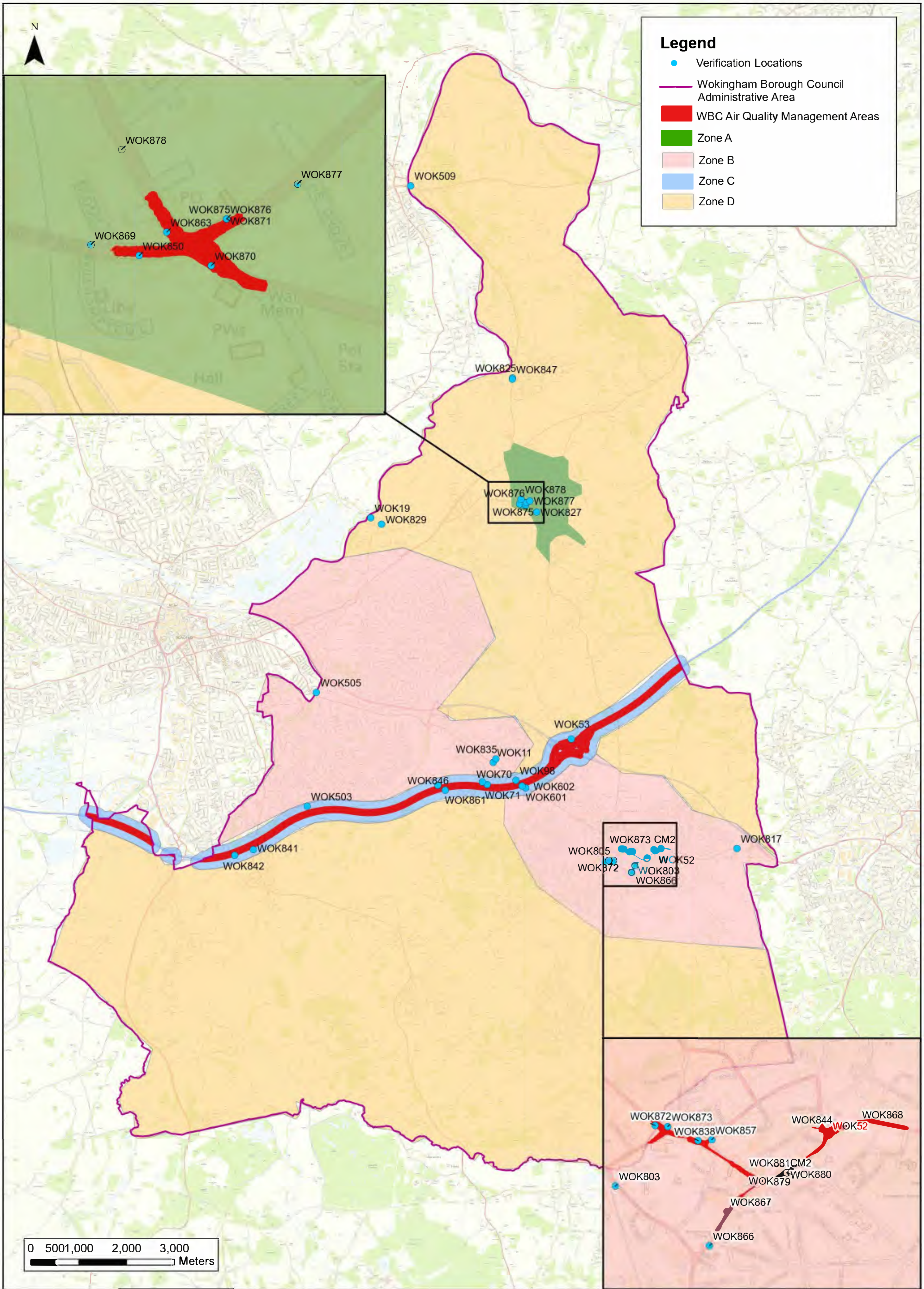


| Stantec | Client: WOKINGHAM BOROUGH COUNCIL | **Wokingham Local Plan Update**<br>WBC Air Quality Management Areas and Monitoring Locations used for Verification | Service Layer Credits:<br>Contains Ordnance Survey Data © Crown Copyright and Database Right 2021. | 1:100,000 @ A4<br>Date: 08/04/2022<br>Drawn: DF<br>Checked: PB<br>Figure 5.1 Rev A |
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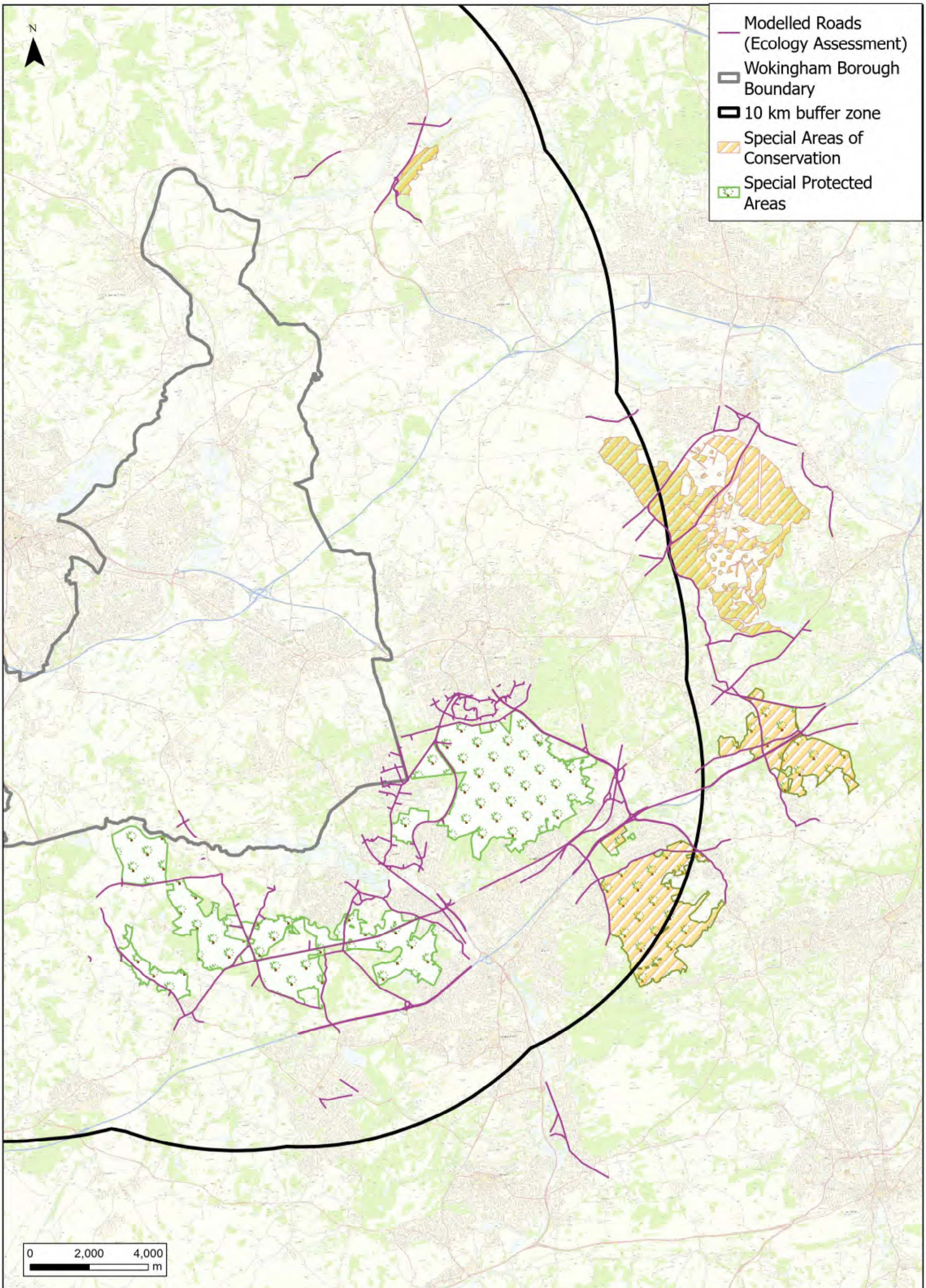


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Ecological Study Area

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Date: 17/01/2023
Drawn: dafrancis
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Figure 6.1 - Overview

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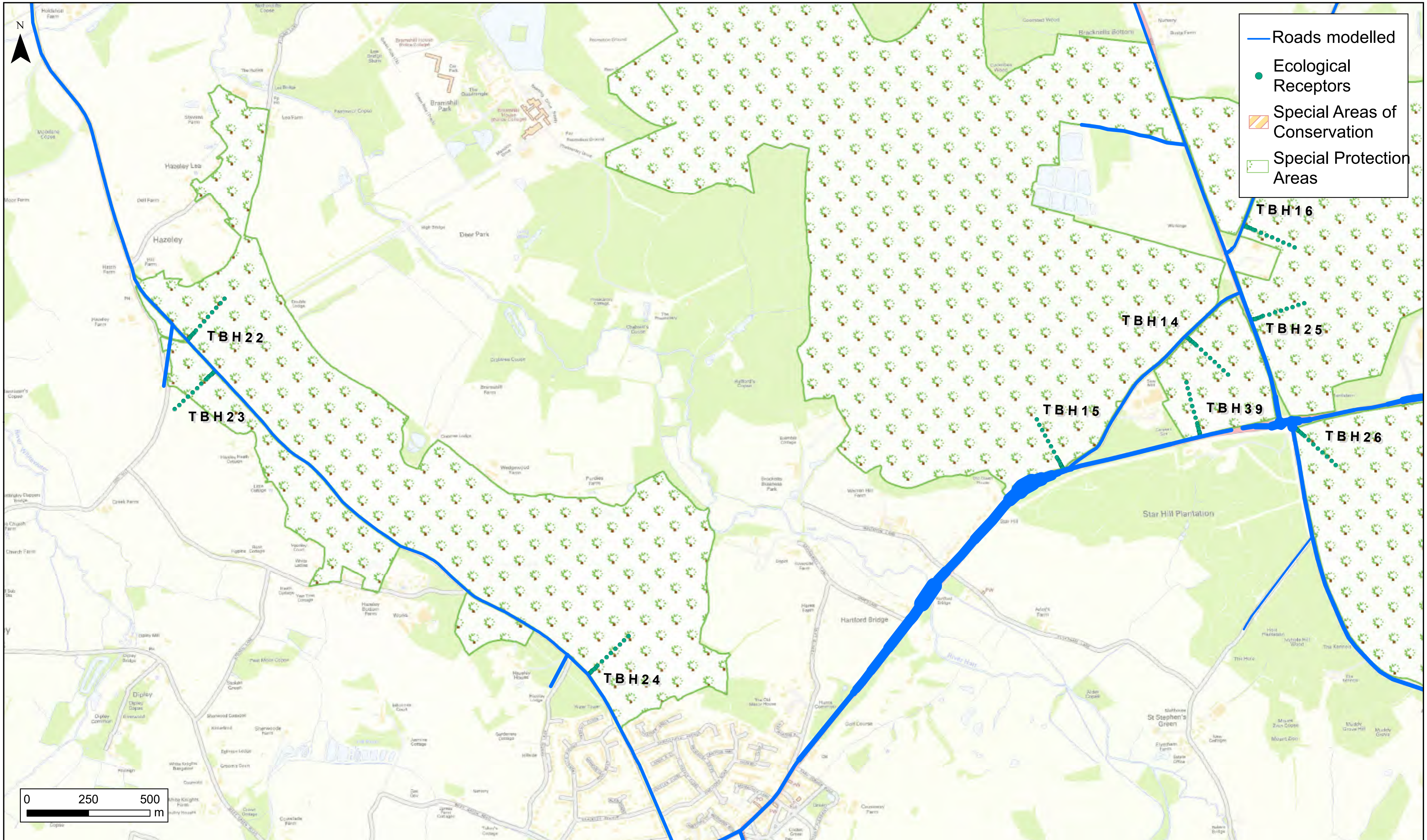


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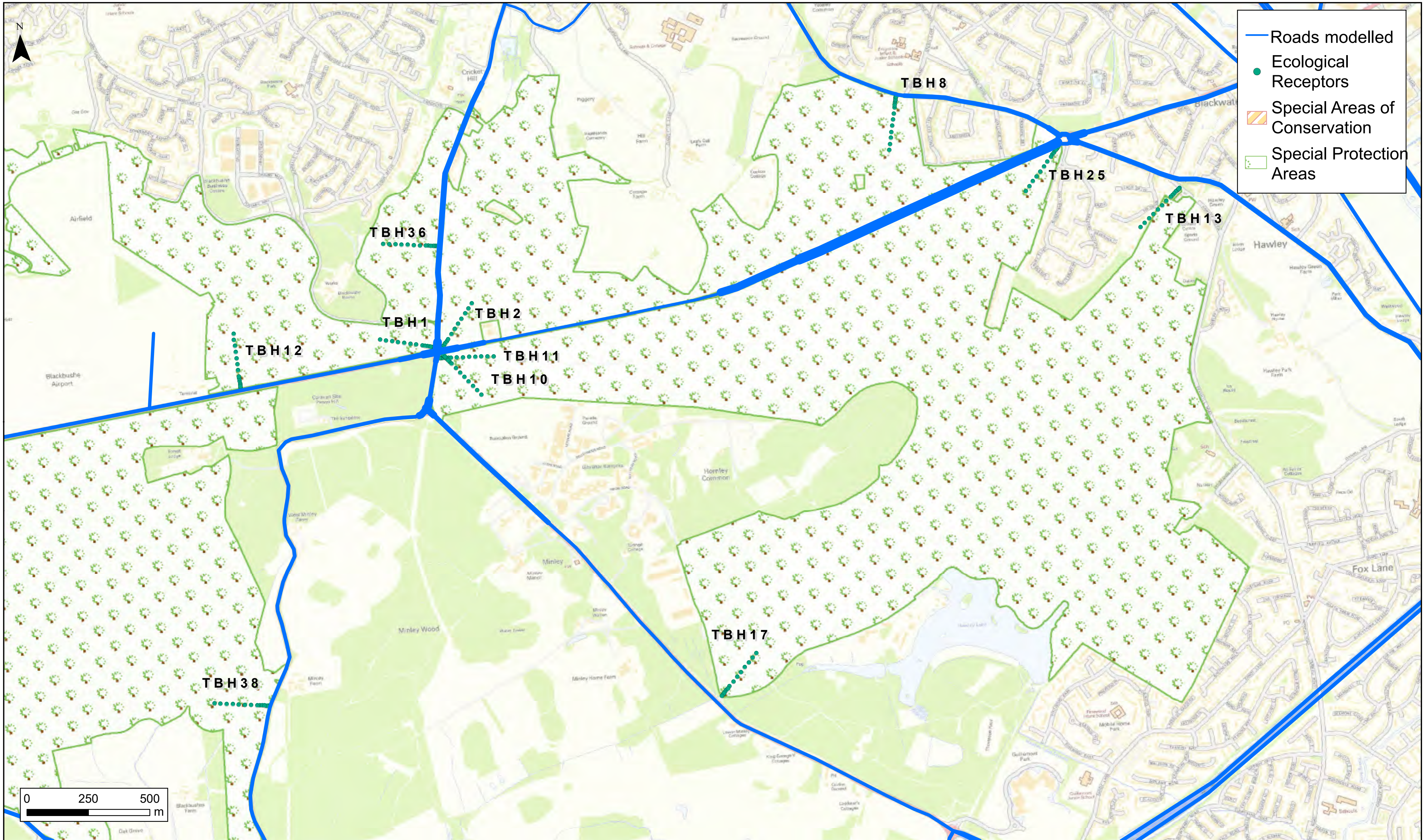


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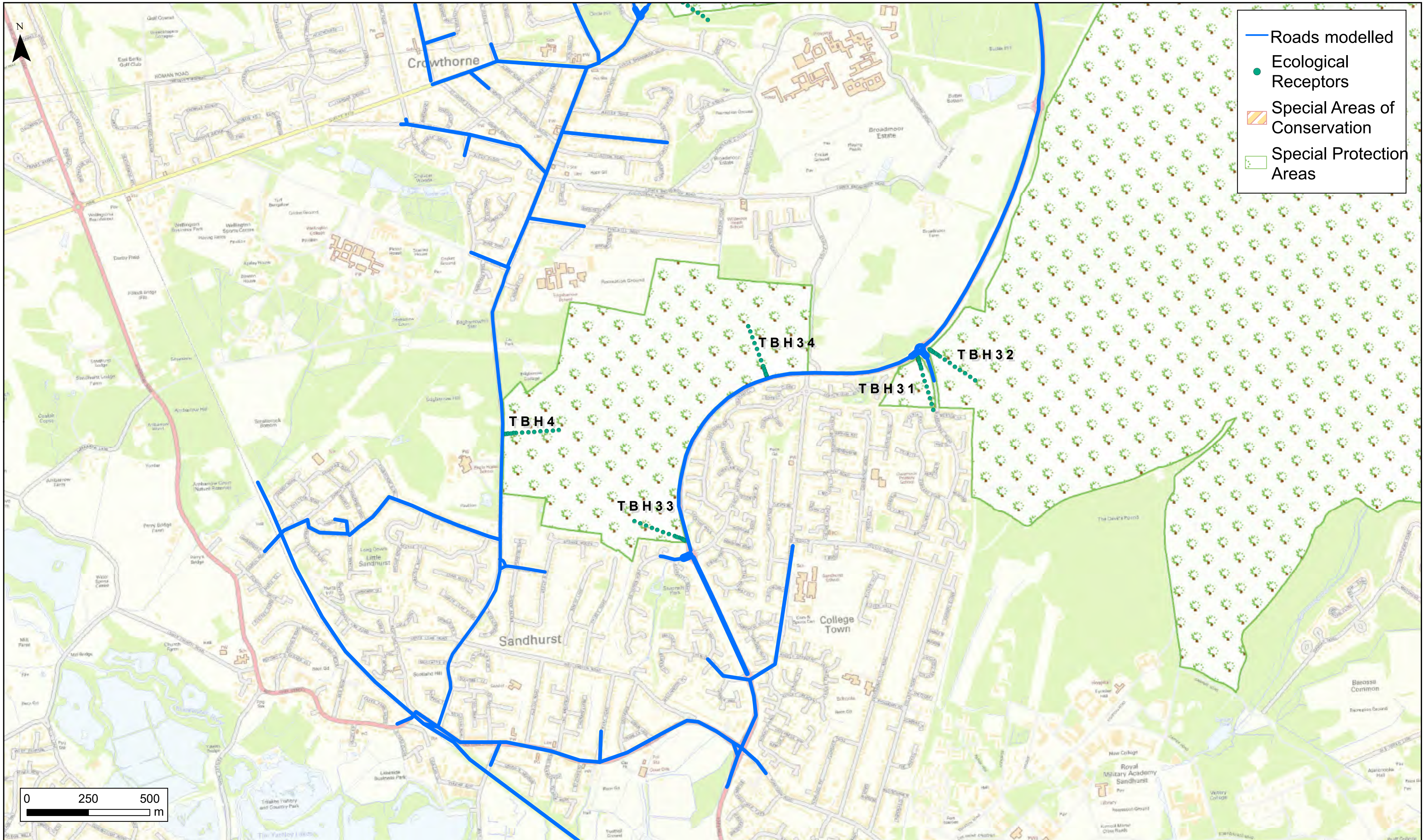


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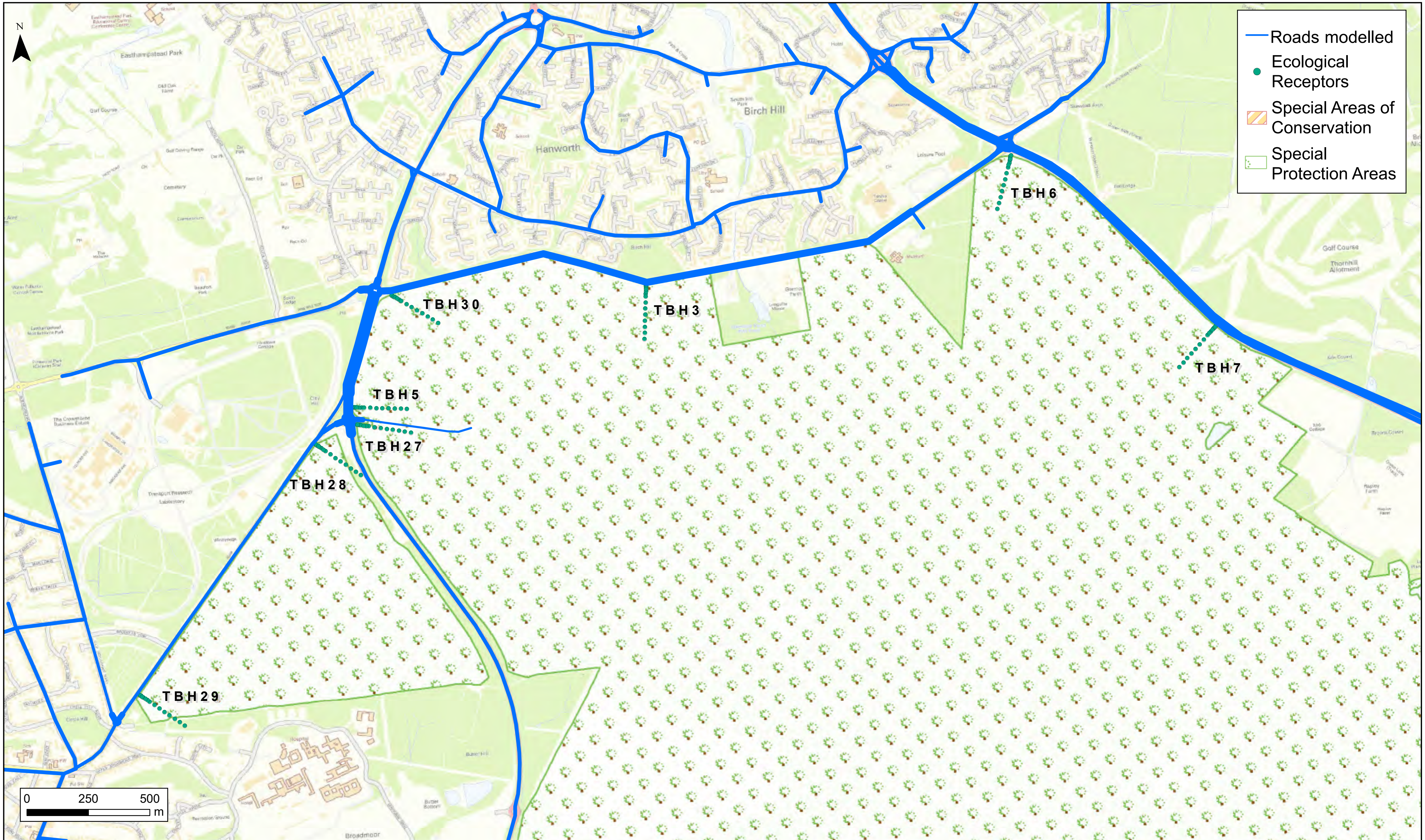


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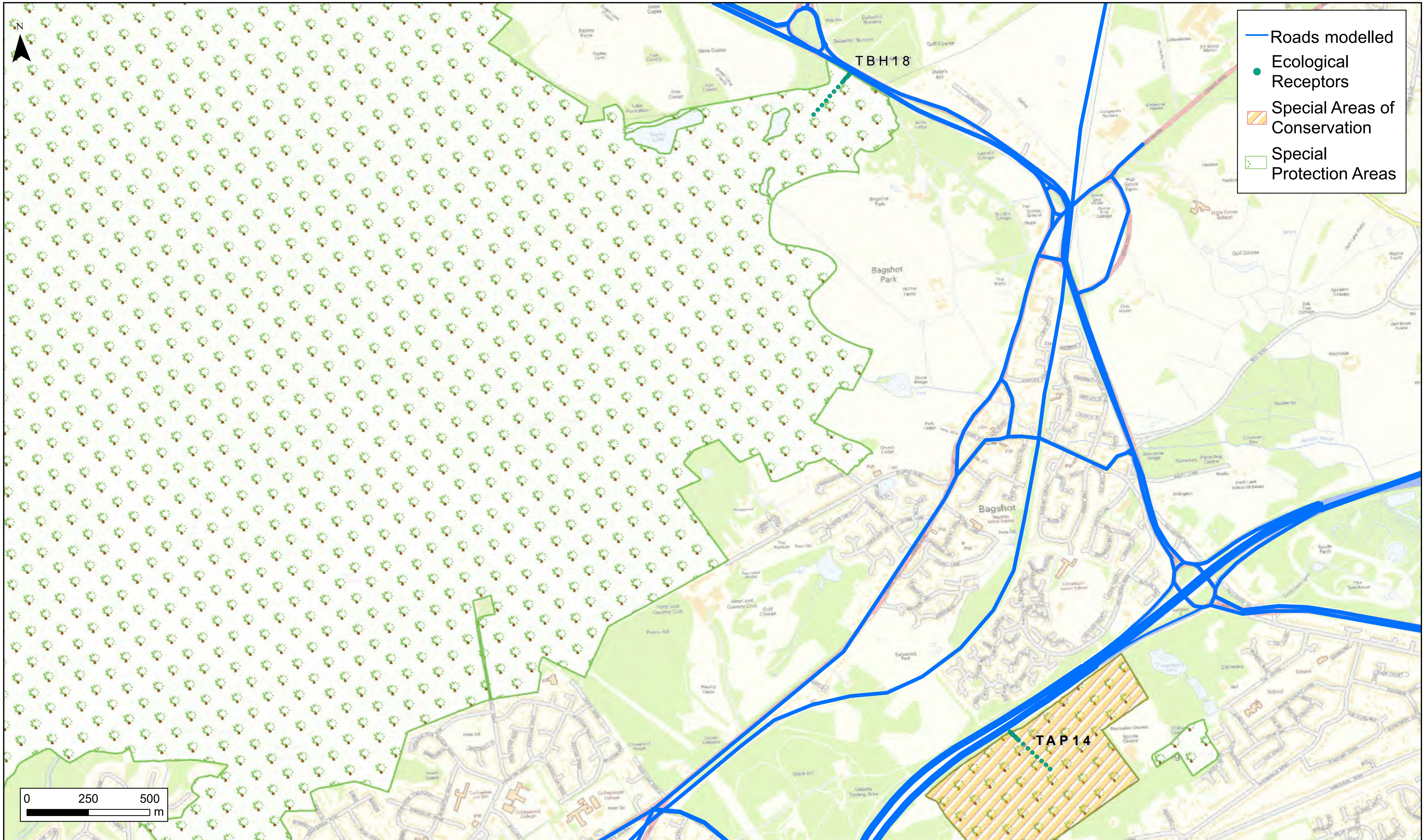


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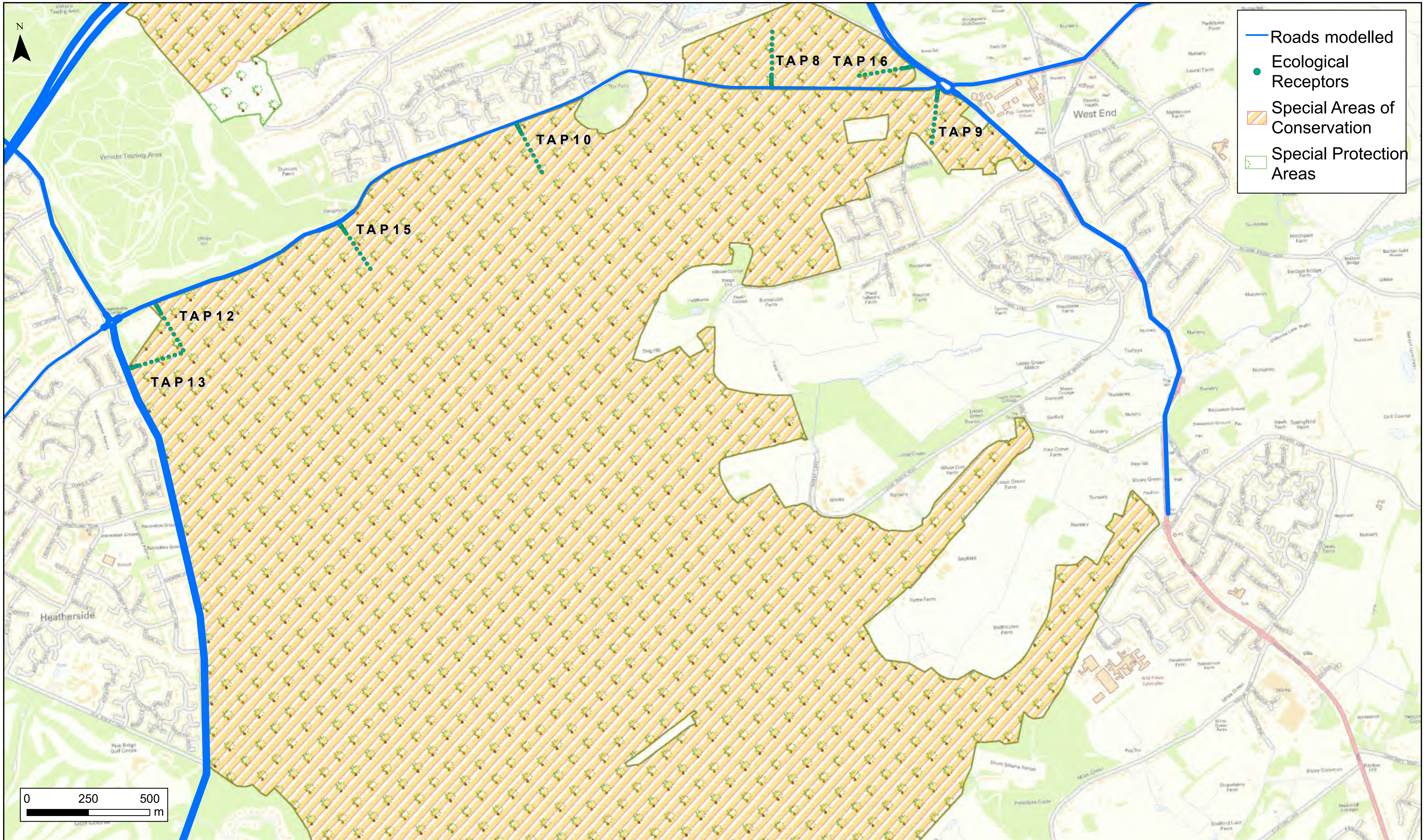


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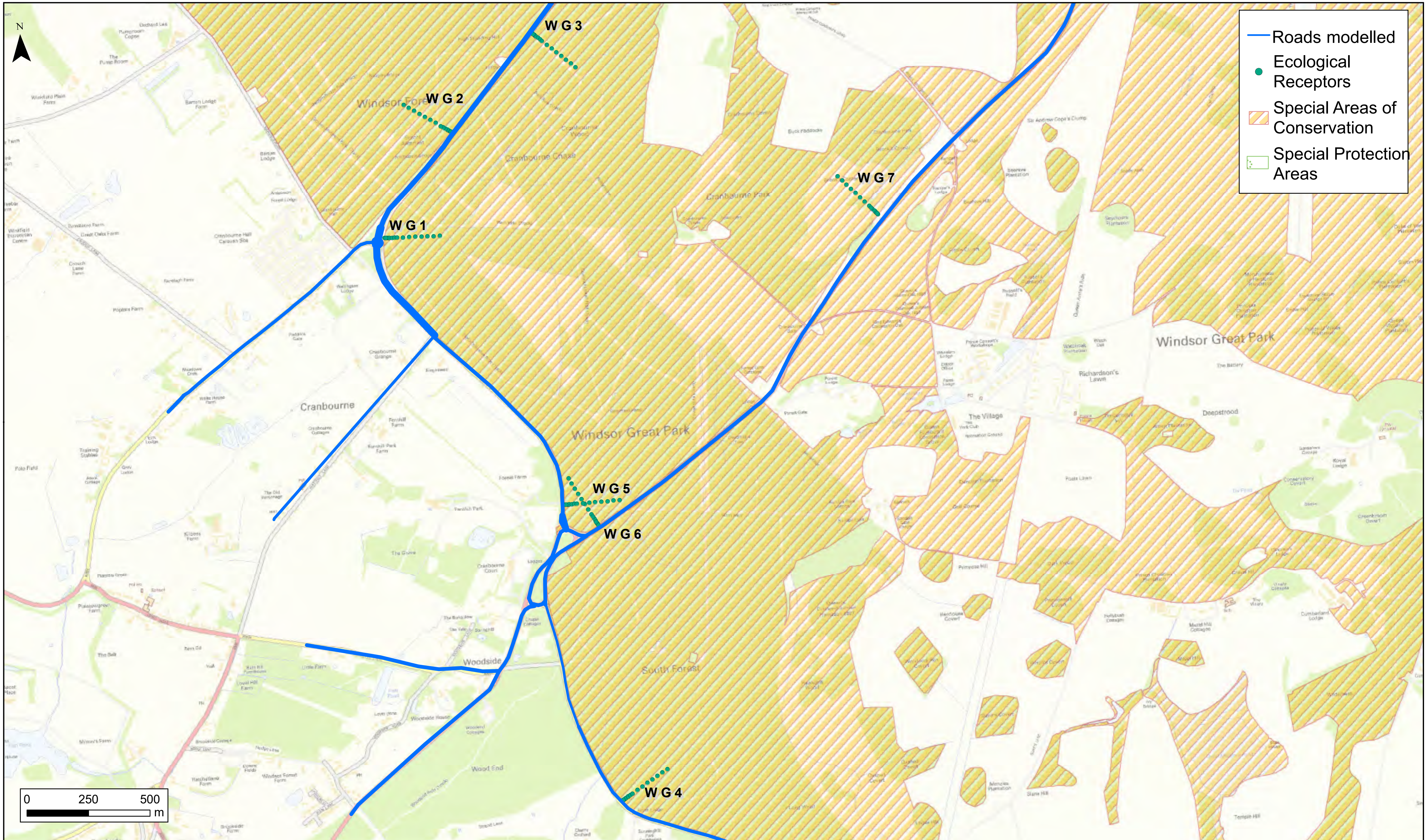


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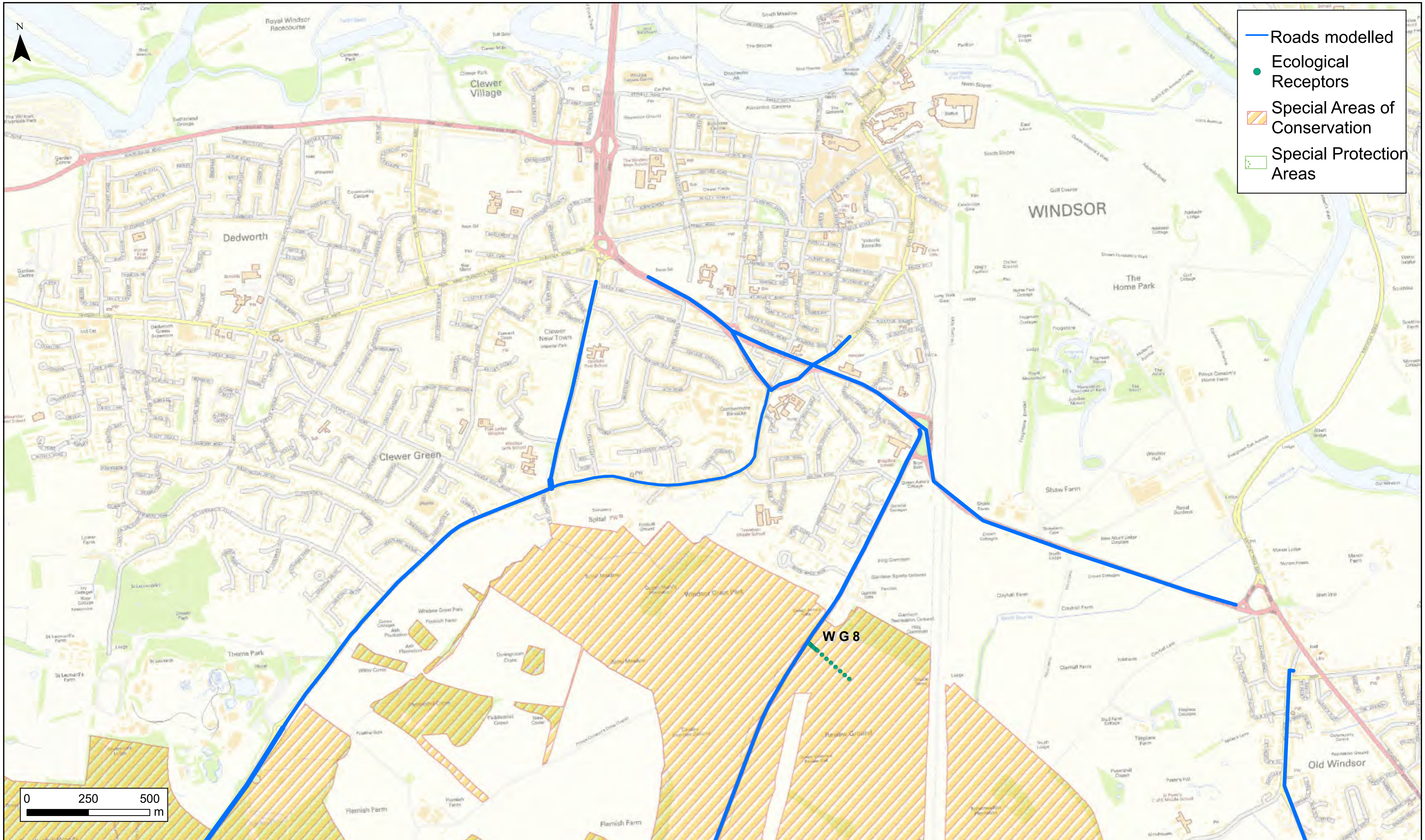


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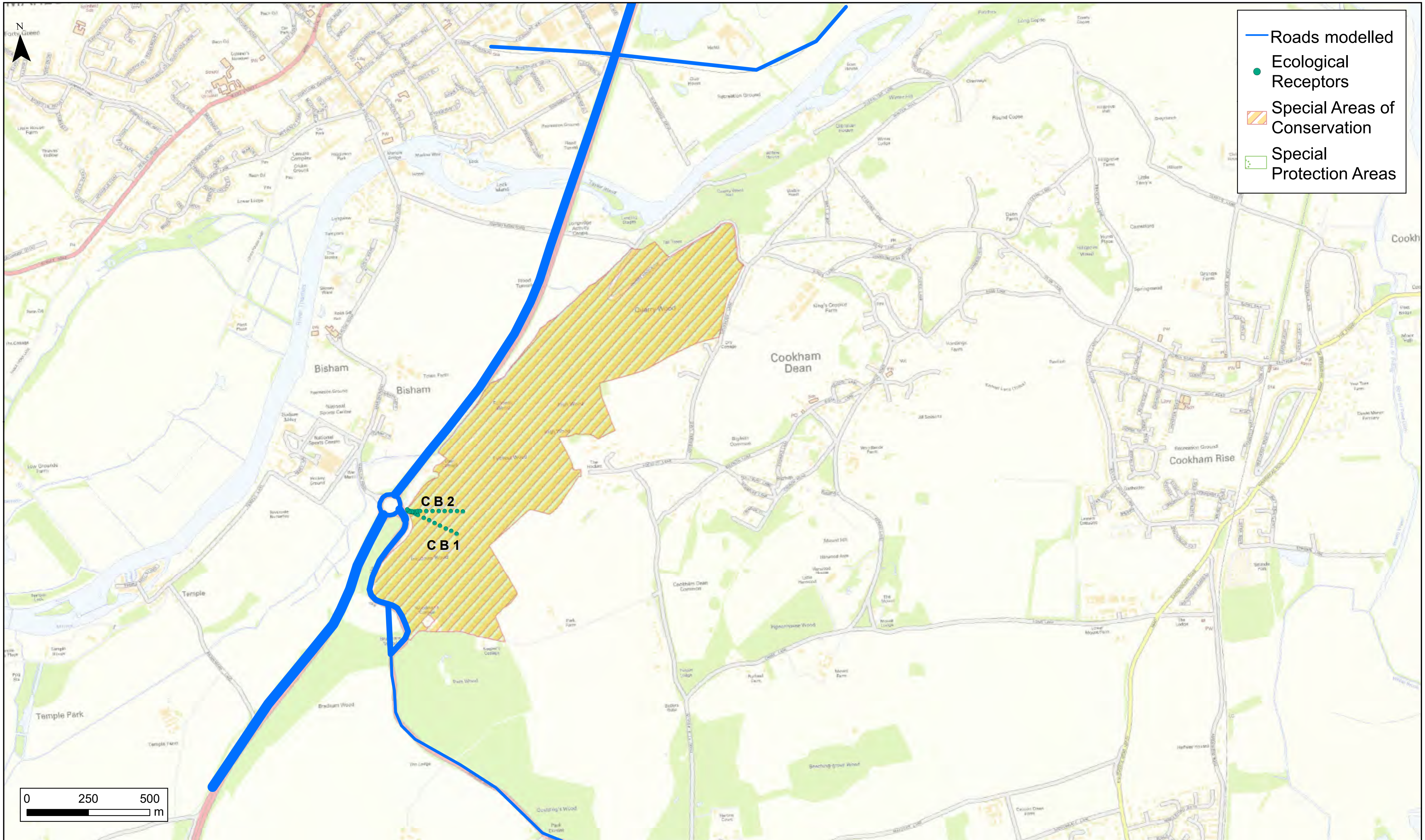


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| Stantec | Client<br>WOKINGHAM BOROUGH COUNCIL | **Wokingham Local Plan Update**<br>Ecological Receptors Modelled | Service Layer Credits:<br>Contains Ordnance Survey Data © Crown Copyright and Database Right 2021. | 1:20,000 @ A4 — Date: 19/04/2022<br>Drawn: ERP — Checked: CB<br>Figure 6.1 - Page 10 — Rev A |