

South East Strategic Reservoir Option Preliminary Environmental Information Report

Equality Impact Assessment

Date: October 2025

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1 Equality Impact Assessment

1.1 The Project

- 1.1.1 The South East Strategic Reservoir Option (SESRO or 'the Project') would mostly be situated within an area bounded by the River Ock to the north, the A34 and the village of Steventon to the east, the Great Western Main Line railway to the south and, the A338 and village of East Hanney to the west.
- 1.1.2 The Project comprises the following water resources infrastructure:
 - Provision of a fully bunded raw (untreated) water storage reservoir with an operational capacity of 150 million cubic metres (Mm³).
 - A pumping station at the base of the proposed reservoir embankment on the north-east side of the reservoir.
 - The river tunnel to transfer flows between the pumping station and the River Thames via intake / outfall structures near Culham.
 - The reservoir tunnels to transfer flows between the reservoir and the pumping station.
 - Thames to Southern Transfer (T2ST) water treatment works (WTW).
 - Sections of pipeline to facilitate transfers from the reservoir to Southern Water via T2ST and Farmoor, and infrastructure to allow connection to future transfer projects.
- 1.1.3 The proposed non-water resources infrastructure includes:
 - Main access road into the Site from A415 Marcham Road.
 - Diversion of the existing Steventon to East Hanney Road.
 - Public access and parking.
 - Minor improvements to highways outside of the Core Project Area, including the A34 Marcham Interchange.
 - Two recreational lakes.
 - Recreational facilities, including a Recreational Lakes Centre, Water Sports Centre on the reservoir embankment, Nature Education Centre and active travel provision.
 - A network of Project Priority Areas for Biodiversity (PAB) to provide habitat creation, enhancement or species relocation.
 - Watercourse diversions to both the east and the west of the reservoir.
 - Provision for the Wilts and Berks Canal, this would be provided as a water channel to allow for future provision of operational features such as locks.
 - Additional floodplain conveyance on the east bank of the River Thames and adjacent to the diverted watercourses in the Ock catchment.
 - A groundwater drain encircling the reservoir.
 - Provision of renewable energy infrastructure including floating solar, solar on structures and hydro-electric turbines. In addition, potential for ground mounted solar is being considered to replace three existing solar farms that would be lost as a result of the Project.
 - Utility diversions, including the diversion of an existing 132kV overhead electricity cable, diversion of an existing gas main near Drayton Road and diversion of an existing

- gas main to the south of the reservoir embankment which would conflict with the proposed alignment of the Steventon to East Hanney Road diversion.
- Temporary rail sidings will also be required during construction, which will be removed upon completion. Some assets associated with the rail sidings may be adopted by Network rail for ongoing use and maintenance during operation. An embanked area will be retained to provide landscape and habitat creation.
- 1.1.4 PEI Report Chapter 2: Project description sets out further detailed description of the Project, including further description of each of these key Project components.
- 1.1.5 The Development Consent Order (DCO) is currently expected to be consented in 2028. Water would be available for use from 2040 and the Project fully open from 2043.
- 1.1.6 The draft Order limits show all the land potentially needed to deliver the Project. This comprises land needed temporarily for construction and land needed permanently to accommodate any new infrastructure, anything below ground such as the reservoir and river tunnels. The draft Order limits also include land that can be used for landscaping and other ecological enhancements, for example to achieve biodiversity net gain.
- 1.1.7 The draft Order limits of the Project are mainly within the Vale of White Horse District, with the exception of the far eastern extent on the eastern bank of the River Thames, which falls within the South Oxfordshire District.
- 1.1.8 The reservoir and associated infrastructure would mostly be situated within an area bounded by the River Ock to the north, the A34 and the village of Steventon to the east, the Great Western Main Line railway to the south and, the A338 and village of East Hanney to the west (this is known as the 'Core Project Area'). The draft Order limits extend east of the A34 for the intake/outfall structure on the River Thames and to the south and west for habitat provision.
- 1.1.9 There are also a number of isolated locations within the draft Order limits where supporting works are proposed to support the Project, these are on the A34 to the east of Harwell at Rowstock and extending approximately 5.5 kilometres (km) west from the southern part of the draft Order limits along a corridor following the Great Western Main Line railway.
- 1.1.10 The area within the draft Order limits is generally flat agricultural land, with some gentle slopes. The agricultural fields are interspersed with houses and farmsteads and bisected by hedgerows and ditches with some small areas of woodland. There is a small industrial area in the south associated with Steventon Depot, and three existing operational solar farms, two located to the north of Hanney Road in the centre of the draft Order limits and one to the east of the A338 in the west of the draft Order limits. The nearest centres of population are Marcham to the north, Drayton to the east, Steventon to the south-east, and East Hanney to the south-west and are outside of the draft Order limits.
- 1.1.11 The draft Order limits (and/or study areas) may be refined or amended following statutory consultation and prior to the submission of the DCO application.
- 1.1.12 PEI Report Chapter 2: Project description relies on the use of relevant parameters and assumptions to allow flexibility in the final design of the Project. In addition, assumptions have been generated where necessary within these parameters that are specific to the Equality Impact Assessment (EqIA).
- 1.1.13 Table 1.1 identifies the Project components and activities relevant to this assessment. It sets out assumptions specific to the EqIA which have been relied on for the assessment of

disproportionate or differential effects. The EqIA draws upon the residual effects reported by aspect chapters within the PEI Report, which are in turn based on both general (Project wide) and aspect specific parameters. These parameters and assumptions are deemed embedded within the residual effects, and are not reported here in addition.

Table 1.1 Project parameters and basis of assessment - construction

Project parameters (components and activities)	Assumption (basis of assessment)
General construction activities	Temporary closures and diversions of Public Rights of Way (PRoW) are assumed for the duration of construction where routes intersect with worksites or haul routes. This is further discussed in PEI Report Chapter 12: Traffic and transport.

Table 1.2: Project parameters and basis of assessment - operation

Project parameters (components and activities)	Assumption (basis of assessment)
Public WCs provision	Public WCs will be available for those visiting the site, including standard provision of disabled WCs in each location. Toilet block locations are generally at car parks and recreational or educational centres.
Car parks	Visitor traffic is expected to be car-dominated (70-100%). Car parks will include disabled parking provision (DDA-compliant spaces) in line with BS8300 and Sport England guidance on Accessible and Inclusive Sports Facilities.
Active travel / PRoW	To replace lost PRoW, some of the new pathways within the site will be designated as PRoW. Other pathways are likely to be permissive paths. A majority of active travel routes would be accessible to all users regardless of mobility needs; alternative paths would be available for users with mobility needs where topographical constraints could render a route unsuitable for inclusive access.
	A range of paths for walking, wheeling, cycling and horse riding would connect into the existing PRoW network surrounding the Project. Walking and cycling provision as part of junction designs to ensure safe movement along key routes between nearby settlements and the Project.
Canal and watercourse crossings	Design of the approach ramps to crossings would take account of inclusive access for wheelchair users and other mobility impairments, access for cyclists and, where applicable, access for horse-boating (towing canal boats). The working assumption

Project parameters (components and activities)	Assumption (basis of assessment)
	is a gradient of 4.5% (1:22) with landings at appropriate intervals to provide users with an opportunity to rest.
Water safety	Rescue boats and lifeguards will be required and all relevant safety measures (such as the provision of life belts at regular intervals along the embankments) will be included within the Safety Management Plan. The operators will also be required to have procedures in place to manage the safety of workers and visitors for all activities within the Project.
Permanent lighting	Where there is a requirement for safety and awareness, such as around car parks and centres of activity, lighting will be provided.
Recreational Lakes Centre	It is assumed the Recreational Lakes Centre will have: a café; changing facilities; education centre; Visitor Centre, Mobility & Active Travel Hub; and public WCs.
	It is assumed that the Visitor Centre, Mobility & Active Travel Hub will include: bus pickup/ drop-off; taxi/ driverless car pickup/ drop-off; bike parking; bike maintenance; Persons with Reduced Mobility (PRM) buggy rental; navigation, orientation and information; shelter; benches and water bottle fill up station.
	It is located with centralised mobility services, allowing a visitor to change modes of transport, carry out maintenance and rest.
Water Sports Centre	It is assumed the Water Sports Centre will have accessible access; changing facilities; and public WCs.
Nature Education Centre	It is assumed the Nature Education Centre will have: a café; education centre; public WC; and observation tower.
Other Recreational Buildings	Facilities like bird hides, changing facilities, and toilets will be designed to be accessible in line with accessibility legislation.
Recreational Spaces and Facilities	The Project provides extensive new areas of publicly accessible green and blue spaces for recreation.

1.2 Purpose of the Equality Impact Assessment

1.2.1 This EqIA is submitted as part of the DCO application describing how Thames Water (the Applicant) has complied with the Equality Act 2010 ('the Act').

- 1.2.2 An EqIA considers the impact of a proposal on relevant groups who share characteristics which are protected under the Act, and informs decision-making based on likely effects on these groups. The protected characteristics defined in the Act are:
 - a. Age
 - b. Disability
 - c. Gender reassignment
 - d. Marriage and civil partnership¹
 - e. Pregnancy and maternity
 - f. Race including colour, nationality, ethnic or national origin
 - g. Religion, or belief
 - h. Sex²
 - i. Sexual orientation
- 1.2.3 In addition to the Protected Characteristic Groups³ (PCGs) outlined, the assessment will also consider wider socio-economic inequalities and intersectionality as outlined within Part 1 of the Act.
- 1.2.4 The EqIA draws on the findings set out in the PEI Report, considering the potential for effects during construction and operation of the Project. Equality considerations have shaped the form of the Project put forward for consultation.
- 1.2.5 Equality considerations have also shaped the approach to consultation in developing this Project, and these are set out within the consultation materials, including the Statement of Community Consultation (SoCC).
- 1.2.6 An updated EqIA will accompany the DCO application, which will consider the potential for effects during construction and operation of the Project, based on findings in the Environmental Statement (ES) and taking account of the statutory consultation.
- 1.3 Legislation, policy and guidance
- 1.3.1 The following legislation, policy and guidelines define the framework and justification for undertaking the EqIA. They define the need to undertake the assessment and outline the scope of assessment including the PCGs which should be considered within the assessment.
- 1.3.2 The EqIA only considers legislation, policy or guidance that explicitly relates to equalities. Other legislation, policy or guidance that relates to the environmental aspects that this

Equality Impact Assessment

¹ For the protected characteristic of marriage and civil partnership, only the first aim of the Equalities Act (preventing discrimination in the workplace) applies

² For the protected characteristic of sex, the sub-groups of men and women are used

³ This term is used to represent those with protected characteristics as defined within the Equality Act 2010 and those with wider socio-economic disadvantage

assessment draws upon are considered to be embedded within those assessments, and are not additionally considered here.

Equality legislation

The Equality Act (2010)

- 1.3.3 The Equality Act 2010 is the core driver for the need for, and format of, an EqlA.
- 1.3.4 It is designed to prohibit discrimination on the grounds of nine characteristics. These categories are known as 'protected characteristics' and the groups they form are referred to as PCGs. They are:
 - Age: a person belonging to a particular age or range of ages
 - Disability: a person who has a physical or mental impairment which has a substantial and long-term adverse effect on that person's ability to carry out normal day-to-day activities
 - Gender Re-assignment: people who are proposing to undergo, are undergoing, or have undergone a process (or part of a process) for the purpose of reassigning their sex
 - Marriage and Civil Partnership: marriage is a union between a man and a woman or between two people of the same sex. Same sex couples can also have a Civil Partnership. Civil partners must not be treated less favorably than married couples (except where permitted by The Equality Act)
 - Pregnancy and Maternity: pregnancy is the condition of being pregnant or expecting a baby. Maternity refers to the period after the birth and is linked to maternity leave in the employment context. In the non-work context, protection against maternity discrimination is for 26 weeks after giving birth
 - Race: a group of people defined by their colour, nationality (including citizenship), and ethnic or national origins
 - **Religion or belief**: religion refers to any religion, including a lack of religion. Belief refers to any religious or philosophical beliefs including lack of belief (such as Atheism)
 - Sex: a man or to a woman, or to a group of people of the same sex
 - **Sexual Orientation**: whether a person's sexual attraction is towards their own sex, the opposite sex or to both sexes
- 1.3.5 The Equality Act 2010 legally protects people from discrimination in the workplace and in wider society. It includes a list of those protected from discrimination and this list has been used to inform the assessment, considering disproportionate impacts of construction and operation of the Project on protected characteristics groups.

The Public Sector Equality Duty (PSED)

- 1.3.6 Under the Act, a public authority in the exercise of its functions (and a person exercising public functions) is subject to the PSED. The PSED requires public bodies to have due regard to three aims:
 - Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act (i.e. the scheme removes or minimises disadvantages suffered by people due to their protected characteristics).

- Advance equality of opportunity between those who share a protected characteristic
 and those who do not (i.e. the scheme takes steps to meet the needs of people from
 protected groups where these are different from the needs of other people and
 encourage participation in public life by underrepresented groups).
- Foster good relations between people who share a protected characteristic and those
 who do not (i.e. the scheme encourages people the need to deal with prejudice and
 support understanding).
- 1.3.7 The duty supports good decision-making by helping decision-makers understand how their activities affect different people. It also requires public bodies to monitor the actual impact of the things they do.
- 1.3.8 When assessing the equality impacts of a decision, organisations should consider the positive and negative impacts, not just the negative. For example, policies designed to support integration and community cohesion may have a positive impact across a population, even if not targeted at any one group in particular.
- 1.3.9 Relevant guidance on fulfilling the PSED includes:
 - Equality and Human Rights Commission 14 (Equality and Human Rights Commission (EHRC), 2012) The Essential Guide to the Public Sector Equality Duty (EHRC, 2014a)
 - EHRC, Engagement and the Equality Duty and A Guide for Public Authorities (EHRC, 2014b)
 - EHRC, Equality Act 2010: Technical Guidance on the Public Sector Equality Duty England (EHRC, 2014c)
 - EHRC, Meeting the Equality Duty in Policy and Decision-Making England (and non-devolved public authorities in Scotland and Wales) (EHRC, 2014d)
 - Government Equalities Office, Equality Act 2010: Public Sector Equality Duty What Do I Need To Know? A Quick Start Guide for Public Sector Organisations (Government Equalities Office, 2011).

'Due regard'

- 1.3.10 The concept of having 'due regard' has been tested in case law, and a set of principles known as the Brown Principles have been accepted. In summary, the Brown Principles mean that:
 - Decision makers should be aware of their duty to have due regard to the identified needs
 - Due regard is fulfilled before and at a time that a policy could affect people with protected characteristics, not just at the time a decision is taken.
 - The duty should be exercised in substance, with rigour and an open mind, in such a way that it influences the final decision.
 - The duty cannot be delegated and remains the responsibility of the body subject to the duty.
 - The duty is ongoing.
 - Records should be kept to demonstrate how the duty has been considered.
- 1.3.11 This EqIA aims to provide evidence in line with the spirit of the legislation, to support decision making where the duty applies.

Social Inclusion and Human Rights

- 1.3.12 Key relevant legislation and guidance associated with social inclusion and human rights is set out below.
- 1.3.13 The Human Rights Act 1998 (HRA) (Equality and Human Rights Commission, 2018) came into force in 2000 and was enacted to incorporate the European Convention on Human Rights (ECHR) into UK law. By incorporating the ECHR, the HRA ensures that individuals can directly rely on the convention rights in UK courts and tribunals. The ECHR Convention Rights include the following articles:
 - Article 2: Right to life
 - Article 3: Freedom from torture and inhuman or degrading treatment
 - Article 4: Freedom from slavery and forced labour
 - Article 5: Right to liberty and security
 - Article 6: Right to a fair trial
 - Article 7: No punishment without law
 - Article 8: Respect for your private and family life, home and correspondence
 - Article 9: Freedom of thought, belief and religion
 - Article 10: Freedom of expression
 - Article 11: Freedom of assembly and association
 - Article 12: Right to marry and start a family
 - Article 14: Protection from discrimination in respect of these rights and freedoms
 - Protocol 1, Article 1: Right to peaceful enjoyment of your property
 - Protocol 1, Article 2: Right to education
 - Protocol 1, Article 3: Right to participate in free elections
 - Protocol 13, Article 1: Abolition of the death penalty
- 1.3.14 The Act now omits Articles 1 and 13 of the ECHR. This is due to the UK upholding these rights through the creation of the HRA. Article 1 mandates that states must protect the Convention's rights and Article 13 ensures those who have their rights violated are able to obtain meaningful justice, i.e. able to file a lawsuit and request a ruling.
- 1.3.15 The HRA has both a horizontal and vertical effect:
 - Horizontal Effect: Applies to disputes between private individuals (e.g. Employeremployee cases), and
 - Vertical Effect: Binds public authorities (e.g. government bodies and police) to respect convention rights.
- 1.3.16 If a law is found incompatible, courts issue a declaration of incompatibility, signaling the need for legislative change. Balancing individual rights against the public interest, the HRA ensures fairness, justice, and accountability in the UK legal system.
- 1.3.17 Within this EqIA, consideration has been given to if and how the Project could potentially infringe on the rights protected by the HRA, particularly Article 14 "protection from discrimination in respect of these rights and freedoms".

Relevant policy

National Policy Statement for Water Resources Infrastructure (NPSWRI)

- 1.3.18 The NPSWRI (Department for Environment Food and Rural Affairs, 2025) provides the primary policy against which nationally significant water infrastructure projects, as defined by the Planning Act 2008, will be determined.
- 1.3.19 The NPSWRI outlines the potential socio-economic effects of nationally significant water resource infrastructure projects such as job creation, supply chain benefits and increased economic activity. By investing in water resource infrastructure, the government aims to stimulate local economies and enhance overall prosperity.
- 1.3.20 The NPSWRI (paragraph 4.13.4) has specific text on the inclusion equalities impacts: "The applicant should also describe the existing demographics within the area and assess how the development could affect any equalities groups. Applicants should assess any likely significant positive and negative socio-economic or equalities impacts as part of an Environmental Statement."
- 1.3.21 It also emphasises that equalities impacts will affect decision making (paragraph 4.13.11): "The decision maker should also consider the equality impacts, whether measures put forward by the applicant to mitigate any adverse equalities impacts caused by the development are acceptable or whether other mitigations should be pursued."
- 1.3.22 This EqIA fulfills paragraph 4.13.14 of the NPSWRI in relation to describing how the development could affect any equalities groups.

National Planning Policy Framework (NPPF)

- 1.3.23 The NPPF does not include any policies that specifically relate to equality impacts.
- 1.3.24 Where it includes policies that are relevant to the wider environmental impacts that are considered in the EqIA, the relevant chapters of the PEI Report describe how the policies considered.

Vale of White Horse and South Oxfordshire Diversity and Inclusion Strategy

- 1.3.25 The Diversity and Inclusion Strategy (South Oxfordshire and Vale of White Horse District Councils, 2022) outlines their commitment to create a fair, inclusive, and safe environment. This strategy was created due to the Councils' legal duty under the Act. The strategy aims to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. The Councils have also developed an action plan which sets out their commitment and actions to creating diverse and inclusive services to their communities.
- 1.3.26 Both the strategy and action plan relate to corporate commitments, rather than requirements for developments within their area. Therefore the content is not directly relevant to this assessment, but it illustrates the general expectation for considering equalities in the area.

South Oxfordshire and Vale of White Horse District Councils Joint Local Plan 2041 (Emerging)

- 1.3.27 Draft Policy HP2 includes considerations under paragraph 5 and 6 that proposals to extend or improve existing community facilities or provide new facilities will be supported where they are accessible and inclusive for a range of users including those who are disabled and promote social inclusion (amongst other considerations).
- 1.3.28 The Project responds to this in terms of the recreational facilities provided during operation.

Ofwat's Strategy and Public Value Principles

- 1.3.29 In their 2019 strategy 'Time to Act Together' (refreshed in January 2024) Ofwat sets out three strategic goals to transform water companies' performance, drive water companies to meet long-term challenges and for water companies to provide best value and outcomes for customers, communities and the environment. (Ofwat, 2019).
- 1.3.30 For people and communities, this relates to:
 - Considering future generations, as well as today's customers in terms of providing high-quality, reliable and affordable water and wastewater services, and a thriving environment to enjoy.
 - Water companies embedding a purpose driven culture when carrying out their core functions, to bring benefits for customers, communities, companies and their investors alike.
 - Behave ethically and consider their wider impact including on society.
- 1.3.31 While this strategy is not directly applied within this EqIA, it underpins the culture which has shaped the approach to supporting customers and communities with protected characteristics. This EqIA also supports the Project to consider the wider impact on society.

Thames Water Strategies

- 1.3.32 Thames Water has published four key strategies that relate to equalities:
 - What Customers, Communities and Stakeholders Want (Thames Water, 2023) There is
 no direct-action plan for an equality strategy, the document outlines how engagement
 with vulnerable customers will increase, in order to improve Customer Measure of
 Experience. This is not directly relevant to this assessment.
 - Our turnaround: Thames Water Annual Report (Thames Water, 2024) This document
 outlines the three-year turn-around plan focusing on operational and financial
 performance. It briefly outlines how the 'Our People' policy covers Diversity and
 Inclusion at a high level. This is primarily focused on staff members rather than
 communities and so is not directly relevant to this assessment.
 - Vulnerability Strategy: Providing an inclusive service (Thames Water, 2025b) This
 vulnerability impact analysis was carried out to assess Thames Water's service
 provision, specifically how Thames Water will provide an inclusive service, extra
 support to those who need it and engage customers who are under-represented. The
 report is influenced by EqIAs and references PCGs such as Disability, Age and
 Ethnicity. It also assesses financial vulnerability and whether English is a customer's

- native language. This focuses on customer (water user) experience and so has limited relevance to this assessment. Impacts for protected characteristic groups from improved supply resilience due to the operation of the Project is considered in the assessment.
- Equality, diversity and inclusion statement (Thames Water, 2025a) This statement sets
 out expectations for staff, contractors, business partners and any person acting on
 behalf of Thames Water in terms of behaviour at work, outside the workplace (when
 dealing with customers, suppliers or other work-related contacts or when wearing a
 work uniform), and on work-related trips or events, including social events. This is not
 directly relevant to this assessment.

1.4 Consultation, engagement and scoping

Non-statutory public consultation

- 1.4.1 Feedback from consultation and engagement is used to define the assessment approach and to ensure that appropriate baseline information is used. In particular the EIA Scoping, including Chapter 15: Socio-economics and communities, and Chapter 16: Human health, has been used to define the assessment and baseline information approach for contributing environmental aspects. Where it is relevant to the EqIA, this has also shaped the approach for this assessment. This particularly relates to the baseline data that underpins the PEI Report.
- 1.4.2 Feedback has also been used to drive the design of the Project to avoid, prevent and reduce any likely environmental effects. Feedback from key stakeholders has informed the Project's proposed mitigation measures. For the PEI Report this considers embedded design and standard good practice mitigation, which is embedded within the PEI Report effects that are considered in this EqIA.

Ongoing engagement

1.4.3 Thames Water has ongoing dialogues with a number of impacted community resources (referred to as 'receptor assets' within the EIA) users, community groups and community representatives. Further engagement is expected to be undertaken, which will supplement the understanding of particular sensitivities and vulnerabilities of potentially impacted protected characteristic groups considered. The Recommended Actions set out in Table 1.16 Assessment of potential equality effects during construction and Table 1.17 Assessment of potential equality effects during operation include a number of recommendations for further engagement in the development of the DCO, and beyond into construction and operation.

1.5 Assessment methodology

- 1.5.1 The potential for equality effects of the Project is limited to those aspects of the Project that affect people. Where the Project does not affect people, it cannot affect different groups of people differently and therefore cannot affect equality.
- 1.5.2 In addition to the PCG listed above, wider equality determinants featured in previous South Oxfordshire District Council and Vale of White Horse District Council EqlAs (Whiteley,

- 2023) and are included in this EqIA to ensure fairness and consistency across local strategies, policies and services when considering equality and diversity.
- 1.5.3 Equality effects can occur where an impact has a disproportionate and/or differential effect on groups of people on the grounds of their protected characteristic, or due to their wider socio-economic disadvantage.
- 1.5.4 Disproportionate effects occur when an intervention has a greater proportional effect on a PCG in a particular location, when compared with the general population. This type of effect can arise in two main ways:
 - An impact is predicted on a residential area where PCGs are known to make up a
 greater proportion of the affected resident population than their representation in the
 wider district and/or county/region or
 - An impact is predicted on a community resource (or receptor asset) predominantly or heavily used by PCGs such as primary schools attended by children or care homes catering for older people in society.
- 1.5.5 Differential impacts occur when members of a PCG are affected differently by an intervention in a particular location, when compared with the general population. This can be because of specific needs, sensitivities or vulnerabilities related to their characteristic. Impacts can be categorised as differential, regardless of the number of individuals affected. These impacts may be observed over both the construction and operation phases of the Project.
- 1.5.6 This EqIA consists of four stages: Screening, Assessment, Mitigation/Enhancement and Monitoring. The approach is influenced by the EqIA methodology of South Oxfordshire District Council and Vale of White Horse District Council (Whiteley, 2023). The stages are outlined in more detail below.
 - Stage 1 Screening: The screening stage determines which PCGs are likely to
 experience differential and/or disproportionate effects as a result of the Project and,
 therefore, require further consideration and assessment within the EqIA. Impacts are
 considered based on evidence from previous studies and a review of academic/peer
 reviewed literature.
 - Stage 2 Assessment: The assessment stage aims to evaluate the likely differential and disproportionate effects of the Project on PCGs. An assessment is undertaken and qualitative descriptive judgments are made regarding the nature of any potential equality effects.
 - Stage 3 Mitigation/Enhancement: Where negative impacts are identified, this section outlines the actions to be taken to reduce negative impacts. This section also includes opportunities to i) advance equality of opportunity and ii) foster good relations between people in any protected group and those who are not.
 - Stage 4 Monitoring: The requirement to appropriately consider the needs of PCGs as defined by the Act should be incorporated into any existing monitoring mechanisms.

Stage 1: Screening

Protected characteristics

- 1.5.7 This EqIA has considered the protected characteristics which are likely to experience differential effects as a result of the Project. An initial screening exercise was undertaken prior to this assessment to understand which protected characteristics should be scoped in and which could be scoped out.
- 1.5.8 The protected characteristics identified by the Act have formed the basis of the assessment, as they are legally protected from discriminatory practices. The scoped in protected characteristics for this assessment are:
 - Age
 - Disability
 - Gender re-assignment
 - Pregnancy/maternity
 - Race
 - Religion/belief
 - Sex
 - Sexual orientation
 - Intersectionality
 - Wider socio-economic disadvantage
- 1.5.9 In terms of elements of wider socio-economic disadvantage, specific further characteristics which are considered relevant to the Project are:
 - Rural communities
 - Deprivation/socio-economic status
- 1.5.10 The initial screening exercise determined whether any PCG should be scoped out as they would not experience any differential or disproportionate effects as a result of the Project. Marriage/ civil partnership has been scoped out of the EqIA as there is no specific evidence in the literature relating marriage and civil partnership to social impacts surrounding large water infrastructure, and so no disproportionate or differential effects would be expected to arise as a result of the Project.
- 1.5.11 Wider equality determinants, which feature in previous South Oxfordshire District Council and Vale of White Horse District Council EqlAs (Whiteley, 2023), but are scoped out of this assessment are:
 - Eliminating Unlawful Discrimination Harassment and Victimisation scoped out as this Project is not expected to affect elimination of unlawful discrimination, harassment and victimisation.
 - Advancing Equality of Opportunities scoped out as this Project is not expected to affect advancing equality of opportunity.
 - Fostering Good Relations scoped out as this Project is not expected to affect fostering good relations.

Equalities indicators

- 1.5.12 The role of the EqIA is to identify where changes associated with the Project may result in disproportionate effects, in relation to PCGs, above the general population. The impacts which have been identified as appropriate for the nature of the Project and therefore considered in the EqIA are:
 - Traffic and transport
 - Physical accessibility
 - Active travel routes
 - Access to employment and training opportunities
 - Access to community facilities
 - Noise
 - Air quality
 - Landscape and visual
 - Social capital⁴
 - Outdoor space and mobility within green spaces
 - Crime, safety and personal and perceived security
 - Health related equality effects
 - Climate change
- 1.5.13 These effects can be observed over both the construction and operation phases of the Project, and the consideration of these indicators has been informed by the Environmental Impact Assessment (EIA) process and the design development.

Study area

- 1.5.14 The spatial scope identified for the EqIA was informed by technical assessments undertaken as part of the EIA process (specifically assessments that consider impacts on people), and the potential impacts on specific PGC's. The findings set out in: PEI Report Chapter 9: Landscape and visual, Chapter 12: Traffic and transport, Chapter 13: Air quality, Chapter 14: Noise and vibration, Chapter 15: Socio-economics and communities, and Chapter 16: Human health; as well as review of best practice, were used to guide the spatial scale in which to consider equalities impacts during construction and operation.
- 1.5.15 The methodology for defining the study area for each receptor in the relevant EIA aspect chapters of the PEI Report listed, is based on a combination of regulatory guidance, professional judgment, and consideration of the potential scale and extent of the Project's effects. To ensure a robust and proportionate assessment, the study areas were tailored to the specific environmental receptors being considered and, in this case, the EqIA.

Baseline

Data collection

1.5.16 Baseline data collection has been undertaken to obtain information over the study areas. The EqlA has considered relevant evidence including baseline data, feedback from

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⁴ Social capital is a term used to describe the extent and nature of our connections with others and the collective attitudes and behaviours between people that support a well-functioning, close-knit society.

stakeholder engagement and published research on equality issues. All literature that has been reviewed is included in the Reference List at the end of this document.

- 1.5.17 The following publicly available data sources have been accessed to inform the baseline with respect to equality impact:
 - Office for National Statistics (ONS) Census Data (ONS, 2021)
 - Ordnance Survey (OS) Maps (OS, 2023a)
 - OS Addressbase Plus (OS, 2023b)
 - ONS Population estimates (ONS, 2023)
 - ONS Annual Population Survey (ONS, 2024)
 - Local Authority Health Profiles (Public Health England, 2019)
 - English Indices of Multiple Deprivation (Department for Communities and Local Government, 2019)
 - Policy review of local strategies
- 1.5.18 In addition to these data sources, the EqIA also draws on environmental baseline data collated for other aspects, specifically, baseline data presented in PEI Report Chapter 15: Socio-economics and communities and Chapter 16: Human health.

Site surveys

- 1.5.19 Baseline data collection for the EqIA is desk-based. No surveys specific to the EqIA have informed this assessment.
- 1.5.20 The EqIA considers residual impacts from other aspects. Where information collected through surveys conducted by other EIA aspects has been relevant to their assessments this has been embedded within their residual effects. No specific consideration of other survey information has been taken through into the EqIA.

Future baseline

- 1.5.21 The assessment has considered the likely evolution of the baseline without the implementation of the Project. The future baseline for the EgIA includes the following:
 - Any relevant other developments expected to be operational prior to or during the construction and operation of the Project; particularly those that may cater to high proportions of PCGs.
 - Consideration of future demographic and socio-economic trends which may impact the distribution or location of PCGs.
 - Any relevant policy or legislative changes at a national or other level.
- 1.5.22 The following data sources have been accessed to inform the future baseline with respect to EqIA:
 - Refer to the PEI Report Chapter 20: Cumulative effects for the methodology used to prepare the list of other developments relevant to the future baseline
 - Projected population forecasts ONS.

Stage 2: Assessment of effects

1.5.23 The EqIA has assessed both direct and indirect effects resulting from the Project. In the context of this study, the term 'effect' has been used to specify where changes (both

- positive and negative) are thought likely to be felt by groups of people sharing the protected characteristics. The assessment considers whether the impacts of the Project on PCGs are over and above those likely to affect the general population of the study area.
- 1.5.24 For each potential impact, an assessment has been undertaken against a number of criteria, to identify the level of change, exposure and duration of adverse effects. The full assessment criteria are set out below:
 - Change The identification of the aspect of the Project that would cause the change,
 and specific reference to whether the change is likely to be beneficial or adverse
 - Receptor The identification of the equalities groups that are likely to be vulnerable to this change
 - Direct/indirect The identification of whether the impact is a direct result of the Project, or forms part of wider indirect effects
 - Duration The identification of whether the change is temporary (short-term, medium-term or long-term) or permanent (defined below)
 - Short-term Effects with a duration that extends for up to one year
 - Medium-term Effects with a duration that extends longer than one and less than five years
 - Long-term Effects with a duration that extends longer than five years
 - Permanent Effects that continue for greater than 15 years following construction.
 - Positive/ Negative The identification of whether the change is likely to have beneficial or adverse impacts upon equalities groups within the relevant study area
 - Extent of population exposure the consideration of the number of people, equalities groups or catchment areas likely to be impacted by the change.
 - Magnitude To gauge how severe the impact is likely to be upon certain equalities groups
- 1.5.25 The criteria were then used to form an overall conclusion on the effect on PCGs, by considering how proportional the change was on vulnerable groups in relation to the general population. The assessment of proportionality is based on an assessment of whether a given impact is likely to be felt more, less or differently by equalities groups than by members of the general population in the same area.
- 1.5.26 This will also include whether an impact is differential, and therefore is likely to have a different impact on equalities groups due to specific needs, greater sensitivity, or the reduced ability to accommodate change.
- 1.5.27 It also considers whether there are impacts which are likely to be experienced in the same way by all, but which occur in areas with disproportionate numbers of people sharing one or more protected characteristics.

Stage 3: Mitigation/Enhancement

1.5.28 An initial assessment of equalities effects, either disproportionate or differential, on PCGs during construction and operation of the Project is presented in Section 1.8: Assessment of potential equality effects alongside recommended actions which intend to minimise adverse disproportionate or differential effects or amplify beneficial ones.

Stage 4: Monitoring

1.5.29 The requirement to appropriately consider the needs of PCGs should be incorporated into any existing monitoring mechanisms.

1.6 Study area

- 1.6.1 The study area has been defined to assess anticipated impacts associated with the Project on different PCGs. The methodology used to define the study areas is outlined in Section 1.5: Assessment methodology.
- 1.6.2 The EqIA is a community-based assessment, and reports equality effects for groups of people who share protected characteristics, rather than for individuals or individual households. This assessment is impact led, and so considers receptors outside of the study area, where appropriate.
- The study area is reflective of the Project parameters and assumptions used for the PEI Report and the associated draft Order limits. See PEI Report Chapter 2: Project description for the full description of the Project and details of the project-wide parameters and assumptions. To support aligned consideration of people and demographic focused baselines, the baseline considered in PEI Report Chapter 15: Socio-economics and communities, and Chapter 16: Human health, the study area for EqIA was defined as all lower super output areas (LSOAs) which are within or intersect with a buffer of 5km from the draft Order limits. Where data is not available to LSOA level, equivalent middle super output areas (MSOAs) have been considered as the study area. Where different aspects of the socio-economic assessment consider different spatial areas, these have also been considered in the EqIA, where relevant. This is illustrated on Figure 1: Equality Impact Assessment Study Area LSOA and Figure 2: Equality Impact Assessment Study Area MSOA, which are appended to this report in Annex 1.
- 1.6.4 In addition, the existing baseline also describes the characteristics of the LSOAs or MSOAs that fall wholly or partially within the draft Order limits, as this is where impacts are likely to be greatest.
- 1.6.5 The majority of the draft Order limits fall within the district of Vale of White Horse. A small section to the north-east of the draft Order limits falls within the district of South Oxfordshire. The study area is largely rural and contains a number of villages, the nearest of which are Marcham, Garford, Frilford, East and West Hanney, Steventon and Drayton, as well as the larger settlements of Abingdon and Wantage.
- 1.6.6 For the purpose of this preliminary baseline, information has been compared to regional and national trends. County-level data for Oxfordshire County Council and national data for England, has been used where appropriate.

1.7 Baseline

Evidence review

1.7.1 There are a number of ways in which the Project has potential to impact protected characteristics, many of which are supported by academic research and evidence. This evidence is set out in Table 1.3 – evidence related to protected characteristic groups and

Table 1.4 – evidence related to wider socio-economic disadvantage, and has shaped the baseline data which has been collected. This is not an exhaustive list that covers every protected characteristic or indicator of disadvantage, as data and research specific to the Project context has not been identified for every aspect. However, this provides an overview of the available research that underpins the overarching approach to the EqIA.

Table 1.3 Protected Characteristic Groups

PCG	Evidence for potential impacts
Age	Children and Young People – Benefits: Research has suggested a beneficial relationship between green space exposure and children's emotional and behavioural difficulties, particularly with hyperactivity and inattention problems. Limited evidence also suggests a beneficial association with mental wellbeing in children and depressive symptoms in adolescents (Vanaken & Danckaerts, 2018). Research has also found that an increase in exposure to green space results in a lower prevalence of obesity and screentime (Dadvand, et al., 2014).
	Children and Young People – Active travel route change: New infrastructure can divide communities and change the normal journey routes of some individuals. For children, a change in route might take them across dangerous road or rail crossing points, placing them at an increased risk of an accident. Children are limited by their physical, cognitive and social development, making them more vulnerable to transport accidents (World Health Organisation, 2023).
	Children and Young People – Air pollution: Children and young people are especially vulnerable to air pollution levels as they spend a higher proportion of their time outdoors, are still developing major organs and breathe in air closer to the ground and so are at greater risk of exposure to more concentrated pollutants (Royal College of Physicians, 2016). The elderly are also more sensitive to impacts from air pollution as they are more likely to have pre-existing health problems.
	Children and Young People – Noise: Children can be particularly sensitive to noise impacts. Research by University College London (UCL) found that younger children are considerably more susceptible to poor noise conditions. Prolonged construction noise pollution has been reported to impair children's cognition and learning (UCL, 2021).
	Children and older adults – Air quality: Children and older people may be more sensitive to the health effects arising from poor air quality. Children, and particularly those from socio-economically deprived backgrounds, can be at greater risk of harm from air pollution and poor air quality than other groups (UNICEF, 2019). Also, as older people are more likely to have respiratory or cardiovascular illness, when compared to other age

PCG	Evidence for potential impacts
	groups, they are more susceptible to the effects of reduced air quality (DEFRA, 2013).
	Older Adults – Benefits: Older people living in neighbourhoods with more green space report better health, higher life satisfaction and less stress. Greater exposure to green space has also been associated with a lower risk of cardiovascular disease and diabetes (Public Health England, 2020). Studies also show that older adults who frequently go to blue spaces were perceived to have better health (both physically and mentally) compared to those who frequently go to green space (Aliyas, 2019).
	Older Adults – Active travel route change: Older people have a lower likelihood to be able to walk for long distances. For this reason, the introduction of a physical barrier within the local community could increase their journey times and reduce their ability to access community facilities (Rui Anciaes, Boniface, Dhanani, Mindell, & Groce, 2016).
	Older Adults –Traffic disruption: Construction at the site may cause road closures, roadblocks and diversions of public transport services. Older adults may be more reliant on public transport and the accessibility of routes close to their home. Any changes to the public transport network are likely to have differential impacts on these members of the community (International Transport Forum, 2017).
	Young People – Employment, training and skills: The construction industry in the UK has an 'ageing workforce', which struggles to attract younger workers and retain existing workers over age 55 (CITB, 2018).
Disability	Access to outdoor space: Numbers of visits to outdoor spaces for leisure or recreation are low for adults with longstanding illness or disability compared to non-disabled individuals. For individuals with a long-standing illness, recreational activities are vital in ensuring they feel a sense of belonging in their community, maintaining mental and physical health and community cohesion (Scottish Government, 2019). This is particularly relevant with regard to the potential accessible community/educational centre.
	Mobility within green space: Evidence shows that deep immersion into green spaces is often hampered by the lack of physical accessibility for disabled individuals. Paths often do not go into the centre of green spaces. Ability to access 'pristine' areas of natural beauty is very low (Corazon, et al., 2019).

PCG	Evidence for potential impacts
	Perceived safety: Evidence suggests that some disabled people are more vulnerable to stress and anxiety in crowded places, as dense and fast-moving crowds can reduce accessibility and make individuals feel unsafe (National Disability Authority, 2021). This is relevant to any busy car parks or walking paths.
	Employment opportunity: Disabled people are amongst those PCGs who experience persistently lower than average levels of employment and are more likely to be in low-pay occupations. There are also concerns that disabled people are under-represented in apprenticeship programmes and in the construction and engineering sectors more generally (EHRC, 2018). Disabled individuals are underrepresented in SMEs, access to employment opportunities through improved transport infrastructure is important to prevent income inequalities (Department for Business and Trade, 2020).
	Benefits of outdoor space: Qualitative studies show that green and blue space have a positive effect on mood, mental health, and stress. Participants also reported feelings of empowerment, enlightenment and thrill (Armstrong, Sharaievska, Crowe, & Gagnon, 2022).
	Construction traffic disruption: Construction at the site may cause road closures, roadblocks and diversions of public transport services. Disabled persons may be more reliant on public transport and the accessibility of routes close to their home. Any changes to the public transport network are likely to have differential impacts on these members of the community (International Transport Forum, 2017).
Gender re- assignment	Perceived safety: Research shows that members of the Lesbian, Gay, Bisexual, Trans, Queer+ (LGBTQ+) community are more likely to be subject to hate crimes and harassment and are significantly less likely to report this (Pezzella, Fetzer, & Keller, 2019). Furthermore, the fear of anti-LGBTQ discrimination and violence have profound impacts on LGBTQ identity and visibility, and safety perceptions affect mobility opportunities and choices (Zebracki, Weintrob, Hansell, Barnard, & Lucas, 2021). At the moment, there is little evidence of expected hate crimes or harassment at the proposed reservoir, but further engagement should be carried out to investigate perceived safety.
Race, religion or belief	Spatial segregation: When introducing new infrastructure, the barrier presented by it may result in spatial segregation. Ethnic minority communities can be more susceptible to spatial segregation, especially those from low-income households, and thus may face limitations in the set of residences, destinations and transport modes they can choose. This has the potential to re-enforce or exacerbate societal divisions (Rui Anciaes, Boniface, Dhanani, Mindell, & Groce, 2016).

PCG	Evidence for potential impacts
	Access to green/blue space: People that identify as being from an ethnic minority background are less likely to live within a five-minute walk of a green space than people that identify as white (39% compared to 58%), less likely to report that there are good walking routes where they live (38% compared to 52%) and less likely to report a variety of different green spaces within walking distance of where they live (46% compared to 58%) (Ramblers, 2021).
	Drowning risk : Recent research has shown that those from minority ethnic groups are disproportionately at risk from losing their life to drowning (Royal Life Saving Society, 2023).
	Perceived safety: For religious people who have a marked religious identity through their clothing there is an increased risk of harassment or discrimination (Department for Transport, 2020).
	Traffic and traffic associated impacts such as air quality and noise: an increase in traffic from the site may have a differential impact as a recent study by Living Streets found that people from an ethnic minority (excluding non-white minorities) are 25% more likely to be a casualty than white pedestrians (Living Streets, 2021). This is likely to be as a result of the amount of time spent as a pedestrian due to lack of access to a vehicle or public transport.
	Sciolism of consideration: Despite the three components of sustainability being environmental, economic and social, the social element is often disregarded. Religion, in particular, is often ignored in spatial planning and thus members of religious groups are often not accounted for in the planning agenda (Greed, 2016).
	Employment skills and training: EHRC report that certain groups experience persistently lower than average levels of employment, including Pakistani and Bangladeshi people, and Muslims (EHRC, 2029). The Construction Industry Council (CIC) reports that just 5.4% of construction workers are from a Black, Asian or ethnic minority background (CIC, 2023), and there are also concerns that people from ethnic minority backgrounds are under-represented in apprenticeship programmes (EHRC, 2018; Youth Futures Foundation 2025).
Sex	Drowning risk : Males make up a higher proportion of accidental fatalities associated with drowning at 83% (National Water Safety Forum, 2023).
	Safety perception: Evidence suggests that women's susceptibility to sexual assault and frequent experiences of various forms of harassment

PCG	Evidence for potential impacts
	can make them more vulnerable and perceive higher security risks (Yavuz & Welch, 2010).
	Difference in travel: There are multiple studies regarding the gender differences in travel, however, several of these studies give opposing evidence. Active Outcomes Scotland states that men are slightly more likely to travel (drive, walk and cycle), meaning they will benefit more from potential active travel routes (Scottish Government, 2015). Similarly, research from the Institute of Transport Studies argues that, while gender differences in car use are declining, women are still less likely to be the main driver of the household (Lucas, Stokes, Jeroen, & Burkinshaw, 2019). Alternatively, the Department for Transport states that females on average take 18% more walking trips than men annually (Department for Transport, 2023). This may mean that women are more likely to be impacted by disruptions to PRoW, walking routes and open spaces, disproportionately impacting access to services, recreation and levels of physical activity; while men are more likely to be impacted by disruptions to traffic overall.
	Difference in health benefits: Research has begun to examine the differences in health association from green space between men and women, as women are a marginalised group they tend to have worse health outcomes. One study has found that women are more likely to have stronger protective associations with green space than men across several physical health outcomes (cardiovascular disease, diabetes, general physical health, non-malignant respiratory disease, mortality and obesity related health outcomes) (Sillman, Rigolon, Browning, Yoon, & McAnirlin, 2022).
	Employment, training and skills: EHRC's report, "Is Britain Fairer?" finds that PCGs experience pay and employment gaps compared with other groups, with the largest gender pay gap being in the skilled trades sector, at nearly 25%. Nationally, apprenticeships are strongly segregated by sex. Women are under-represented in the construction and engineering sectors (EHRC, 2019), accounting for only 11 per cent (%) of the construction workforce and just 1% of workers on site (CIC, 2023).
Sexual orientation	Perceived safety: Research shows that members of the LGBTQ+ community are more likely to be subject to hate crimes and harassment and are significantly less likely to report this (Pezzella, Fetzer, & Keller, 2019). Furthermore, the fear of anti-LGBTQ discrimination and violence have profound impacts on LGBTQ identity and visibility, and safety perceptions affect mobility opportunities and choices (Zebracki, Weintrob, Hansell, Barnard, & Lucas, 2021).

PCG	Evidence for potential impacts
Pregnancy/ maternity	Health of unborn child: An increase in access to green space is associated with increased birth weight and a decreased risk for low birth weight. Thus, increased accessibility to green spaces improves the wellbeing of the unborn child (Agay-Shay, et al., 2014). Air pollution: Air pollution, such as from construction can have an adverse impact on pregnant women as it disrupts foetal development (Medical News Today, 2020).
Intersectionality	Intersectionality recognises that individuals may simultaneously belong to multiple social groups, and that these groups may interact with and impact each other in complex ways shaping their experiences and opportunities. And so, they may experience differential or disproportionate effects as a result of a combination of multiple protected characteristics. For example, an individual who identifies as a black woman may face discrimination that is different from that faced by a white woman or a black man as her experiences are shaped by both her race and sex. Below are a few examples of how intersectionality may impact individuals in complex ways in the context of this Project: The risk of drowning is 3.5 times higher for children of black or black British ethnicity than white (Royal Life Saving Society, 2023). The impact of blue spaces on the mental health of children with disabilities has been underemphasized (Aghabozorgi, van der Jagt, Bell, & Brown, 2023) Providing blue spaces has the co-benefits of job or food creation, biodiversity promotion and drought relief, so are both public health and social investment (Thompson DA, 2022). Noise and visual changes do not affect all children equally. For example, children with autism are often highly sensitive to specific types of noise (UCL, 2021) and changes in the visual environment can also create challenges for those who experience hypersensitivity, such as sensory overload (Autism Speaks, n.d.).

Table 1.4 Wider socio-economic disadvantage

Wider socio- economic disadvantage	Evidence for potential impacts
Rural communities	Transport access: The Journal of Transport and Health 2024 overview shows that more than one-third of people live in rural areas and experience additional transport issues. Distances and public transport routes are longer, more time-consuming and more expensive. Smaller population means fewer passengers, increasing prices further. Higher costs and smaller revenues result in fewer services hence, those without

Wider socio- economic disadvantage	Evidence for potential impacts
	private vehicles suffer increasing isolation and lack of access to education, employment, shops, or healthcare services. Community viability: Blue spaces bring economic benefits to local areas. Looked-after blue features usually increase property value and attract visitors and tourists. (Thames 21, 2024). This should be positive for rural communities in supporting rural businesses, local employment and boosting the local economy.
Deprivation/ socio- economic status	Access to employment and services: The Department of Transport 2019 review shows that car ownership can have a positive impact on wellbeing by enabling people to access employment, education and training facilities as well as leisure facilities more easily than they would be able to through public transport. Those without access to a car, such as people from low socioeconomic backgrounds and deprived areas, are therefore more vulnerable to social isolation and unemployment, particularly in areas with poor public transport provision.
	Green/blue accessibility: Research indicates that there is a negative relationship between socio-economic status and access to natural spaces, stating individuals living in high areas of deprivation are less likely to have visited a natural space. This greatly widens the gap in health outcomes (Natural England, 2021). Further research has identified more specific statistics showing:
	• People on low incomes are less likely to live within a 5-minute walk of a green space (46% of those with an annual household income under £15,000 compared to 70% of people with an annual household income over £35,000).
	• Less likely to live somewhere where the streets are green (27% compared to 53%).
	• Less likely to report that there are good walking routes where they live (42% compared to 59%) (Ramblers, 2021).
	Research in Sheffield found that urban deprivation was more likely to affect people's contact with nature for wellbeing than ethnicity. Parks, neighbourhoods, roadsides and through-routes in deprived areas were more often described as having rubbish and not being looked after, which put some people off walking, cycling and visiting green spaces locally (University of Sheffield, n.d.).
	Studies suggest that blue space can have direct benefit for health, especially mental health and psycho-social wellbeing. There is also evidence for greater social connectedness during and after the Project or space is delivered (Easkey Britton, 2020). Although investment in public spaces may deliver mental health improvements to everyone, those living in more deprived areas stand to benefit the most. This is because access to blue space is likely to 'protect' people from needing to see their GP

Wider socio- economic disadvantage	Evidence for potential impacts
	and, in deprived communities, there are fewer healthcare resources per capita (Thompson DA, 2022).

Existing baseline

- 1.7.2 This section uses demographic, socio-economic and community data to represent the baseline statistics on PCGs in the study area. This illustrates the overall picture and helps to identify any areas with high proportions of PCGs, but will not represent the lived experience of every individual who has a protected characteristic.
- 1.7.3 There are 148,901 people residing in the LSOAs within the 5km study area, 51,650 of those live within LSOAs that fall within the draft Order limits.
- 1.7.4 Overall, with regard to PCGs:
 - Age: within the study area there are both slightly more children and young people than average, and more older people than average (meaning there are less people of working age). Life expectancy, of those within the study area, is over 2.5 years longer than the national average for both men and women.
 - **Disability**: overall there are relatively low levels of health deprivation and good health within the study area, compared with England as a whole. Self-rated health is higher than average, and rates of disability are lower.
 - Gender re-assignment: characteristics are broadly in line with regional and national averages and are reasonably consistent across the study area.
 - **Pregnancy/maternity**: the birth rate in the study area is about in line with national averages, but higher than Oxfordshire overall.
 - Race: the study area is less ethnically diverse overall compared to the regional and national averages.
 - Religion or belief: Christianity or no religion were most commonly reported by residents within the study area, with both groups combined accounting for over 90% of the population. This is slightly higher than the regional and national averages.
 - **Sex:** on average there is a higher proportion of female residents within the study area than male residents, in line with the regional and national averages.
 - **Sexual orientation**: the majority of the population within the study area identify as straight or heterosexual, slightly higher than the regional and national averages.
 - Intersectionality: this is difficult to infer from desk-based data research, and so will be explored through engagement, particularly in relation to users of impacted community resource receptors, or through the local authority working groups.
 - Wider socio-economic disadvantage
 - Rural communities: average population density within the study area is significantly higher than the regional and national average, at 2,552 residents per km². This average does not reflect that there are pockets of rurality, including LSOAs that have a population density of under 100 per km².
 - Deprivation/ socio-economic status: overall deprivation across the study area is very low.

1.7.5 In addition, a number of community resource receptors have been identified, which cater to a high proportion of PCGs.

Age

- 1.7.6 Table 1.5 shows that the population in LSOAs within the 5km study area is slightly younger on average than Oxfordshire and England. On average, 17.8% of the population in these LSOAs is under 15 years old, compared to Oxfordshire with 16.8% and England with 17.3%. The LSOAs in the study area also have a slightly higher average older population of 18.6% compared to Oxfordshire with 17.9% and England with 18.4%.
- 1.7.7 Within the draft Order limits, the percentage of older people is the same as within the study area, but a higher proportion of the population is younger (18.7%, see Table 1.5).

Table 1.5 Age across the study area at LSOA level

Area	% Children (0-14)	% Older People (65+)
Study area	17.8	18.6
Within the draft Order limits	18.7	18.6
Oxfordshire	16.8	17.9
England	17.3	18.4

Source: ONS, 2021a

- 1.7.8 Within the study area, Vale of White Horse 015H in Didcot and South Oxfordshire 015F in Wallingford LSOAs have the highest proportion of 0-14 year olds, with 28.2% and 28.3% of each area's population respectively, which is approximately 10.5 percentage points more than the average for the study area.
- 1.7.9 The LSOA in the study area with the highest proportion of people aged 65 and above is Vale of White Horse 003F in Abingdon (particularly areas east of Tilsley Park), at 30.2%, which is 11.8 percentage points more than the national average.
- 1.7.10 Table 1.6 shows that the area of Oxfordshire has a male life expectancy of 81.3 years and female life expectancy of 84.9 years, which is higher than the national averages of 79.1 years and 83.1 years respectively. The average life expectancy within the study area is 82.5 (male) and 85.7 (female), slightly higher than both the regional and national averages.
- 1.7.11 Life expectancy within the draft Order limits is slightly less than the study area, particularly for males: 81.6 years (male); and 85.6 years (female) (see Table 1.6).

Table 1.6 Life expectancy across the study area at MSOA level⁵

Area	Male life expectancy at birth (years)	Female life expectancy at birth (years)
Study Area (OHID, 2020)	82.5	85.7

⁶ Note the percentage of population has been calculated using 2021 Census Data

Area	Male life expectancy at birth (years)	Female life expectancy at birth (years)
Within the draft Order limits (OHID, 2020)	81.6	85.6
Oxfordshire (OHID, 2023)	81.3	84.9
England (OHID, 2023)	79.1	83.1

1.7.12 The MSOA Vale of White Horse 006 – Abingdon Town and West has the lowest life expectancy in the study area, at 79.3 years for males and 83.3 years for females.

Disability

- 1.7.13 On average, 14.6% of the population in LSOAs in the study area are disabled under the Equality Act, which is similar to the Oxfordshire average of 14.5% and less than the national average of 17.3%.
- 1.7.14 Those not disabled under the Equality Act but who have a long-term physical or mental health condition is higher than the regional average by 0.4 percentage points, and the national average by 1.5 percentage points (see Table 1.7).
- 1.7.15 The percentage of the population who are disabled under the Equality Act is marginally higher within the draft Order limits at 14.8%, but overall is aligned with the study area.

Table 1.7 The percentage of residents with limited long-term illness or disability at LSOA level

Area	Disabled under the Equality Act (% of usual population)	Not disabled under the Equality Act: Has long-term physical or mental health condition but day-to- day activities are not limited (% of usual population)	Not disabled under the Equality Act: No long-term physical or mental health conditions (% of usual population)
Study Area	14.6	8.3	77.1
Within the draft Order limits	14.8	8.1	77.1
Oxfordshire	14.5	7.9	77.6
England	17.3	6.8	75.9

Source: ONS, 2021b

- 1.7.16 The LSOA with the largest proportion of people disabled under the Equality Act, within the study area, is South Oxfordshire 014C in Henley-on-Thames with 21.5%, which is 6.9 percentage points more than the study area average.
- 1.7.17 Table 1.8 shows that 12,410 people within Oxfordshire as a whole were receiving a disability living allowance in 2018; this equates to 1.7% of the population, which when compared to the national average, is lower by 0.8 percentage points.

Table 1.8 Benefit claimants at regional and national level

Area	Total claimants (2018)	Total resident population (ONS, 2021c)	Percentage of population ⁶
Oxfordshire	12,410	725,291	1.7
England	430,570	56,490,048	2.5

Source: ONS, 2018

1.7.18 Table 1.9 also shows the number of valid Blue Badges held in Oxfordshire which totals 3.5% of the population, 1.5 percentage points lower than England as a whole.

Table 1.9 Number of Blue Badges held at regional and national level

Area	Total valid Blue Badges held by organisations and individuals (2024)	Total resident population (ONS, 2021c)	Percentage of population ⁶
Oxfordshire	25,300	725,291	3.5
England	2,836,900	56,490,048	5.0

Source: Department for Transport, 2024

- 1.7.19 The area has low levels of health deprivation across the study area, according to the English Indices of Multiple Deprivation (IMD)⁷. Over 60% (105 of 165) of the LSOAs in the study area are ranked in the 10% least deprived areas in England for health deprivation i.e. very low health deprivation. All other LSOAs are within the 50% least deprived in England (i.e. better than average). However, there is one exception the Vale of White Horse 008C in Abingdon on the south bank of River Thames, which is ranked among the 40% most deprived areas in terms of health deprivation nationally.
- 1.7.20 Overall, the study area has relatively low levels of health deprivation and good overall health, compared with England as a whole. Life expectancy and self-rated health are higher than the national average, and rates of disability are lower.

Gender reassignment

- 1.7.21 On average there is little variation across the study area, Oxfordshire and England when considering the proportion of individuals who identify differently from sex registered at birth, either as a trans woman, trans man or not specified in the data.
- 1.7.22 Table 1.10 shows that slightly more of the population identify as the same sex registered at birth within the draft Order limits (95.1%) and the study area (94.6%), compared to Oxfordshire (93.3%) and England (93.5%). The proportion of those who identify differently from the sex registered at birth within the draft Order limits and the study area is lower, by

⁶ Note the percentage of population has been calculated using 2021 Census Data

⁷ Note that some LSOA boundaries have changed and are different from the ones reflected in the IMD LSOA boundaries, this has been accounted for when looking at the IMD scores for the study area

- 0.1 percentage point, when compared to the regional average, but is the same as the national average.
- 1.7.23 There is little variation between MSOAs within the study area when considering those who's gender identity differs from sex registered at birth.

Table 1.10 Gender reassignment by location at MSOA level

Area	Gender identity the same as sex registered at birth (%)	All other gender identities (including trans man or trans woman)	Not answered
Study Area (MSOA)	94.6	0.1	5.1
Within the draft Order limits	95.1	0.1	4.6
Oxfordshire	93.3	0.2	6.1
England	93.5	0.1	6.0

Source: ONS, 2021d

Pregnancy and maternity

1.7.24 In 2023 there were 1,636 live births within the study area. Table 1.11 outlines the number of live births in the study area compared to Oxfordshire and England. Overall Oxfordshire has a low birth rate compared with England, but within the study area it is more in line with the national average. The study area accounted for 29.9% of the live births in Oxfordshire in 2023.

Table 1.11 Live births compared to total resident population at LSOA level

Area	Live births in 2023	Total resident population (ONS, 2021c)	Percentage of population ⁶
Study Area	1,636	148,901	1.1
Within draft Order limits	613	51,650	1.2
Oxfordshire	7,144	725,291	0.2
England	563,561	56,490,048	1.0

Source: ONS, 2023

Race

1.7.25 Overall, the study area has low ethnic diversity compared to Oxfordshire or England, as 91.2% of the people within the study area (and similarly, 91.3%, within the draft Order limits) are ethnically white, compared to 86.9% across Oxfordshire, or 81% across England (see Table 1.12).

Table 1.12 Ethnicity across the study area at LSOA level

Area	Asian, Asian British or Asian Welsh (%)	Black, Black British, Black Welsh, Caribbean or African (%)	Mixed or multiple ethnic groups (%)	White (%)	Other ethnic group (%)
Study Area	3.9	1.6	2.3	91.2	1.0
Within the draft Order limits	3.6	1.8	2.4	91.3	1.0
Oxfordshire	6.4	2.1	3.1	86.9	1.6
England	9.6	4.2	3.0	81.0	2.2

Source: ONS, 2021e

1.7.26 The most ethnically diverse LSOA in the study area is Vale of White Horse 003A in Wootton, with 41.3% reporting as non-white. Within Wootton, 19.5% of the population are Asian people, 15.6 percentage points more than study area average, and 13.4% Black people, 11.8 percentage points more than the study area average.

Religion or belief

- 1.7.27 Table 1.13 shows that Christianity is the largest religious group in the study area, comprising nearby half of the population at 48.4%, which Is mirrored within the draft Order limits (48.9%). This is slightly higher than Oxfordshire (47.3%) and national averages (46%). The next largest group within the study area have no religion (41.9%), which is also higher than Oxfordshire (40.0%) and national averages (36.7%). Within the draft Order limits a slightly larger proportion of the population have no religion (42.1%).
- 1.7.28 Most other faiths are at similar levels to the rest of Oxfordshire, apart from Muslim people at 1.3% which is 1.9 percentage points lower than Oxfordshire. Both the study area and Oxfordshire are generally less diverse in terms of faith compared to national averages.

Table 1.13 Faith by location across the study area (as a % of usual resident population) at MSOA level

Area	Christian (%)	Buddhist (%)	Hindu (%)	Jewish (%)	Muslim (%)	Sikh (%)	Other Religion (%)	No Religion (%)	Religion not stated
Study Area	48.4	0.5	0.9	0.2	1.3	0.2	0.5	41.9	6.2
Within the draft Order limits	48.9	0.5	0.7	0.2	1.0	0.2	0.5	42.1	5.9
Oxfordshire	47.3	0.5	0.9	0.3	3.2	0.2	0.6	40.0	6.9
England	46.3	0.5	1.8	0.5	6.7	0.9	0.6	36.7	6.0

Source ONS, 2021f

Sex

- 1.7.29 The study area comprises of a lower percentage of females (50.3%) than Oxfordshire with 50.6% and the national average with 51% (see Table 1.14).
- 1.7.30 Within the draft Order limits, the percentage of males and females is 50% respectively.

Table 1.14 Sex composition across the study area at LSOA level

Area	% Female	% Male
Study Area	50.3	49.7
Within the draft Order limits	50.0	50.0
Oxfordshire	50.6	49.4
England	51.0	49.0

Source: ONS, 2021g

1.7.31 The gender split varies at LSOA level within the study area, ranging from 54.2% females and 45.8% males in Vale of White Horse 014H in Wantage, and 40.9% females and 59.5% in Vale of White Horse 003A in Wootton.

Sexual orientation

1.7.32 Table 1.15 shows that the majority of the population within the study area identify as straight or heterosexual (90.5%), 2.1 percentage points higher than Oxfordshire and 1.1 percentage points higher than England. The percentage of gay or lesbian and bisexual people is slightly lower for the study area compared to the regional and national averages at 1.2% and 1.1% respectively. Within the draft Order limits the percentage of those who identify as straight or heterosexual is slightly higher than the study area at 91.1%.

Table 1.15 Sexual orientation by location across the study area at MSOA level

Area	Straight or Heterosexual (%)	Gay or Lesbian (%)	Bisexual (%)	All other sexual orientations (%)	Not answered (%)
Study Area	90.5	1.2	1.2	0.3	6.8
Within the draft Order limits	91.1	1.2	1.1	0.3	6.3
Oxfordshire	88.4	1.5	1.7	0.4	7.9
England	89.4	1.5	1.3	0.3	7.5

Source: ONS, 2021h

1.7.33 The MSOA with largest reported proportion of gay and lesbian people, within the study area, is South Oxfordshire 009 in Didcot Ladygrove, with 1.7%, which is higher than both the regional and national average by 0.2 percentage points. The MSOA with the largest proportion a bisexual individuals is South Oxfordshire 013 in Didcot South East, with 2%, which is also higher than the Oxfordshire and England averages.

Intersectionality

1.7.34 Intersectionality will be further explored through engagement with relevant equalities stakeholders to understand if any prominent intersectionality issues are present amongst the local communities.

Wider socio-economic disadvantage

Rural communities

1.7.35 The LSOAs in the study area have an average population density of 2,552 residents per square kilometre (km²) which is higher than Oxfordshire with 278 residents and England with 434 residents per km². However, there are ten LSOAs that have under 100 residents per km², with LSOA West Berkshire 001C in Chieveley and Cold Ash, Newbury has the lowest with just 27 residents per km².

Deprivation and socio-economic status

- 1.7.36 The English Indices of Multiple Deprivation (IMD) measures relative levels of deprivation across LSOAs in England. The measures of IMD are based on 37 separate indicators across seven domains of deprivation, which include:
 - Income
 - Employment
 - Education, skills and training
 - Health deprivation and disability
 - Crime
 - Barriers to housing and services and
 - Living environment.
- 1.7.37 The area has low levels of deprivation, according to the English IMD data (MHCLG, 2019)⁷. Over 60% of the LSOAs in the study area are within the 20% least deprived areas of England. Only one LSOA is within the 30% most deprived Vale of White Horse 008C in Abingdon (south of the River Thames), with its deprivation heavily influenced by education skills and training, income and employments.
- 1.7.38 The percentage of economically active residents in employment within the study area is 97.1% in the LSOAs (ONS, 2022). This is slightly higher than the figure for Oxfordshire as a whole (96.7%). These figures represent a higher rate of employment compared to the national average for England (95.1%).
- 1.7.39 The percentage of economically active residents who are unemployed is 2.9% in the LSOAs within the study area. This is slightly lower than the figure for Oxfordshire as a whole (3.3%). These figures represent a lower rate of unemployment compared to the national average for England (4.9%).
- 1.7.40 In terms of young people, and access to employment or training, Oxfordshire has lower levels of 16 and 17 year olds classified as NEET (Not in Employment, Education or Training) than the South East or England averages. In all cases there is a general trend towards growing proportions of young people as NEETs.

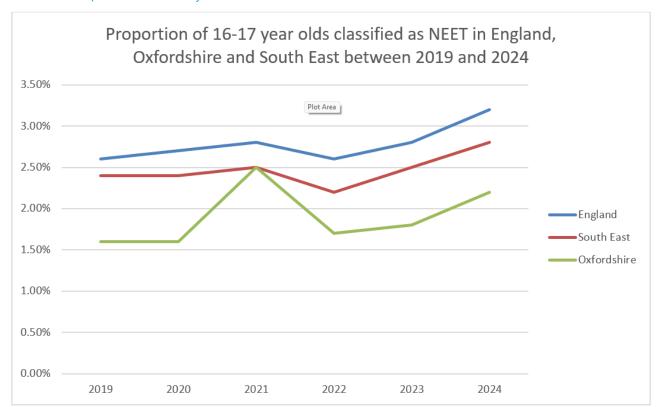


Plate 1.1 Proportion of 16-17 year olds classified as NEET 2019-24

Source Department for Education, 2025

1.7.41 Social Grade is discussed in detail in the PEI Report Chapter 16: Human health, however in general the study area has a higher proportion of people in higher and intermediate managerial, administrative and professional occupations than regional and national averages, and lower proportions in semi-skilled and unskilled manual and lowest grade occupations than regional and national averages.

Community Receptor Assets

- 1.7.42 There are over 1,000 community facilities and services which fall within the 5km study area. Of particular interest for PCGs are nurseries, primary and secondary schools, further education facilities, community halls and centres, places of worship, hospitals, health centres, GP practices, care homes, and leisure facilities which provide specific activities for PCGs e.g. riding for the disabled.
- 1.7.43 There are a further over 900 open spaces within the 5km study area, including public open spaces, nature reserves, woodlands, amenity land, playgrounds, ponds, public parks, public gardens and cemeteries.
- 1.7.44 There are 44 footpaths, 33 bridleways, 23 restricted byways and 22 Byways Open to All Traffic (BOATs) within the 5km study area. The Thames Path National Trail runs along the eastern side of the River Thames within the draft Order limits boundary. This trail is mainly flat and considered to be suitable for people with a wide range of abilities and many places along it can be accessed by people with limited mobility (National Trails, n.d.-a). The Ridgeway National Trail runs to the south of Wantage being partly within the 5km study area. This trail is considered to be more challenging, regardless of mobility level. However,

it offers miles of wide track without gates or stiles making it relatively accessible compared to other off-road routes (National Trails, n.d.-b).

Future baseline

- 1.7.45 The future baseline considers the future conditions expected in the study area.
- 1.7.46 The regional study area of Oxfordshire's population is set to grow from 687,524 in 2018 to 750,634 in 2043. This is a 9.2% increase in the overall population of the area, which is lower than the national population increase of 10.3% (ONS 2019, ONS 2020).
- 1.7.47 The proportion of older population is projected to increase by 44.7% nationally between 2018 2043. The increase in older population is higher for the area of Oxfordshire with an increase of 51.3% in the same timeframe.
- 1.7.48 With regards to employment, between 74,590 and 102,835 additional jobs were projected in Oxfordshire between 2020 2040. In comparison to historical job trends for the area, the business-as-usual scenario suggests slower growth over the next two decades. However, this still exceeds the planning assumptions and projected growth highlighted in the 2014 Oxfordshire Strategic Housing Market Assessment (SHMA) (OxLEP 2025).
- 1.7.49 According to the Green Space Index (GSI) (2024), based on the current provision of parks and green spaces, the provision of green space per person would decrease from 30 square metres (sqm) to 28sqm by 2043. This would reduce further and faster in areas where most population growth is expected.
- 1.7.50 The population within the study areas is anticipated to grow over time, with population in the Vale of White Horse district predicted to rise by 23% between 2018 2043, with an annual rate of growth of 0.83%, (ONS, 2019). For South Oxfordshire district, the population is projected to increase by 6.7% at an annual rate of growth of 0.26%.
- 1.7.51 In terms of population structure, in both authorities, it is projected that the proportion of the population within the 0 to 19 age group will decrease between 2018 2043 by 42% for Vale of White Horse and 21% for South Oxfordshire. A similar trend is projected for the age group of 25 to 44 years old a decrease of 21% for Vale of White Horse district and 39% for South Oxfordshire district is projected. For the 65+ age group, there is a projected increase of 27% for Vale of White Horse district and a 9% decrease for South Oxfordshire. Population growth is likely to increase demand for housing and social infrastructure in the area whilst changes to population structure are likely to have implications for the types of social and community infrastructure required.

1.8 Assessment of potential equality effects

- 1.8.1 The potential disproportionate and differential effects of the Project on PCGs at this stage are presented in this section. Table 1.16 presents potential equality effects during the construction of the Project and Table 1.17 presents potential equality effects during the Project's operation. It should be noted that the assessment is based on design to date and preliminary likely significant effects from the PEI Report. A number of assumptions are made in the PEI Report to reflect a reasonable worst-case scenario at this stage, so effects in the EqIA may change as the design and information to support assessment evolves.
- 1.8.2 Recommended actions are intended to support the Applicant in illustrating compliance with equalities legislation and policy, through further engagement and targeting mitigation secured through the DCO to minimise adverse disproportionate or differential effects, or amplify beneficial ones. Recommended actions are not essential mitigation in EIA terms, but elements of these recommended actions can be secured through DCO requirements, design principles and the CoCP. Recommended actions will be kept under review through the development of the ES, detailed construction design and into operation.

Construction

Table 1.16 Assessment of potential equality effects during construction

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
Impact on residential properties (loss of access)	PEI Report Chapter 15: Socio-economics and communities does not identify any areas where access to residential properties could be temporarily affected due to road or lane closures during construction. Therefore, no effects for PCGs have been identified at this stage.	None	None	None

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
Impact on residential properties (loss of homes)	The PEI Report Chapter 15: Socio-economics and communities states that up to 30 homes are located within the draft Order limits (shown in Figure 15.5: Residential dwellings, community facilities, business and tourism receptors of the PEI Report Chapter 15: Socio-economics and communities). This is expected to result in disruption for residents due to relocation, which can lead to stresses, particularly if people cannot easily remain in the area and lose access to social networks, religious communities, support groups or existing healthcare provisions for example. The vulnerability of individuals within these households is unknown and will vary between the individuals affected. For example, older people and those with mental or physical health conditions or disabilities may find it more difficult to adapt, which would have an adverse differential effect for these PCGs. Children may also be more vulnerable if the relocation requires a change of school, creating a potential adverse differential effect on children. The precise demographic profile of affected residents is not known. There could be permanent, adverse differential effects for children, older people and disabled people where they are resident in affected properties.	None	Children (adverse effect) Older people (adverse effects) Disabled people (adverse effect)	Continue engagement with residents of affected properties, for example through a support programme, to understand any impacts to people with protected characteristics, and consider targeted support for relocation planning, where appropriate.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
Access to schools and educational facilities	PEI Report Chapter 12: Traffic and transport states that construction traffic is expected to approach the Project primarily via the A34. To facilitate access there will be road upgrades on some of these routes. This may cause changes to access and environmental amenity for nearby receptors, including: Caldecott Primary School Caldecott Junior School Abingdon Preparatory School Drayton Community Primary School Gems Wantage Primary Academy Little Pioneers Children's Day Nursery The Manor Preparatory School (adjacent to the A34) Larkmead School (secondary) (adjacent to the A34) St Helen and St Katherine (secondary) (adjacent to the A34) Additionally, road works will be required along the A415 to facilitate some traffic accessing the site which will travel east	None	Disabled, young people at The Unicorn Academy (adverse effect)	Continued liaison with schools which are accessed by impacted roads during construction to support students and their guardians to plan ahead as appropriate. Continue engagement with The Unicorn School to understand further the specific sensitivities relating to the protected characteristics of the students that will be impacted by journey time and access changes.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	 along the A415 in Abingdon. There are three education facilities located in the A415 corridor between the A34 and Market Place Abingdon: The Unicorn School (specialist school for children with learning differences, specifically dyslexia, dyspraxia and dyscalculia) Carswell Community Primary School Mctimoney College of Chiropractic Impacts on the school environments and/or access to the schools may cause stress for pupils, especially those who are neurodiverse. Although effects on these educational facilities may be noticed by users, they are unlikely to prevent access or alter education experiences. Therefore, based on current understanding of the schools and impacts on traffic, it is not considered likely that disproportionate or differential effects are likely to occur for PCGs at the schools listed above, with the exception of the Unicorn School. The Unicorn School in Abingdon is a specialist school for children with learning differences (specifically dyslexia, 			Further consider opportunities within the design to improve journey times and access where routes are impacted by the construction of the Project.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	dyspraxia and dyscalculia) located within the study area. Dyslexia can manifest as difficulties with navigation and way finding in unfamiliar circumstances, and heightened sensitivity to noise and visual stimuli. Therefore, users of this educational facility will include children who are particularly vulnerable to the effects assessed in the PEI Report, such as traffic and transport, air quality and noise changes.			
	PEI Report Chapter 12: Traffic and transport has identified potential for a likely significant effect of delay to drivers at the interchanges of the A415 with the A34 and Colwell Drive. These junctions would likely form part of the access route to this facility for some students at The Unicorn Academy, who may have specific access arrangements or requirements in place.			
	Overall, these effects may cause temporary disruption and stress to some students at The Unicorn Academy, and alter existing access arrangements. This may create an adverse differential effect			

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	on the children and young people who attend this school, especially those with heightened sensitivity to noise and visual stimuli.			
Noise impacts on learning environments at schools and educational facilities	PEI Report Chapter 14: Noise and vibration has identified significant effects from construction activity noise to the community in Steventon. There are two educational facilities located in Steventon: • St Michael's Church of England Primary School • Duchess Nursery St Michael's Church of England Primary School includes a forest school element (where learning takes place outside), and Duchess Nursery use outdoor spaces as part of their continuous provision; which means that children using those facilities may be more impacted by construction noise. This may create an adverse differential effect on the children who attend this school and nursery.	None	Children at St Michael's Church of England Primary School, Duchess Nursery (adverse effect)	Continued engagement with these two educational facilities to further understand the potential noise effects on people with protected characteristics attending this school/nursery. Through design development, including mitigation set out in the Draft commitments register (PEI Report, Appendix 2.2: Draft commitments register), develop

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
				measures to reduce or avoid noise effects where possible.
Access to healthcare facilities and emergency services	PEI Report Chapter 12: Traffic and transport states that, during construction, there will be road upgrades, a potential new access road to the Project, and additional traffic along the section of the A415 east of the A34. This has the potential to cause changes to access to, and the environment of healthcare facilities located in this area, notably: • Abingdon Community Hospital • Marcham Road Health Centre • Ock Street Clinic Dentist • Rejoice Dental Practice • Newmedica Eye Care Clinic This could result in adverse disproportionate and differential effects on PCGs, such as older people, disabled people and pregnant women, as they are typically more likely than the general	Disabled people (adverse effect) Older people (adverse effect) Pregnant women (adverse effect)	Disabled people (adverse effect) Older people (adverse effect) Pregnant women (adverse effect)	Continued engagement with emergency response services linked to John Radcliffe Hospital, Abingdon Fire Station and Abingdon Police Staton to further understand any potential impacts to emergency response during construction. Based on their feedback, consider if further measures to manage traffic during construction are

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	population to require use of healthcare and emergency services.			required or deliverable to
	Additionally, PEI Report Chapter 15: Socio-economics and communities also reports temporary significant effects on public services (including health and emergency) due to an assumed temporary increase in population in the study area, associated with an influx of construction workers coming to site from beyond the study area and using public services. This increased demand for healthcare services locally, may result in potential for a temporary adverse differential effect on PCGs who are more likely than the general population to require access to healthcare and emergency services, and may find it more difficult to do so with increased demand.			support emergency response.
	PEI Report Chapter 12: Traffic and transport has identified a potential likely significant effect of delays on drivers at the junctions of the A415 with the A34 and Colwell Drive. The stretch of the A415 between these two junctions provides			

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	access to the Abingdon Community Hospital and potential access to:			
	 John Radcliffe Hospital in Oxford Abingdon Fire Station Abingdon Police Station. Delays along the A415 could impact emergency response times for police and fire services travelling from Abingdon stations, and for ambulances travelling from Oxford to Abingdon. During construction, this may result in adverse differential effects for PCGs, such as people with disabilities, older people or pregnant women, who may rely more on emergency services than others. 			
Access to and use of registered common land	PEI Report Chapter 15: Socio-economics and communities identifies a number of areas in which access to, and use of, registered common land could be temporarily affected by construction works associated with the Project. These are: Heywoods Close (Oxfordshire) Cowhane (Oxfordshire)	None	None	None

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	Several pieces of land in the parish of West Hanney (Oxfordshire) The assessment reports that the land listed is infrequently used and the proposed construction works are unlikely to result in significant effects for nearby communities. It is not anticipated that there would be any disproportionate or differential effects for PCGs in these areas in relation to access to and use of registered common land.			
Access to open spaces	There will be increased traffic associated with construction vehicles, which may cause delays for access routes to open and green spaces, particularly for users travelling west or south out of Abingdon. As discussed in the evidence review, access to open space for leisure and recreation is particularly important for some PCGs, such as children, older people and disabled people, and can have important wellbeing benefits for these groups. PEI Report Chapter 12: Traffic and transport identifies potential for three likely significant, in addition to other non-	None	None	None

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	significant traffic and transport effects throughout the study area which may have a combined effect on the overall ease of access to active travel and open spaces. However as these effects are diffused across the study area it is not anticipated that there would be disproportionate or differential effects for people with protected characteristics accessing green and open spaces.			
Loss of or changes to open spaces	As discussed in the evidence review, access to and use of open space for leisure and recreation is particularly important for some PCGs, such as children, older people and disabled people, and can have important wellbeing benefits for these groups.	Older people in Abingdon (adverse effect)	None	Through design development, reduce or remove land take effects at these allotments. Where this is not possible, consider
	The PEI Report Chapter 15: Socio- economics and communities makes a worst-case assumption that a very small part of the edges of the West End Allotments could be removed during construction. Potential alternative land to replace any land lost at West End Allotments has been proposed by the Project, but this is not yet confirmed.			opportunities to replace allotments elsewhere to serve this part of Abingdon, or embed alternative open space provision.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	Currently, there is an overall small loss of land within the Project. Additionally, the remaining allotments may experience environmental amenity effects, including air quality, noise and visual effects due to construction activities. Whilst there are two other allotment sites in Abingdon, allotments tend to serve localised communities and additionally may not have capacity for new members. Older people tend to make up a higher than average proportion of allotment users. It is unclear currently whether the two other allotment sites in Abingdon, have capacity for new members, or if they would be suitable for the users of the impacted site. Although the nature and scale of the impact on these community facilities is not known at this time, on a precautionary basis it is considered that there could be a disproportionate impact on older people due to the partial loss of West End Allotments.			Should a loss of allotment land remain within the DCO design, continued engagement with West End Allotments to understand if a higher than average proportion of users fall within PCGs, and seek to identify further mitigation for those disproportionately impacted.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
Impacts on amenity at open spaces	PEI Report Chapter 14: Noise and vibration has identified potential significant noise effects associated with construction traffic travelling through Steventon which, on a precautionary basis, may cause changes to environmental amenity for users of Steventon Allotments. This is the only allotment site in Steventon. Whilst there are other sites in the study area, allotments tend to serve extremely localised communities and so are not expected to be viable alternatives. It is also unclear currently whether other allotments have capacity for new members, or if they would be suitable for the users of the impacted site. Although the nature and scale of the impact on users of Steventon allotments is not known at this time. As above, older people tend to make up a higher than average proportion of allotment users, therefore on a precautionary basis it is considered that there could be a disproportionate impact on older people	Older people in Steventon (adverse effect)	None	Continued engagement with Steventon Allotments to understand if a higher than average proportion of users fall within PCGs. Through design development, including mitigation set out in the Draft commitments register (PEI Report, Appendix 2.2: Draft commitments register), develop measures to reduce or avoid noise effects where possible.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	due to temporary construction noise impacts. The PEI Report states that there will be changes associated with the Thames intake/outfall works at Drayton Road Allotments, which may cause changes to environmental amenity, including air quality and the noise and visual environment. However, none of these environmental changes have been assessed as significant at this stage, and are therefore not likely to result in adverse effects for PCGs.			
Impact on other community facilities	PEI Report Chapter 14: Noise and vibration has identified significant effects from construction noise to the South Oxfordshire Crematorium and Memorial Park. PEI Report Chapter 15: Socio-economics and communities also reports that there will be temporary adverse amenity effects on Grove Cemetery and South Oxfordshire Crematorium and Memorial Park due to increased noise and visual effects acting in combination.	Older people (adverse effect) Black and Ethnic Minority groups (adverse effect) Religious groups (adverse effect) People on low income/ unemployed	None	Continued engagement with managers of each of these cemeteries and crematoriums, including more detailed understanding of how sites are used (spatially) and if the facilities are used by high

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	As crematorium and cemeteries are generally places of quiet reflection, this is anticipated to result in a change to amenity, character and user's ability to use these facilities as intended. This has the potential to create an adverse differential impact on older people as this PCG tends to make up a higher than average proportion of cemetery users. Additionally, South Oxfordshire Crematorium and Memorial Park offers low-cost cremations and Asian funeral and cremation services. Effects at this facility could result in an adverse disproportionate effect for Black and Ethnic Minority groups, religious groups and people on low income/ unemployed people as these PCGs may be more likely to use these facilities due to the type of service offered.	people (adverse effect)		numbers of people with protected characteristics. Through design development, including mitigation set out in the Draft commitments register (PEI Report Appendix 2.2: Draft commitments register), develop measures to reduce or avoid noise and visual effects where possible.
Noise and visual (in- combination) impact on residential properties	PCGs including children, older people (including those with conditions such as dementia, disabled people (such as those who are neurodivergent or living with certain chronic health conditions), and pregnant women can be particularly	None	Children (adverse effect) Older people (adverse effects)	Through design development, including mitigation set out in the Draft commitments register (PEI

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	sensitive to noise. Older people and some groups of disabled people, including people with autism, can be more sensitive to changes in their environment, including in the visual environment. PEI Report Chapter 15: Socio-economics and communities identifies areas where residents could experience temporary construction effects due to noise and visual effects acting in combination. These areas include parts of: Denchworth East Hanney Steventon Culham Drayton Grove Garford Abingdon-on-Thames Marcham and Marcham Mill The precise demographic profile of affected residents is not known. There could be temporary, adverse differential effects for children, older people, disabled		Disabled people (adverse effect) Pregnant women (adverse effect)	Report, Appendix 2.2: Draft commitments register), develop measures to reduce or avoid noise and visual effects where possible. Continued engagement with impacted residents to understand any protected characteristics, and understand if the Project can mitigate in response to their needs.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	people or pregnant women where they are resident in affected properties.			
Noise impacts ⁸ on residential properties	Although effects may still be noticeable to communities, PEI Report Chapter 14: Noise and vibration reports that effects from construction traffic and construction activities are generally not expected to be significant. The noise assessment, however, identifies potential for significant effects from construction noise including in Challow, residential properties along Mill Road, south-east Abingdon around the Abingdon Marina Park. The precise demographic profile of affected residents is not known. There could be temporary, adverse differential effects for children, older people, disabled people or pregnant women where they are resident in affected properties	None	Children (adverse effect) Older people (adverse effects) Disabled people (adverse effect) Pregnant women (adverse effect)	Through design development, including mitigation set out in the Draft commitments register (PEI Report, Appendix 2.2: Draft commitments register), develop measures to reduce or avoid noise effects where possible. Further engagement by the construction contractor with impacted residents to understand any protected

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⁸ This section, noise impact, only considers areas that have not already been considered above for noise and visual in-combination effects. Equality Impact Assessment Classification - Public

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
				characteristics, and understand if the Project can mitigate in response to their needs.
Noise impacts on open space and PRoW	PEI Report Chapter 14: Noise and vibration identifies changes to the noise environment that may impact environmental amenity and sense of place at some open and green spaces near to the draft Order limits, and PRoW.	Children (adverse effect)	Children (adverse effect) Older people (adverse effect)	Through design development, including mitigation set out in the Draft commitments register (PEI
	Oxfordshire has low levels of physical activity in active children, and the study area has a higher percentage of children when compared to the regional and national averages. This therefore could create a temporary adverse disproportionate effect on children. Children and older people, are more likely			Report, Appendix 2.2: Draft commitments register), develop measures to reduce or avoid noise and visual effects where possible.
	to be more susceptible to, or have greater concerns about, amenity changes and impacts on PRoW and other pedestrian			Further engagement by the construction

⁹ This section, noise impact, only considers areas that have not already been considered above for noise and visual in-combination effects. Equality Impact Assessment Classification - Public

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Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	routes. Therefore, on a precautionary basis these noise effect could create a temporary adverse differential effect for children and older people.			contractor with impacted residents to understand any protected characteristics, and understand if the Project can mitigate in response to their needs.
Visual impacts ¹⁰ on residential properties	PEI Report Chapter 9: Landscape and visual has identified potential for further significant visual effects in West Hanney and Frilford. As some groups of disabled people, including people with autism, can be more sensitive to changes in their visual environment, there could be temporary adverse differential effects for disabled people where they are resident in affected properties. Older people and those that are less mobile are also more likely to be upset by	None	Disabled people (adverse effect) Older people (adverse effect)	Through design development, including mitigation set out in the Draft commitments register (PEI Report, Appendix 2.2: Draft commitments register) and measures in the CoCP, develop measures to reduce or avoid

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¹⁰ This section, visual impact, only considers areas that have not already been considered above for noise and visual in-combination effects. Equality Impact Assessment Classification - Public

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	changes to views and outlooks, and rely on visual cues or landmarks to navigate or orient themselves, causing changes to potentially affect their independence and safety. Therefore, visual changes could result in a differential effect for disabled and older people resident is affected properties.			noise and visual effects where possible. Further engagement by the construction contractor with impacted residents to understand any protected characteristics, and understand if the Project can mitigate in response to their needs.
Visual impacts ¹¹ on open space and PRoW	PEI Report Chapter 9: Landscape and visual identified potential for likely significant visual effects to open spaces within the study area. Changes to visual environments may also impact environmental amenity and sense of place	Children (adverse effect)	Children (adverse effect) Older people (adverse effect)	Through design development, including mitigation set out in the Draft commitments register (PEI Report, Appendix 2.2: Draft

¹¹ This section, visual impact, only considers areas that have not already been considered above for noise and visual in-combination effects. Equality Impact Assessment Classification - Public

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	at some open and green spaces near to the draft Order limits. Children and older people are more likely to be more susceptible to, or have greater concerns about, amenity changes. Oxfordshire has low levels of physical activity in active children, and the study area has a higher percentage of children when compared to the regional and national averages. This therefore may create a temporary adverse disproportionate effect on children.			commitments register), develop measures to reduce or avoid noise and visual effects where possible. Further engagement by the construction contractor with impacted residents to understand any protected characteristics, and understand if the Project can mitigate in response to their needs.
Changes in air quality	PCGs such as children, older people, pregnant women, and those living with certain chronic health conditions, can be particularly sensitive to changes in air quality. Additionally, some PCGs, including Black and Minority Ethnic groups	None	None	None

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	and people on low income or unemployed people can be more likely to live in areas with poor air quality and high levels of pollution. PEI Report Chapter 13: Air quality assesses the potential for effects on air quality during construction as a result of construction and no significant effects are identified at this stage. Therefore, it is not considered that the construction of the Project would create any adverse differential or disproportionate effects for PCGs.			
Traffic and transport impacts	As discussed in the evidence review, PCGs including children, young people, older people, disabled people, and people from an ethnic minority background can be more likely to use public transport than other groups of the population, and some groups, including children, can be more likely to experience differential effects as a result of severance of routes, road safety concerns associated with the presence of construction traffic on local roads, and impacts on PRoW and other pedestrian routes. Delays for road users also have	None	None	None

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	the potential to result in differential effects for children and for disabled people accessing schools and other community facilities.			
	Where it is considered that effects on road users could impact their access to particular community facilities or open spaces, this is discussed in rows above. Construction activities which affect PRoW or other active travel routes as a result of delays associated with temporary closures and diversions are discussed in the row below.			
	PEI Report Chapter 12: Traffic and transport identifies that construction traffic may impact routes in Steventon and Drayton; however, any increased traffic movements in this area are not expected to be significant. Therefore it is not considered likely that there would be differential or disproportionate effects for PCGs living in these areas, even though these effects may still be noticeable to the community.			
	The traffic and transport assessment has also identified a likely significant			

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	severance effect for non-motorised users (NMU) due to traffic flows on A415 Marcham Road between Marcham and Farringdon Road, and potential for a likely significant effect causing delay to drivers at the interchanges of the A415 with the A34 and Colwell Drive. The traffic and transport assessment has identified other non-significant traffic and transport effects throughout the study area, including to public transport, which may have a minor combined effect on the overall ease of access to community services and between communities.			
	This is not likely to significantly discourage users of community resources, from accessing them, therefore, it is not considered likely that there would be differential effects for PCGs accessing community services due to traffic and transport effects.			
	Further information on construction traffic routes will be provided in the Environmental Statement (ES) and EqIA report that accompanies the DCO submission.			

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
Public Rights of Way (PRoW)	On a number of PRoW routes, diversions and temporary closures are expected to result in increased journey times for pedestrians using these PRoW and cyclists on National Cycle Network (NCN) 5. PEI Report Chapter 12: Traffic and transport has identified potential for three likely significant and other non-significant traffic and transport effects on PRoW throughout the study area which may have a combined effect on the overall ease of access to active travel. These impacts are not expected to significantly discourage access, but they may cause displacement to alternative routes. Increased traffic associated with construction vehicles may cause delays or impact environmental amenity and sense of place of some PRoW, including the Vale Way, the Thames Path, and the Ridgeway National Trail which are more likely to be used recreationally. Overall, these changes may negatively impact levels of usage for these resources	None	Children (adverse effect) Disabled people who are sensitive to change (adverse effect) Older people (adverse effect) Pregnant people/mothers with small children (adverse effect).	Through development of the construction management measures, consider measures to support access to diverted PRoW and NCN for PCGs, such as wayfinding, surfaces, and use of gates.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	due to reduced opportunity, attractiveness and amenity, and concerns about road safety. PCGs such as children or disabled people who are sensitive to change, are more likely to be more susceptible to, or have greater concerns about, safety and amenity changes. As Oxfordshire has low levels of physical activity in children and the study area has a higher percentage of children than the regional and national averages, the effects, although not significant for the general population, have temporary, adverse differential effects for children.			
Safety and security	During construction, there will be environmental amenity changes to the outdoor environment. This may reduce public use of certain routes and areas, leading to a decrease in passive surveillance and increased concerns about safety. The stopping up of the existing Steventon to East Hanney road will create a cul-desac area with a small parking area which may attract antisocial behaviour. Although actual crime and anti-social behaviour are	None	Adolescents (adverse effect) Older people (adverse effect) People with disabilities (adverse effect) People from ethnic and religious minority backgrounds (adverse effect)	Through design development, including mitigation set out in the Draft commitments register (PEI Report, Appendix 2.2: Draft commitments register), develop measures to reduce safety risk

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	unlikely to significantly increase, the community may have the perception or fear or increased crime and antisocial behaviour. As discussed in the evidence review, PCGs, adolescents, older people, people with disabilities, people from ethnic and religious minority backgrounds, LGBTQ+ people and women, can be more vulnerable to crime, fear of crime or likely to experience concerns about their personal safety when walking alone or in unfamiliar environments. The fear of crime is the anxiety people feel about potentially being a victim of crime. It does not necessarily relate to the probability of being a victim of crime, but the factors listed above can influence this fear. It can affect their access and participation to social life. This fear of crime could result in differential effects. During construction there will be additional road traffic, including HGVs,	effects	LGBTQ+ people (adverse effect) Women (adverse effect)	and perceptions of safety risk for PCGs. Consider measures through design development of construction compounds and construction sites that avoid the creation of dark/hidden spaces, CCTV, lighting and access control in car parks, and where required traffic regulation orders to prevent antisocial parking. Consider securing measures to
	and road diversions in place. It is assumed that the majority of construction material vehicles would enter and leave the site			ensure safety in and around construction

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	from a main access point on the A415 (although other access points will be necessary from the A338, A417, Hanney Road, and B4017). These are the main access routes for many of the villages in the study area. The construction of the Project could therefore increase risk of transport-related accidents and injuries, which is a particular concern for some PCGs, such as children. However, PEI Report Chapter 12: Traffic and transport has identified no likely significant effects to road safety due to changes in traffic flows. Impacts to road safety from additional traffic and road diversions and the safety of NMU route alterations are mitigated by a range of embedded and good practice measures. Therefore, it is considered that there are not likely to be disproportionate or differential effects for PCGs from the potential for increased risk of transport related accidents and injuries. Safety around construction sites can be a particular concern for children. Health and Safety Executive (HSE) guidance on			compounds in the CoCP. This could include consideration of, for example, hoardings, lighting, pedestrian access across site entrances, security, and emergency contact details. Consider engagement with local schools to raise awareness of the risks associated with construction sites and activity.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	health and safety on construction sites highlights the importance of measures such as maintaining a secure site, using barriers or covering excavations and pits, isolating and immobilising vehicles and plant, storing building materials securely, removing ladders, and locking away hazardous substances.			
Employment	PEI Report Chapter 15: Socio-economics and communities assumes that the peak number of construction workers on site at any one time would be around 1,800 workers. As noted in the evidence review, the construction sector nationally has an ageing workforce which has led to skills gaps and labour shortages. National data shows that groups including women, disabled people and people from Black and Minority Ethnic backgrounds have historically been underrepresented in the sector. The local baseline shows that the area has generally lower levels of unemployment and people with higher skill levels. Nationally, the proportion of people from ethnic minority backgrounds within the UK's workforce is expected to rise to almost 21% by 2051. This is currently not reflected in the	Young people (beneficial effect)	Young people (beneficial effect) Disabled people (beneficial effect) Women (beneficial effect) Black and Minority Ethnic groups (beneficial effect)	Engage with stakeholders and the local supply chain to understand local barriers to employment in the construction sector. Consider measures for inclusion in a Community Employment Plan (CEP) or equivalent, that could address barriers and increase access to employment opportunities for all groups, including for example, consideration of

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	majority of workplaces, with many ethnic minorities concentrated in lower-paying jobs (McGregor-Smith, 2017). Therefore, with targeted efforts, there could be an opportunity to create local job opportunities and increase access to jobs, specifically in the construction sector, for underrepresented groups within the workforce. This may present beneficial differential effects for PCGs that may previously have been underrepresented in the construction workforce, and the potential for beneficial differential and disproportionate effects for young people in the Oxfordshire (regional) employment market.			local procurement to encourage engagement by local businesses.
	A Community Employment Plan (CEP) or equivalent will be produced following DCO submission. This document will set out measures to support the delivery of the socioeconomic employment benefits of the Project. This presents an opportunity to work with local stakeholders and businesses and the wider supply chain to develop and embed actions that could increase access to construction employment for PCGs. PCGs. Further information will be provided in the EqIA report that accompanies the DCO submission.			

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
Training opportunities	The construction of the Project would create opportunities for training and apprenticeships throughout the construction phase. This presents an opportunity to address the issues related to an ageing construction workforce and skills shortages within the construction sector. There is therefore potential for beneficial differential effects for young people, including those who may be NEET. There could also be beneficial differential effects for people from other PCGs that have tended to be under-represented in apprenticeship programmes in the construction and engineering sectors, including women, disabled people, and people from Black and Minority Ethnic groups. A CEP or equivalent, that will be produced for the DCO submission provides an opportunity to work with local training providers and employers to develop and embed actions that could increase access to apprenticeships and other training opportunities for PCGs. Further information will be provided in the EqIA that accompanies the DCO submission, drawing on the measures included in a CEP (or equivalent). At this stage, it is considered that there is the potential for job opportunities	Young people (beneficial effect)	Young people (beneficial effect) Disabled people (beneficial effect) Women (beneficial effect) Black and Minority Ethnic groups (beneficial effect)	Engage with stakeholders and the local supply chain to understand barriers to training and apprenticeships in the construction sector, including low engagement and take-up among PCGs. Consider measures for inclusion in a CEP (or equivalent) that could address barriers and increase access to training opportunities for PCGs.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	created during the construction of the Project to result in beneficial differential effects for PCGs that may historically have been underrepresented in the sector.			
	There is also the potential for beneficial disproportionate effects for young people in the Oxfordshire (regional) employment market.			

Operation

Table 1.17 Assessment of potential equality effects during operation

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
Impacts on access due to increased trips to the area	PEI Report Chapter 12: Traffic and transport states that during operation there will be a small amount of additional road traffic, but there will be no likely significant effects to road safety due to changes in traffic flows. This takes into account a range of embedded	None	None	None

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	mitigation measures, that are set out in PEI Report Chapter 12: Traffic and transport.			
	PEI Report Chapter 12: Traffic and transport has also identified no significant impact on emergency services response times due to additional road traffic or any diversions. as journey times by road are not expected to substantially increase. Therefore, it is not considered likely changes to traffic flows during operation would result in disproportionate or differential effects for PCGs.			
Impacts on access due to parking in villages to access the reservoir facilities	Primary access to the site and main car park is from the A415. At Steventon, East Hanney and Drayton, additional NMU access points to the Site are proposed, accompanied at Steventon and East Hanney by small car parks. PEI Report Chapter 12: Traffic and transport has identified no significant	Rural communities (adverse effect) Older people (adverse effects) Disabled people (adverse effect)	None	Include sufficient parking within the design to support the expected recreational and visitor trips expected to the site. Continued engagement with communities and community facilities during operation, to understand the potential impact on access, and to develop

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	effects on the road network due to people accessing the reservoir. This is a perception of a risk that the presence of NMU access points to the Site may encourage visitors arriving by car to use villages as informal Site entrances. Overspill from car parks, or on-street parking in the villages, may mean that there are impacts on access to community facilities and services in the surrounding villages. At East Hanney, parking restrictions are proposed to limit antisocial parking. There could be possible adverse disproportionate effects for rural communities as they are more likely to rely on travelling to access services. Additionally, PCGs, such as disabled people and older people, may rely on accessing particular facilities or services more than the general population. Therefore, there is also potential for adverse disproportionate effects on these groups.			measures to reduce or avoid effects where possible.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
Impact on community facilities	At the South Oxford Crematorium and Memorial Gardens the visual impact of the embankment, and potential for disturbance by people using the NMU access point nearby, have the potential to disrupt the tranquility of the site and impact visitors to the crematorium and Memorial gardens. The site is used for services and by visitors to graves or memorial sites and currently provides a peaceful setting. Overall, these effects are considered to have the potential to cause only limited or occasional disruption to users of South Oxfordshire Crematorium and Memorial Park, and therefore are not expected to result in disproportionate or differential effects.	None	None	Continued liaison with communities and community facilities during operation, to understand the potential impact on their operations, and consider developing measures to reduce or avoid effects if required, e.g. further screening.
Safety and security – antisocial behaviour	During operation, there will be an increase in visitors to the local area, creating potential for (or at least a perception of the potential for) antisocial use of local facilities in	Older people (adverse effect) Disabled people (adverse effect)	None	Through design development, including mitigation set out in the Draft commitments register (PEI Report, Appendix 2.2: Draft commitments register), develop

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	villages close to the site. In particular, the stopping up of the existing Steventon to East Hanney road will create a cul-de-sac with a small parking area which may attract antisocial behaviour. Groups more vulnerable to crime include PCGs such as children and adolescents, older people, people with disabilities, people from ethnic and religious minority backgrounds, LGBTQ+ people and women. The facilities provided by the Project, including parking, toilets and changing spaces, are expected to be sufficient to prevent the risk of antisocial behaviour associated with visitors to the Project occurring. Further information will be provided in the EqIA report that is submitted with the DCO application. On a precautionary basis, there may be the potential for actual or perceived risks from antisocial behaviour, which could result in adverse disproportionately effect children	Black and Ethnic Minority groups (adverse effect) LGBTQ+ people (adverse effect) Women (adverse effect) Children and young people (adverse effect) Religious minority groups (adverse effect)		measures to reduce safety risk and perceptions of safety risk for PCGs. Consider measures through design development of the Project that avoid the creation of dark/hidden spaces, CCTV, lighting and access control in car parks, and where required traffic regulation orders to prevent antisocial parking. Consider measures, such as parking restrictions, to address potential access impacts for local community.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	and adolescents, older people, people with disabilities, people from ethnic and religious minority backgrounds, LGBTQ+ people and women.			
Safety and security – risk of drowning	As discussed in the evidence review, increased drowning risk can be a particular concern for children,	None	None	Apply the relevant measures identified as required within a Safety Management Plan.
	black and minority ethnic groups and men as the risk of these groups drowning is statistically higher. The Project proposes a large open body of water, therefore there is a potential for adverse disproportionate effects for these groups as a result of the potential safety risks associated with drowning.			Consider compulsory training for staff and operators around the safety procedure, general water safety and safety risk specifically for PCGs.
	Should an older person or a person with certain disabilities fall into the water, they may be more likely to suffer longer term impacts on their health from any incident. Therefore, there is the potential for differential effects for disabled people or older people.			

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	PEI Report Chapter 19: Major accident and disasters sets identifies that all relevant safety measures will be included within the Safety Management Plan. Operators will also be required to have procedures in place to manage the safety of workers and visitors for all activities within the Project. This includes measures which will mitigate drowning risk.			
	Therefore, PEI Report Chapter 19: Major accident and disasters has concluded that all risks from potential major accidents or disasters have been mitigated to as low as reasonably possible (ALARP).			
	Therefore, once operational, it is not considered likely that the Project would result in any adverse differential or disproportionate effects for PCGs in terms of drowning risk, due to the safety measures that would be mandatory. This is secured as a DCO requirement.			

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
Provision of new accessible open space; and recreational, leisure and education facilities	The Project will provide new recreational and leisure facilities including open space, Visitor Centre (Recreation Lakes Centre) and Water Sports Centre, and an Education Centre. PEI Report Chapter 15: Socio-economics and communities reports that there are limited alternative equivalent facilities within the 5km study area. As discussed in the evidence review, access to open space for play and recreation is particularly important for children, and can have important wellbeing benefits for other PCGs, including older people and disabled people. The Project would provide extensive new areas of publicly accessible green and blue spaces for recreation. This provision has the potential to have differential beneficial effects for PCGs such as children, older people, disabled people, Black and Minority ethnic groups and people on low income/ unemployed people,	Children and young people (beneficial effect)	Children (beneficial effect) Older people (beneficial effect) Disabled people (beneficial effect) Black and Minority ethnic groups (beneficial effects) People on low incomes/ unemployed people (beneficial effects) Women, including pregnant women and mothers of babies and small children (beneficial effect)	Continued engagement with communities to understand the potential impacts of the Project's design and test if the facilities proposed are suitable to meet needs. Further consideration within the design of the accessibility of the activities as well as accessibility of the buildings they are located within. This could include consideration of types of water sports equipment and activities available (such as hoists); and the type of equipment available for hire, such as trikes or other accessible cycling equipment as well as bicycles withing the cycle hire. Consider further opportunities to enhance user experience and with the wider community. Continue engagement with communities and consider incorporating further measures, such as wayfinding, or suitable

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	especially as there are limited alternative facilities in the study area. Although communities in the study area have generally good access to open space, Oxfordshire has a lower percentage of physically active children. The recreational lakes will provide new facilities for swimming, paddleboarding and fishing, which will provide new opportunities for recreation and physical activity for a range of user groups, including children. Therefore, there could be an	effects		locating of facilities to enhance user experience.
	opportunity for beneficial disproportionate effects on children to be experienced. The Recreational Lakes Centre and Nature Education Centre will provide opportunities for recreation and outdoor learning. For children and			
	young people, outdoor educational activities help foster creativity, support cognitive development and increase physical activity.			

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	There is therefore potential for beneficial disproportionate effects on children and young people as users are likely to include schools and families, including from beyond the study area. The Visitor Centre, Mobility & Active Travel Hub may incorporate facilities such as a rental buggy for persons with reduced mobility, shelter, benches and water bottle fill up stations to support access to the lakes for a range of user groups, including more vulnerable groups such as older people, people with disabilities/ reduced mobility, pregnant women or families with infants.			
	Additionally, an accessible entry to the water will be provided and access to the lakes will be supported by changing and toilet facilities. The approach ramps to canal and watercourse crossings will take account of inclusive access for wheelchair users and other mobility impairments, access for cyclists and, in some locations, access for			

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	horse-boating (pulling a canal boat), with landings at appropriate intervals to provide users with an opportunity to rest.			
	There will also be active travel and public transport connectivity. The majority of active travel routes will be accessible to all users regardless of mobility needs; alternative paths would be available where topographical constraints could render a route unsuitable for inclusive access.			
Impact on Public Rights of Way (PRoW) and active travel routes	There will be both new routes and reinstated PRoW connecting the Site to the local community with access points at regular intervals around the perimeter. A range of paths for walking, wheeling, cycling and horse riding would connect into the existing PRoW network and walking and cycling provision will be part of junction designs to ensure safe movement along key routes to and from nearby settlements. On-site, routes will connect into all facilities,	Children (beneficial effect)	None	Continue engagement with communities and consider incorporating further measures, such as wayfinding, or suitable locating of facilities to enhance user experience.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	and to each other, providing increased connectivity within the study area.			
	Although the PEI Report Chapter 12: Traffic and transport has identified that some existing PRoW routes will be longer; overall changes are expected to increase connectivity across the study area.			
	This may increase physical activity for the local community and as Oxfordshire has a lower percentage of physically active children, this could have beneficial disproportionate effects for children.			
Climate resilience – availability of drinking water	Changing climate conditions in the future may exacerbate (or ameliorate) the experiences of PCGs. For example, equality groups often reside in areas susceptible to climate-related risks (e.g. flooding, heatwaves, or storms), and rising temperatures and changing rainfall patterns are expected to increase water demand (Bryan et al, 2020).	None	Children (beneficial effect) Older people (beneficial effect) Pregnant women (beneficial effect) Disabled people (beneficial effect) People on low income/	Continue engagement with communities to test if the Project meets the needs of PCGs.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	During operation, the intended benefits of the Project will reduce the effect of drought conditions in the region.		unemployed people (beneficial effect)	
	Therefore, the Project's aim of ensuring resilience of water supply for customers, will have a beneficial differential effect for some PCGs such as children, older people, pregnant women, disabled people and people on low income or unemployed people.			
Employment and training opportunities	PEI Report Chapter 15: Socio- economics and communities estimates that there will be approximately 100 staff travelling to and from the site per day. These would be new jobs, employed either by the Applicant or by an Appointed Provider. Although opportunities are less available during operation than construction, the operation of the Project may create opportunities for training and apprenticeships, at the	None	Young people (beneficial effect) Disabled people (beneficial effect) Women (beneficial effect) Black and Minority Ethnic groups (beneficial effect)	Consider measures for inclusion in a CEP that could address barriers and increase access to employment opportunities for PCGs.

Impact	Description of impacts, potential equality effect/s and actions	Groups that could experience disproportionate effects	Groups that could experience differential effects	Recommended actions
	proposed reservoir and in maintenance activities. The CEP (or equivalent) is expected to include measures that could support access to these jobs for people with protected characteristics, including young people, disabled people, women and people from Black and Minority ethnic groups. Therefore, a beneficial differential effect for these groups may be possible. Further information will be provided in the EqIA report that accompanies the DCO submission, drawing on information gathered for the CEP.			

1.9 Next steps

- 1.9.1 The next steps for the EqIA are listed below:
 - Continued updates to the baseline, drawing on published data sources, online mapping
 and information received through stakeholder engagement and consultation, to
 understand the representation of PCGs in the potentially impacted populations
 specifically, and further understanding of potential ways to accommodate the specific
 sensitivities of the impacted people with protected characteristics.
 - Continued involvement in design development of the Project.
 - Continued engagement with affected stakeholders, including representatives of PCGs and community facilities that could be directly impacted, to understand how PCGs use the facilities and identify potential disproportionate or differential effects and appropriate measures to address any adverse effects.
 - Continued review of EIA findings and outputs to understand the potential for disproportionate and differential effects for PCGs.
 - Involvement in the development of the CoCP, and other securing documents, to embed measures to address adverse effects for PCGs and community facilities and services.
 - Continued involvement in the development of the commitments being established for the Project.
 - Involvement in the development of the Community Employment Plan to include measures that could support the delivery of some of the economic and social benefits of the Project, including access to new jobs and training opportunities for people with protected characteristics.

Annex 1 – Figures



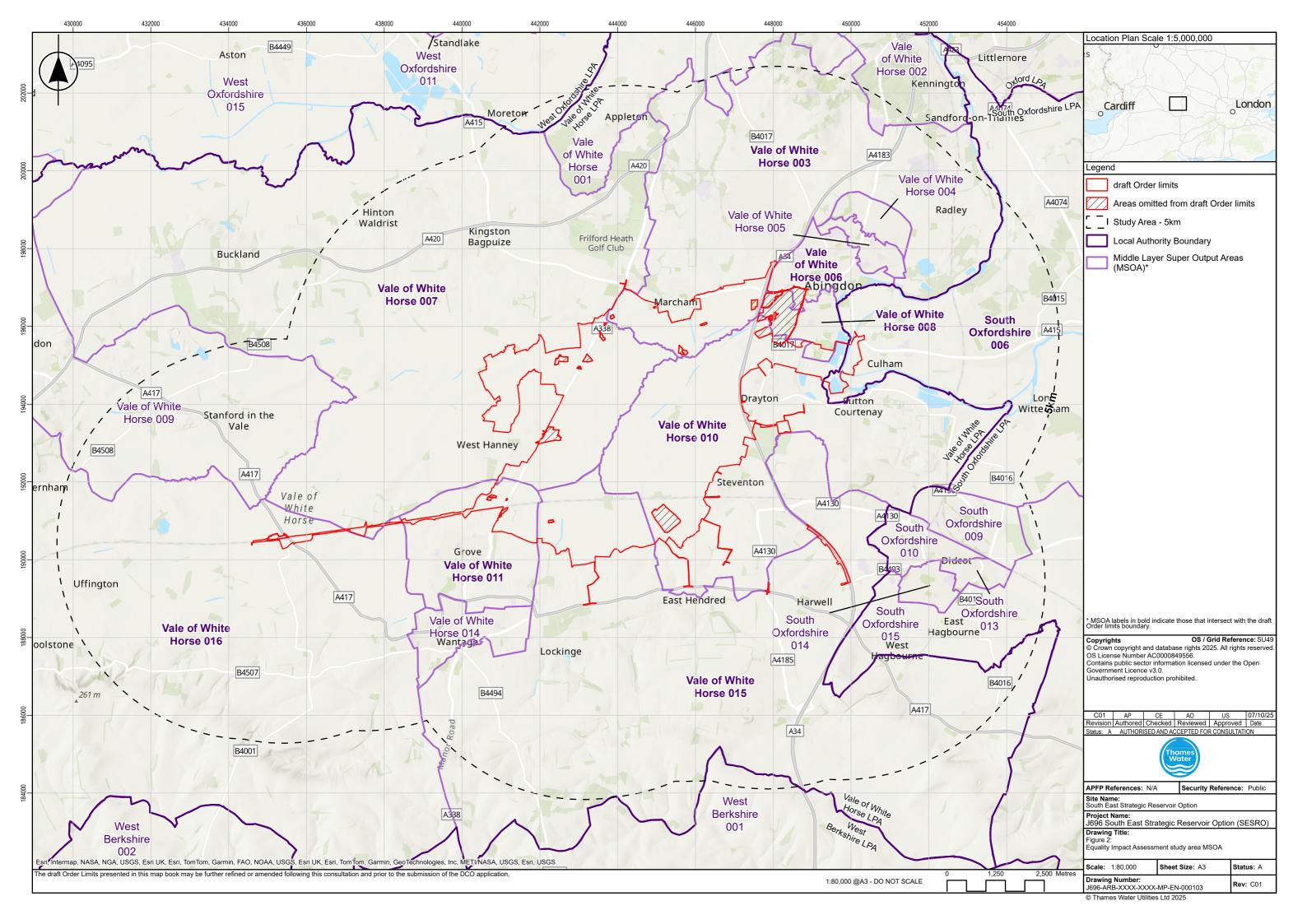
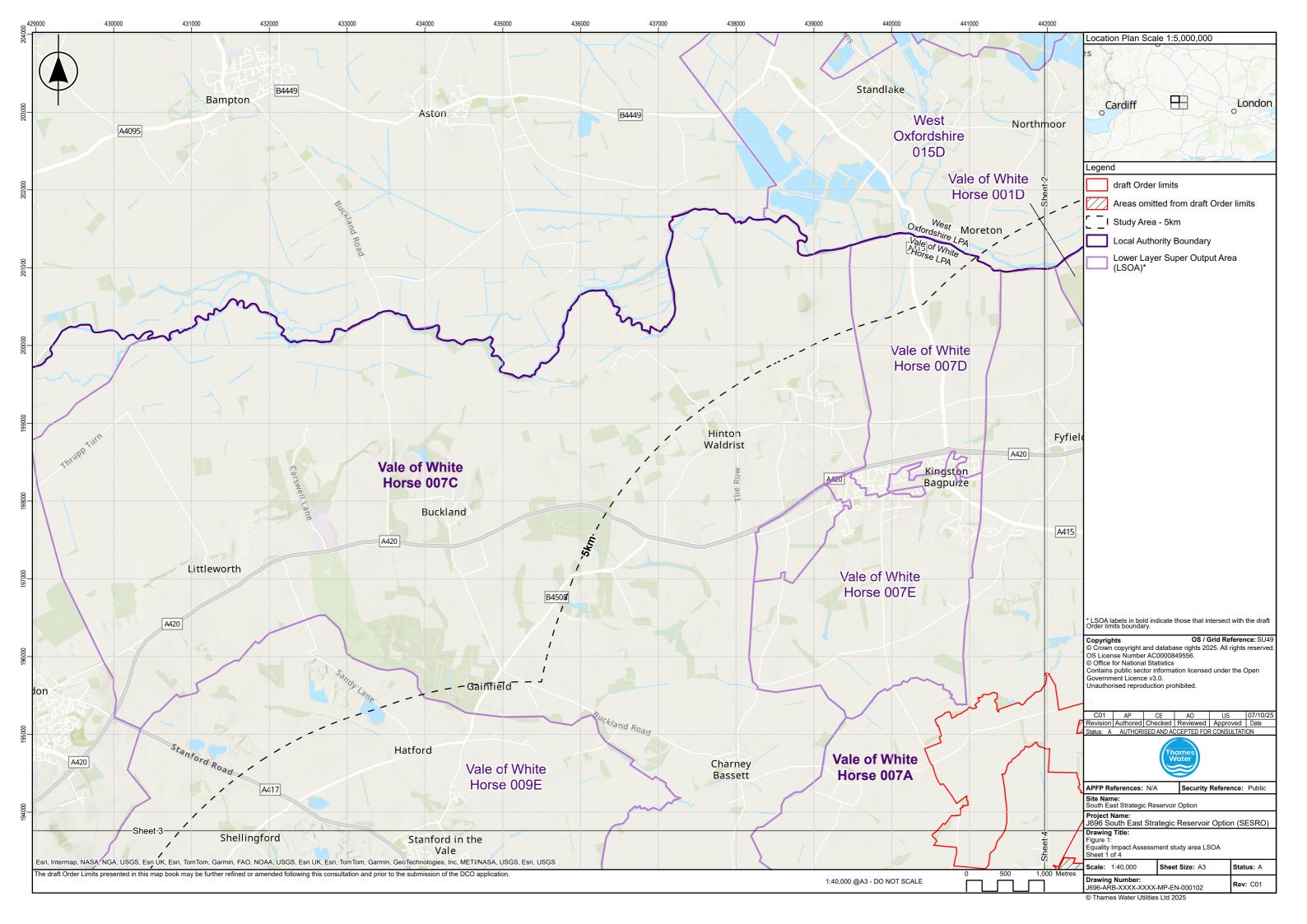
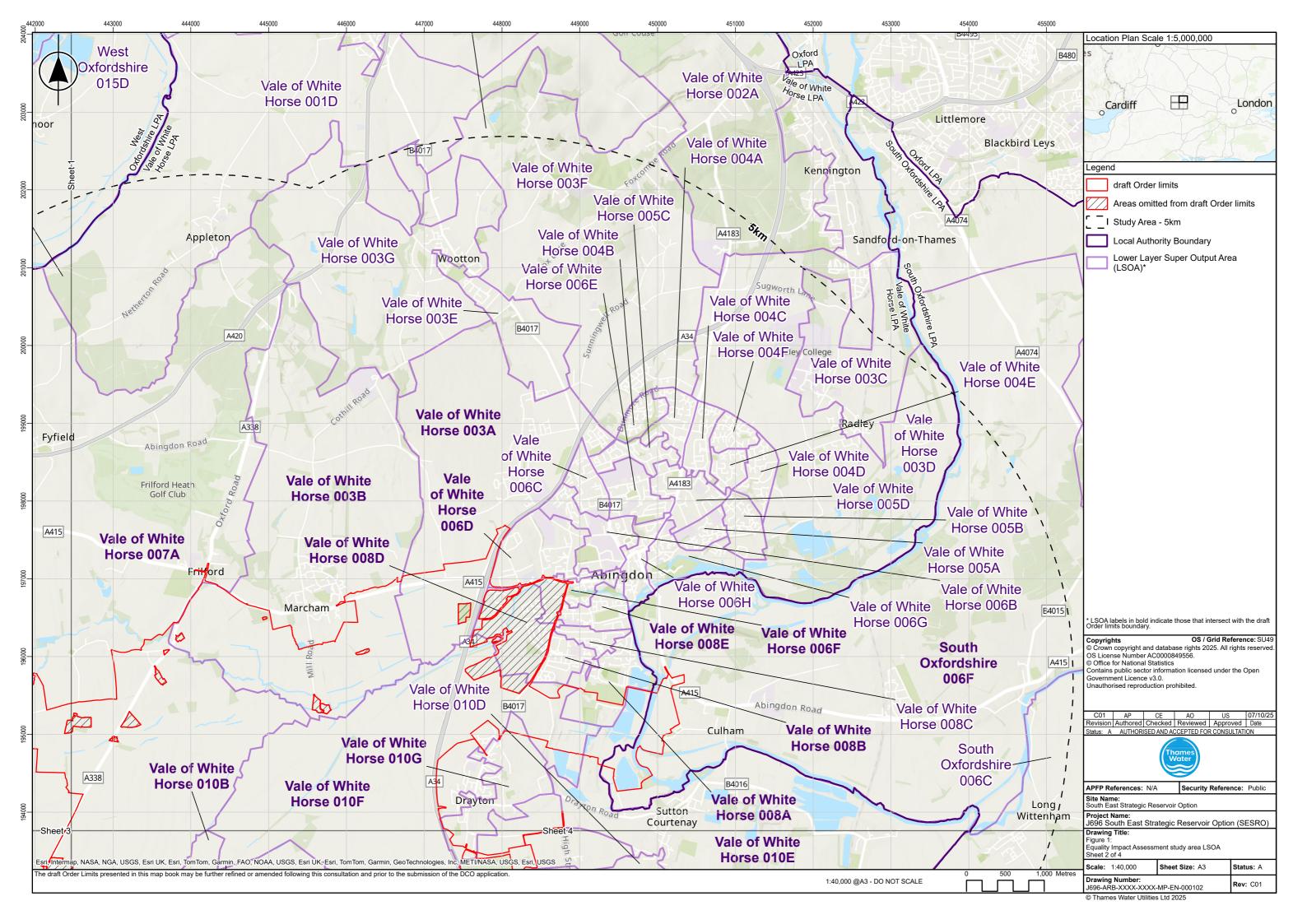
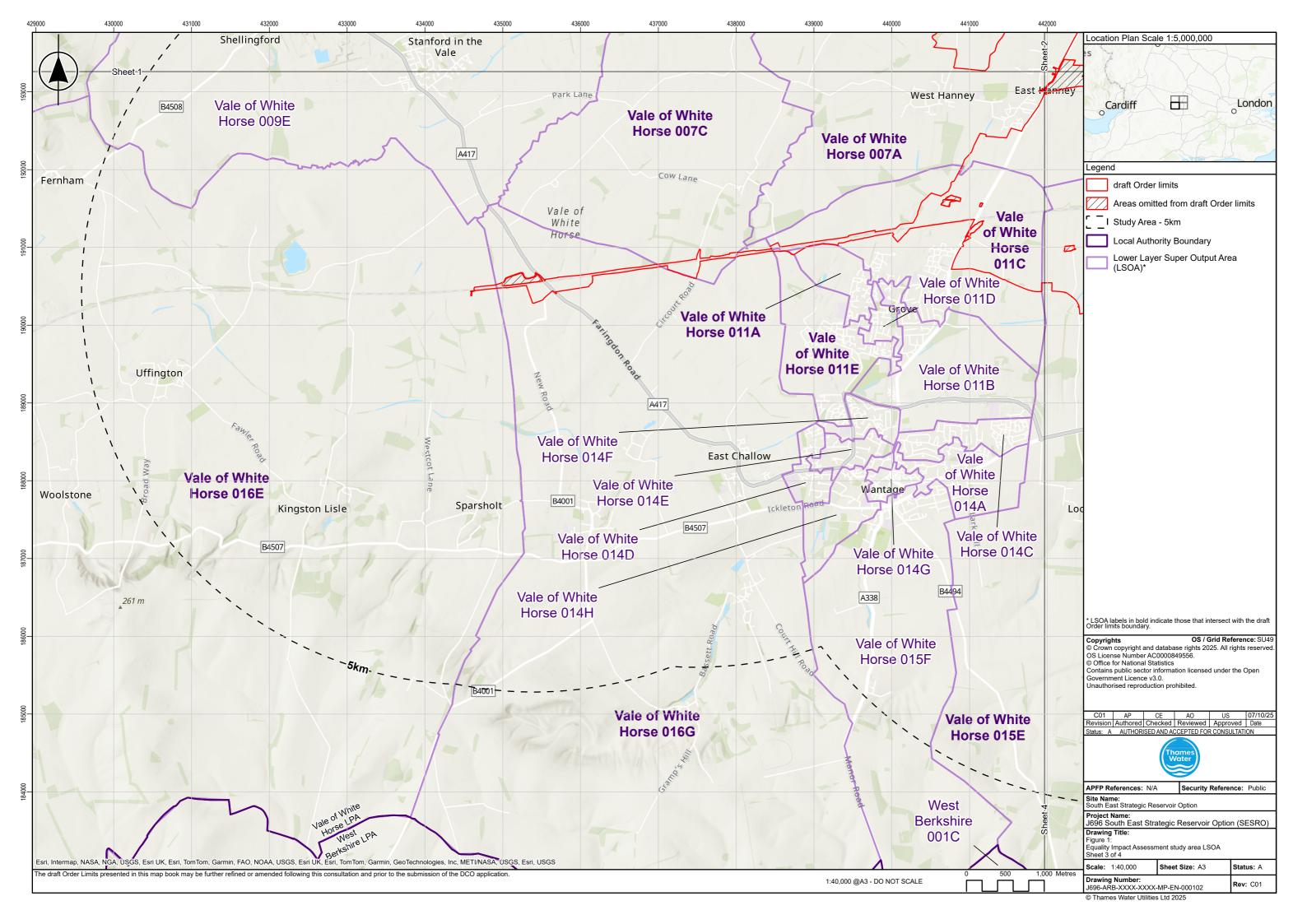
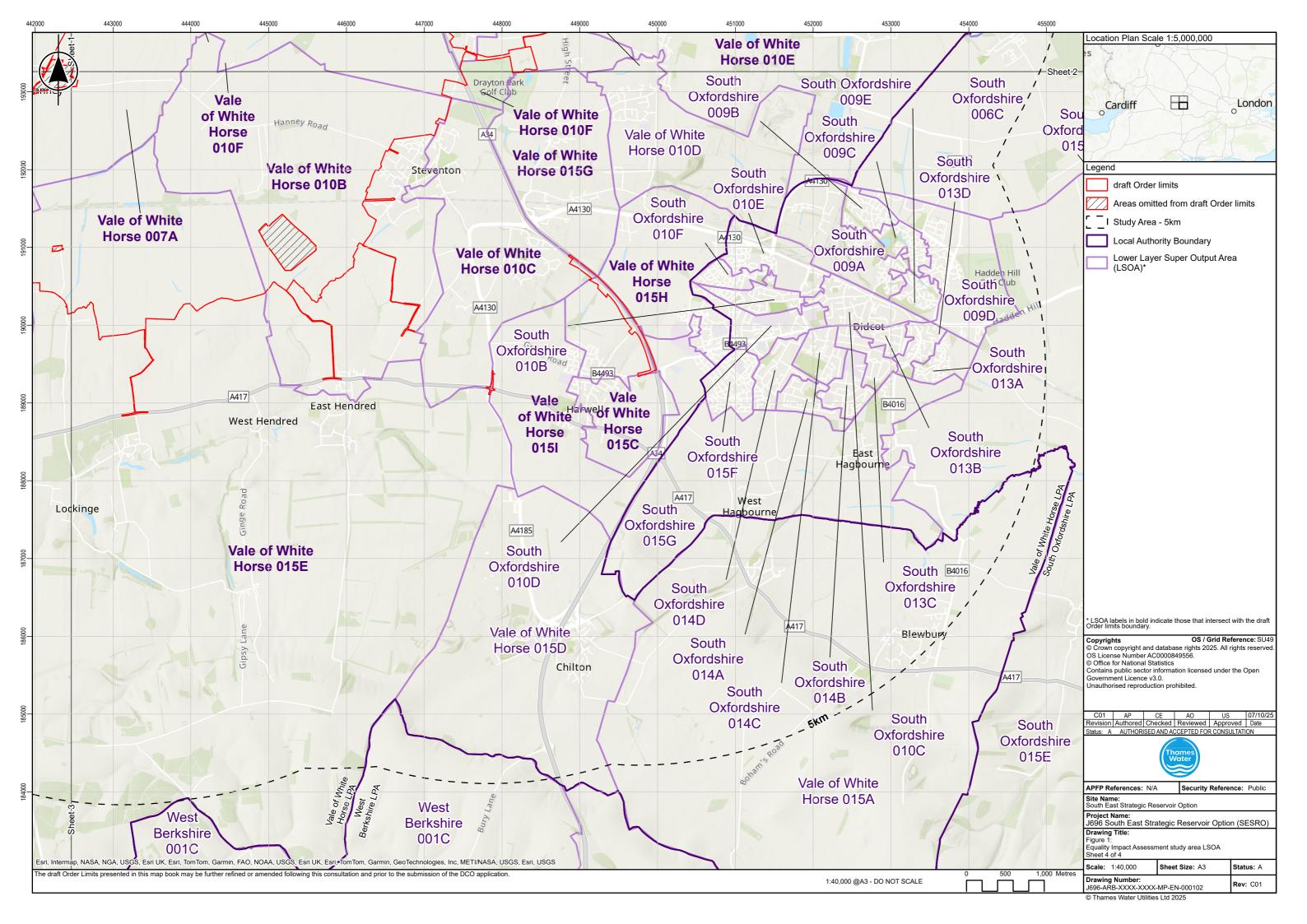


Figure 2: Middle layer super output areas	s (MSOA)	
Fauality Impact Assessment		









References

Agay-Shay, K., Peled, A., Crespo, A. V., Peretz, C., Amitai, Y., Linn, S., . . . Nieuwenhuijsen. (2014). Greenspace and adverse pregnancy outcomes.

Aghabozorgi, K., van der Jagt, A., Bell, S., & Brown, C. (2023). Assessing the impact of blue and green spaces on mental health of disabled children: A scoping review. Health & Place.

Aliyas, Z. (2019). Physical, mental, and physiological health benefits of green and blue outdoor spaces among elderly people.

Armstrong, M., Sharaievska, I., Crowe, B. M., & Gagnon, R. J. (2022). Experiences in outdoor recreation among individuals with developmental disabilities: Benefits, constraints, and facilitators.

Autism Speaks. (n.d.). Sensory Issues. Accessed June 2025. Sensory issues | Autism Speaks

Bryan, K., Ward, S., Roberts, L., White, M., Landeg, O., Taylor, T & McEwen, L. (2020). The health and well-being effects of drought: assessing multi-stakeholder perspectives through narratives from the UK. Climatic Change. Accessed July 2025. https://link.springer.com/article/10.1007/s10584-020-02916-x

Construction Industry Council (CIC). (2023). Diversity and Inclusion. Accessed June 2025. https://www.cic.org.uk/policy-and-public-affairs/diversity-and-inclusion

Construction Industry Training Board (CITB). (2018). Fuller Working Lives in Construction. Accessed June 2025. https://www.citb.co.uk/media/2bylp3yw/fuller-working-lives-in-construction.pdf

Corazon, S. S., Gramkov, M. C., Poulsen, D. V., Lygum, V. L., Zhang, G., & Stigsdotter, U. K. (2019). I Would Really like to Visit the Forest, but it is Just Too Difficult: A Qualitative Study on Mobility Disability and Green Spaces.

Dadvand, P., M. Villanueva, C., Font-Ribera, L., Martinez, D., Basagaña, X., Belmonte, J., . . . J. Nieuwenhuijsen, M. (2014). Risks and Benefits of Green Spaces for Children: A Cross-Sectional Study of Associations with Sedentary Behaviour, Obesity, Asthma, and Allergy. Environmental Health Perspectives.

Department for Business and Trade. (2020). Small Business Survey reports.

Department for Education. (2025). NEET by characteristics. Participation in education, training and NEET age 16 to 17 by local authority. Accessed July 2025.: https://explore-education-training-and-neet-age-16-to-17-by-local-authority/2023-24?subjectId=f184c634-dd32-41ac-6c2a-08dcd3ffc1f6

Department for Environment, Food & Rural Affairs (2025). National Policy Statement for Water Resources Infrastructure (NPSWRI). Accessed July 2025.

https://www.gov.uk/government/publications/national-policy-statement-water-resources-infrastructure

Department for Environment, Food & Rural Affairs (Defra). (2013). Effects of air pollution. Accessed June 2025. https://uk-

air.defra.gov.uk/assets/documents/reports/cat05/1409261329 air pollution uk 2013 issue 1.pdf

Department for Transport (2020). FS13 Future of Transport - Equalities and access to opportunity. Accessed April 2025.

https://assets.publishing.service.gov.uk/media/5fb7ed18d3bf7f572e8cbebe/F13-Future-of-Transport-Equalities-access-to-opportunity-rapid-evidence-review-accessible.pdf

Department for Transport (2023). Walking and cycling statistics, England: Demographic differences in walking and cycling. Gov.uk. Accessed April 2025. <a href="https://www.gov.uk/government/statistics/walking-and-cycling-statistics-england-demographic-differences-in-walking-and-demographic-

cycling#:~:text=Females%20aged%2030%20to%2039,29%20and%2070%20and%20over.

Department for Transport (2024). Blue Badge scheme statistics: data tables (DIS). Gov.uk. Accessed April 2025. https://www.gov.uk/government/statistical-data-sets/blue-badge-scheme-statistics-data-tables-dis

Easkey Britton, G. K. (2020). Blue care: a systematic review of blue space interventions for health and wellbeing. Health Promotion International, Pages 50–69. Accessed April 2025. https://doi.org/10.1093/heapro/day103

Environment Agency. (2008). Addressing environmental inequalities: water quality. Science Report. Accessed July 2025.

https://assets.publishing.service.gov.uk/media/5a7ce660e5274a724f0be324/scho0507bmru-e-e.pdf

Equality and Human Rights Commission (EHRC) (2012). Equality and Human Rights Commission 14.

EHRC (2019). Is Britain Fairer? Accessed June 2025.

https://www.equalityhumanrights.com/sites/default/files/2021/is-britain-fairer-2018.pdf

EHRC (2014a). The Essential Guide to the Public Sector Equality Duty. Accessed March 2025. https://www.equalityhumanrights.com/sites/default/files/psed_essential_guide_-guidance_for_english_public_bodies.pdf

EHRC (2014b). Engagement and the Equality Duty and A Guide for Public Authorities. Accessed March 2025.

https://www.equalityhumanrights.com/sites/default/files/engagement and the equality duty.pdf

EHRC (2014c). Technical Guidance on the Public Sector Equality Duty England (Equality and Human Rights Commission. Accessed March 2025. https://www.equalityhumanrights.com/guidance/public-sector-equality-duty-england-0

EHRC (2014d) Meeting the Equality Duty in Policy and Decision-Making England (and non-devolved public authorities in Scotland and Wales). Accessed March 2025.

https://www.equalityhumanrights.com/sites/default/files/meeting_the_duty_in_policy_and_decision-making.pdf

Greed, C. (2016). Religion and Sustainable Urban Planning: 'If you can't count it, or won't count it, it doesn't count'. Sustainable Development. Retrieved from Wiley.

Government Equalities Office (2011). Equality Act 2010: Public Sector Equality Duty What Do I Need To Know? A Quick Start Guide for Public Sector Organisations. Accessed March 2025. http://www.pfc.org.uk/pdf/equality-duty.pdf

Human Rights Act 1998. Accessed March 2025. https://www.legislation.gov.uk/ukpga/1998/42/contents

International Transport Forum (2017). Towards a framework for identifying and measuring the benefits of accessibility. Organization of Economic Co-operation and Development. Accessed July 2025. https://www.itf-oecd.org/sites/default/files/docs/towards-framework-measuring-benefits-accessibility.pdf

Living Streets. (2021). Road Traffic And Injury Risk In Ethnic Minority Populations. Accessed July 2025. https://www.livingstreets.org.uk/media/5t4g2gaj/road-traffic-injury-risk-amongst-gb-black-and-ethnic-minority-populations.pdf

Lucas, K., Stokes, G., Jeroen, B., & Burkinshaw, J. (2019, March). Inequalities in Mobility and Access in the UK Transport System. Accessed July 2025.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/784_685/future_of_mobility_access.pdf

McGregor-Smith, R. (2017). Race in the workplace: The McGregor-Smith Review. Department for Business, Energy & Industrial Strategy. Accessed August 2025.

https://assets.publishing.service.gov.uk/media/5a7f81c6ed915d74e33f6dc4/race-in-workplace-mcgregor-smith-review.pdf

Medical News Today (2020). Can air pollution affect pregnancy outcomes? Accessed July 2025. https://www.medicalnewstoday.com/articles/air-pollution-and-pregnancy-outcomes

Ministry of Housing, Communities & Local Government (2021). National Planning Policy Framework (NPPF). Accessed May 2025. https://www.gov.uk/government/publications/national-planning-policy-framework--2

Ministry of Housing, Communities and Local Government (MHCLG). (2019). English Indices of Multiple Deprivation. Accessed March 2025. https://www.gov.uk/guidance/english-indices-of-deprivation-2019-mapping-resources

National Disability Authority (2021). Annual Report.

National Trails. (n.d.-a). Thames Path Map and Trail Information. Accessed April 2025.https://www.nationaltrail.co.uk/en_GB/trails/thames-path/trail-information/

National Trails. (n.d.-b). The Ridgeway Map and Trail Information. Accessed April 2025 https://www.nationaltrail.co.uk/en_GB/trails/the-ridgeway/trail-information/

National Water Safety Forum (2023). WAID UK 2023 Summary for the NWSF.

Natural England (2021). The People and Nature Survey for England: Adult Data Y1Q1 (April - June 2020) (Experimental Statistics). Accessed March 2025. https://www.gov.uk/government/statistics/the-people-and-nature-survey-for-england-adult-data-y1q1-april-june-2020-experimental-statistics

Office for Health Improvement and Disparities (OHID) (2023). Life expectancy at birth. Department of Health & Social Care. Accessed March 2025. https://fingertips.phe.org.uk/

OHID (2020). MSOA Life expectancy at birth. Department of Health & Social Care. Accessed March 2025. https://fingertips.phe.org.uk/

Ofwat (2024). Ofwat's Public Value Principles. Time to act, together: Ofwat's strategy. Accessed June 2025. https://www.ofwat.gov.uk/about-us/our-strategy/ofwats-public-value-principles/

Office for National Statistics (ONS) (2023). Live births in England and Wales for small geographic areas. Nomis. Accessed April 2025.

https://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=20

ONS (2019). National population projections: 2018-based. Accessed March 2025.

https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/subnationalpopulationprojectionsforengland/2018based

ONS (2021a). TS007A – Age by five-year age bands. Nomis. Accessed March 2025. https://www.nomisweb.co.uk/datasets/c2021ts007

ONS (2021b). TS038 – Disability. Nomis. Accessed March 2025.

https://www.nomisweb.co.uk/datasets/c2021ts038

ONS (2021c). TS001 - Number of usual residents in households and communal establishments. Nomis. Accessed March 2025. https://www.nomisweb.co.uk/datasets/c2021ts001

ONS (2021d). TS070 – Gender identity. Nomis. Accessed March 2025.

https://www.nomisweb.co.uk/datasets/c2021ts070

ONS (2021e). TS022 – Ethnic group. Nomis. Accessed March 2025.

https://www.nomisweb.co.uk/datasets/c2021ts022

ONS (2021f). TS031 – Religion. Nomis. Accessed March 2025.

https://www.nomisweb.co.uk/datasets/c2021ts031

ONS (2021g). TS008 – Sex. Nomis. Accessed March 2025.

https://www.nomisweb.co.uk/datasets/c2021ts008

ONS (2021h). TS077 – Sexual orientation. Accessed March 2025.

https://www.nomisweb.co.uk/datasets/c2021ts077

ONS (2022). Census 2021 Economic activity status. Nomis. Accessed March 2025.

https://www.nomisweb.co.uk/sources/census 2021

ONS. (2018). Benefit claimants – disability living allowance by disabling condition. Nomis. Accessed April 2025. https://www.nomisweb.co.uk/datasets/bdlac

Pezzella, F. S., Fetzer, M. D., & Keller, T. (2019). The Dark Figure of Hate Crime Underreporting.

Planning Act 2008 (as amended). Accessed January 2025. https://www.legislation.gov.uk/ukpga/2008/29/contents

Public Health England (2020). Improving access to greenspace: a new review for 2020. Accessed June 2025.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904 439/Improving access to greenspace 2020 review.pdf

Ramblers (2021). Why access to green space matters. Accessed March 2025. https://cdn.ramblers.org.uk/media/files/ramblers-access-nature-11 0.pdf

Royal College of Physicians (2016). Every breath we take: the lifelong impact of air pollution. Accessed March 2025. https://www.rcp.ac.uk/improving-care/resources/every-breath-we-take-the-lifelong-impact-of-air-pollution/

Royal Life Saving Society (2023). New report shows sharp increase in child drownings in England, with children from minority ethnic groups and families from deprived areas most at risk. Accessed March 2025. https://www.rlss.org.uk/news/new-report-shows-sharp-increase-in-child-drownings-in-england-with-children-from-minority-ethnic-groups-and-families-from-deprived-areas-most-at-risk

Rui Anciaes, P., Boniface, S., Dhanani, A., Mindell, J., & Groce, N. (2016). Urban transport and community severance: Linking research and policy to link people and places. Journal of Transport and Health.

Scottish Government (2015). Active Scotland Outcomes: Indicator Equality Analysis. Accessed March 2025. https://www.gov.scot/publications/active-scotland-outcomes-indicator-equality-analysis/

Scottish Government (2019). Scottish household survey 2019: annual report.

Sillman, D., Rigolon, A., Browning, M. H., Yoon, H. V., & McAnirlin, O. (2022). Do sex and gender modify the association between green space and physical health? A systematic review. Environment Research.

South Oxfordshire and Vale of White Horse District Councils (2022). Vale of White Horse and South Oxfordshire Diversity and Inclusion Strategy . Accessed June 20205.

https://www.whitehorsedc.gov.uk/wp-content/uploads/sites/3/2023/02/Diversity-and-Inclusion-Strategy-final.pdf

South Oxfordshire District Council and Vale of White Horse District Council (2024). Joint Local Plan 2041 (Publication version). Accessed February 2025. https://www.whitehorsedc.gov.uk/vale-of-white-horse-district-council/planning-and-development/local-plan-and-planning-policies/local-plan-2041/ Strava (2024). Global Heat Map. Accessed March 2025. <a href="https://www.strava.com/maps/global-heatmap?sport=All&style=dark&terrain=false&labels=true&poi=true&cPhotos=true&gColor=blue&gOpacity=100#9/37.7749/-122.4194

Thames 21 (2024). The importance of urban blue spaces. Accessed March 2025. https://www.thames21.org.uk/2024/05/the-importance-of-urban-blue-spaces/

Thames Water (2023). What Customers, Communities and Stakeholders Want. Accessed June 2025. https://www.thameswater.co.uk/media-library/vgfo4ngl/what-customers-communities-stakeholders-want.pdf

Thames Water (2024). Our turnaround. Thames Water Annual Report 2023/24. Accessed June 2025. https://www.thameswater.co.uk/media-library/home/about-us/investors/our-results/2024-reports/thames-water-annual-report-2023-24.pdf

Thames Water (2025a). Equity, diversity & inclusion statement. Accessed July 2025. https://www.thameswater.co.uk/media-library/i111jd1/equity-diversity-inclusion-statement.pdf

Thames Water (2025b). Vulnerability Strategy. Accessed July 2025. https://www.thameswater.co.uk/media-library/aiajcxp5/vulnerability-strategy.pdf

The Equality Act 2010. Accessed March 2025. https://www.legislation.gov.uk/ukpga/2010/15/contents

Thompson DA, G. R. (2022). Cohort Profile: The Green and Blue Spaces (GBS) and mental health in Wales e-cohort. Int J Epidemiol. doi:10.1093/ije/dyac080.

Unicef (2019). Child Health Experts Warn Air Pollution is Damaging Children's Health. Accessed June 2025. https://www.unicef.org.uk/press-releases/child-health-experts-warn-air-pollution-is-damaging-childrens-health/

University College London (UCL) (2021). The impact of noise and soundscape on children with autism in schools. Accessed June 2025. The impact of noise and soundscape on children with autism in schools | Bartlett Faculty of the Built Environment

University of Sheffield (n.d.). Improving Wellbeing through Urban Nature: integrating green/blue infrastructure and health service valuation and delivery (IWUN). Accessed March 2025. https://gtr.ukri.org/projects?ref=NE%2FN013565%2F1

Vanaken, G.-J., & Danckaerts, M. (2018). Impact of Green Space Exposure on Children's and Adolescents' Mental Health: A Systematic Review.

Whiteley, R. (2023). Joint Local Plan - Equality Impact Assessment Form. South Oxfordshire District Council and Vale of White Horse District Council. Accessed April 2025. https://democratic.southoxon.gov.uk/documents/s30570/Appendix%204.%20Equalities%20Impact%20Assessment.pdf

World Health Organisation (2023). Road traffic injuries. Accessed March 2025. https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries

Yavuz, N., & Welch, E. W. (2010). Addressing fear of crime in public space: gender differences in reaction to safety measures in train transit. Urban Studies.

Youth Futures Foundation (2025). Research brings more understanding on barriers minority ethnic young people experience in accessing and completing apprenticeships. Accessed July 2025. https://youthfuturesfoundation.org/news/minority-ethnic-young-people-apprenticeships/

Zebracki, M., Weintrob, A., Hansell, L., Barnard, Y., & Lucas, K. (2021). Queer mobilities: critical LGBTQ perspectives of public transport spaces.

