

Habitats Regulations Assessment of the Impact on European Protected Sites of Bolton Local Plan

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Prepared by

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For

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Habitats Regulations Assessment (HRA) of the Impact of Bolton Local Plan: Consultation on European Protected Sites

1. Introduction

1.1 European protected sites are of exceptional importance for the conservation of species and natural habitats. The purpose of Habitats Regulation Assessment (HRA) of land use plans is to ensure that protection of the integrity of European protected sites is an integral part of the planning process at a regional and local level. European protected sites comprise Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites. Government guidance advises that potential SPAs (pSPA), candidate SACs (cSAC) and potential Ramsar (pRamsar) sites are also included in HRAs.

1.2 Article 6(3) of Council Directive 92/43/EEC transposed into UK law by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 dealing with the conservation of European protected sites states that:

'Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.'

1.3 The Bolton Local Plan is regarded as a Plan which is considered likely to have significant effect on one or more European protected site and should therefore be subject to assessment.

1.4 It is noted that the Plan being assessed will be subject to public consultation and public examination and likely further amendment. Further Appropriate Assessments may therefore be required

1.5 Habitats Regulation Assessments can be seen as having a number of discrete stages -

- Stage 1 – Screening
- Stage 2 – Appropriate Assessment
- Stage 3 – Derogation (compensation) where effects cannot be avoided or mitigated

1.6 This document forms Stage 1 and Stage 2 of the Habitats Regulation Assessment (HRA) process and contributes to the fulfilment of the Council's statutory duty as regards Article 6(3). It is an Opinion and an Assessment of whether the Bolton Local Plan may have a significant effect on the special interest of any European designated protected sites.

It is also an Opinion on, and an Assessment of, whether any of the identified effects (if any) can be avoided or mitigated or whether any of the actions proposed in the plan need adjustment.

1.7 Stage 1 – Screening

The purpose of the Screening stage of the HRA process is to initially identify the risk or the possibility of significant adverse effects on a European site which could undermine the achievement of a site's conservation objectives, and which therefore require further

detailed examination through an appropriate assessment. If risks which might undermine a site's conservation objectives can clearly be ruled out (based on the consideration of objective information), a proposal will have no likely significant effect (LSE) and no appropriate assessment will be needed. In order for a policy or an allocation in a Plan to be screened out of the HRA process a conclusion must be made 'beyond reasonable scientific doubt' that the policy or allocation will not have an LSE on the European Protected site or its qualifying features. Case law has established in relation to screening that:

- An effect is likely if it 'cannot be excluded on the basis of objective information' (Waddenzee C127-02 ∞ 45). This requires consideration and a conclusion made against known and presented data/survey or results/scientific evidence (e.g. literature review).
- An effect is significant if it 'is likely to undermine the conservation objectives' [of the European protected site (Waddenzee (C127-02 ∞ 48))]. This excludes from consideration other impacts not related to the qualifying features and their conservation objectives.
- In undertaking a screening assessment for likely significant effects 'it is not that significant effects are probable, a risk is sufficient, but there must be credible evidence (see above) that there is 'a real, rather than a hypothetical, risk' Boggis v Natural England & Waveney District Council. This refines the understanding of the 'precautionary principle' as it applies to the Habitats Regulations.
- The Sweetman (case C258-11) also offers some simple guidance that the screening step 'operates merely as a trigger', in order to progress to further assessment stages through the process.

1.8 Stage 2 – Appropriate Assessment

In 2017 the decision of the Court of Justice of the European Union (People over Wind, case C323/17) concluded that it was not appropriate within the Screening Stage to consider measures that would mitigate for impacts on the qualifying or designated features of the European site. This ruling has resulted in an update to the Habitats Regulations 2017 as they have been translated into UK domestic legislation and updated Habitats Regulations (amendment) (EU Exit) 2019 to reflect the exit of the UK from the European Union.

In a Stage 2 – Appropriate Assessment, evidence and detail should be considered which can demonstrate that a Plan including any embedded measures or additional mitigation can result in a conclusion that there would be no 'adverse effect on integrity' (AEOI), when considering a European sites conservation objectives. In applying the Stage 2 – Appropriate Assessment the relevant competent Authority – in this case the Local Authority concerned - must also consider whether there is a relevant planning mechanism (which may apply at a different level of the planning hierarchy) which can secure the necessary mitigation via either conditions or obligations.

In the case of a Strategic Local Plan the level of detail in land use plans concerning developments that will be permitted under the Plan at some time in the future is rarely sufficient to allow the fullest quantification of potential adverse effects. It is therefore necessary to be cognisant of the fact that HRAs for plans can be tiered, with assessments being undertaken with increasing specificity at lower tiers. This is in line with DCLG guidance and court rulings that the level of detail of the assessment, whilst meeting the relevant requirements of the Habitats Regulations, should be 'appropriate' to the level of plan or project that it addresses.

Government guidance says:

"The scope and content of an appropriate assessment will depend on the nature, location, duration and scale of the proposed plan or project and the interest features of the relevant site. 'Appropriate' is not a technical term. It indicates that an assessment needs to be proportionate and sufficient to support the task of the competent authority in determining whether the plan or project will adversely affect the integrity of the site." That is, the Plan must make every effort to ensure that no Policies or Allocations will cause harm to the special nature conservation interest of European sites. But where some doubt remains as to whether harm will occur the plan must show that sufficient safeguards will be in place in other levels of the planning hierarchy to ensure that no harm will be caused to the special interest of European sites. A precautionary approach should always be taken".

The advice of Advocate-General Kokott to the European Court of Justice (9th June 2005, Case C-6/04) is relevant. She commented that:

"It would ...hardly be proper to require a greater level of detail in preceding plans [rather than planning applications] or the abolition of multi-stage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the Plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure"

1.9 In Combination Assessment

The Habitats Regulations also include a requirement for an assessment not only for a Plan alone but also for consideration of any LSE in-combination with other projects or plans. An 'in-combination' assessment should be undertaken for any impact which is shown to have an effect even where it might be considered 'de minimis' for the plan in isolation. In the application of the in-combination test projects or plans are also considered to include reasonably foreseeable proposals (RFP), which may include projects, plans or schemes which have not concluded their passage through the development planning process, whether they are in full or outline or include other strategic planning documents.

Other plans, which are also important in the context of the Bolton Local Plan, which are considered here in the test of in-combination effects. Include:

- Places for Everyone Joint Development Plan Document (2024);
- Warrington Local Plan (2023);
- Central Lancashire Local Plan (2025);
- West Lancashire Local Plan (2012);
- Sefton Local Plan (2017);
- Greater Manchester Joint Minerals DPD (2013);
- Greater Manchester Joint Waste DPD (2012);
- Other Supplementary Planning Documents and local plans.

These usually include their own Habitats Regulation Assessments and the conclusions of these HRAs have been taken into consideration when determining whether or not likely significant effects will occur.

1.10 The Competent Authority

The competent authority under the Habitat Regulations, is the body which undertakes the assessment of likely significant effects (LSE). This is usually the Local Planning Authority in relation to the preparation of Plans or the consideration of planning applications but may also be another statutory body who has authority and powers to permit, consent or licence activities (e.g. the Environment Agency). Natural England as the statutory government advisor in these matters also has a role in the process to ensure that the Plan will not have any likely significant harmful effects on European sites.

A Judicial Review (R (Preston) v Cumbria County Council [2019] EWHC 1362) concerning a project level HRA ruled that a Local Planning Authority cannot rely on the future decisions and assessment of another permitting competent authority (in this instance the Environment Agency) within their own conclusions on the Screening (Stage 1) and must give consideration of sufficient securing measures (Stage 2 – Appropriate Assessment) at the time of their own determination of an application for development.

Government guidance in this regard which seems relevant to plans, outline proposals or operations which might require an additional consent/permit from a third party indicates:

- a competent authority is permitted to grant a plan or project consent which leaves the applicant free to determine subsequently certain parameters relating to the construction phase, only if that authority is certain that the consent includes conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site.

While this Plan, and the HRA, are at a high tier of the planning process, this is important when considering any necessary mitigation for identified effects.

1.11 The Greater Manchester Ecology Unit

The Greater Manchester Ecology Unit (GMEU), as the specialist ecological adviser to Bolton Council has prepared this Screening Opinion and Assessment. Information held by Natural England and the Joint Nature Conservation Committee (JNCC) was consulted for the qualifying features, the conservation objectives and favourable condition for the European Sites concerned (the information is summarised below).

GMEU ecologists familiar with the European sites concerned and their special interests, reviewed the ecological information. The key vulnerabilities and sensitivities of the European sites concerned are understood by GMEU allowing for an informed assessment of the possible effects of the Plan, and any specific aims, objectives and policies contained in the Plan.

GMEU has prepared a number of HRAs for Local Plans and Strategies, prepares HRAs for planning applications across GM and Lancashire and is often consulted on HRAs prepared by others.

1.12 This report assesses the 'Bolton Local Plan: 2022 to 2042'. It is recognised that as the name suggests the plan provides a framework for development in Bolton and that land currently not allocated may come forward for development during the period of the Plan. Where these cannot be screened out as having no likely significant effect an Appropriate Assessment may be required at the time of the allocation or application stage.

1.13 The assessment takes into account the likely cumulative impacts (in-combination effects) of these additional developments based on the current estimates of the amount of new development which may be proposed outside of the strategic allocations. It also takes into account likely cumulative impacts of strategic allocation within Bolton identified in the

Places for Everyone and strategic and local allocations in neighbouring districts and Boroughs such as Wigan and Warrington.

- 1.14 The report identifies policies, which may require further assessment as part of the ongoing HRA of the Bolton Local Plan: 2022 to 2042 as the plan develops and makes recommendations, where necessary, on possible changes to policies.

2. Brief Description of the Plan

- 2.1. The Plan being assessed is the 'Bolton Local Plan: 2022 to 2042'. It is a part of a suite of development plans for Bolton, which include the strategic development plan for Greater Manchester, Places for Everyone.
- 2.2. The primary purpose of the Bolton Local Plan is to guide development proposals not covered by the strategic development Plan for Greater Manchester (Places for Everyone, PfE) up to 2042. The plan aims to set out where new homes, jobs, community facilities and green space should go, and how the borough will grow up to 2042.

3. Identification of European designated sites concerned

- 3.1 This Assessment has first screened all European sites in the region and where appropriate Wales, to generate a long list and decide which of these sites are likely to be affected by future development in Bolton. When assessing the impact of a Plan on European protected sites it is important to consider the impact on sites not only within the administrative area covered by the Plan but also those which fall outside the Plan boundary, as these could still potentially be affected by the Plan.

The list of sites assessed and considered and their proximity to Bolton are shown in Appendix 1. Appendix 2 shows potential pathways from Bolton to the European sites.

The Screening Criteria

- 3.2 In carrying out the initial screening process, the Assessment has considered the main possible **sources** of effects on the European sites arising from the Plan, possible **pathways** to the European sites and the effects on possible sensitive **receptors** in the European sites. Only if there is an identifiable source, a pathway and a receptor is there likely to be a significant effect.
- 3.3 Possible sources and pathways for effects arising from development on the identified Sites and used in the screening of European sites are considered to be:
- Water pollution via watercourse and groundwater moving from Bolton to European sites (habitat damage and species loss);
 - Air pollution primarily transport related via road network (habitat damage);
 - Increased recreational disturbance to European sites on-foot, by road or train (species disturbance and habitat damage); and
 - Risk of invasive non-native species introduction via waterways (habitat and species impacts).
- 3.4 There are no designated European sites within the Bolton Council local authority boundary. The closest European site is part of the Manchester Mosses Special Area of Conservation (SAC), which at its closest point is approximately 5.5km south of the Bolton boundary.

- 3.5 Guidance and precedence concerning distances at which significant effects on European sites are caused by water or air pollution has been taken into account during the screening of European sites. Recommended buffer zones for certain types of 'most damaging' operations (e.g. air pollution from vehicles and recreational disturbance) have been used in the screening of sites. The buffer zones are based on distances before pollution sources and recreational disturbance become so diffuse so as to be indiscernible or impossible to ascribe to particular source. Outside of these buffer zones significant effects on European sites arising from water and air pollution and recreational disturbance are considered unlikely to arise.
- 3.6 Natural England also publish SSSI 'Impact Risk Zones' (IRZs) providing guidance on the types of development which should be considered for their possible impacts on SSSIs and which impacts should be considered. All European designated sites are also designated as SSSIs. IRZs can therefore provide guidance when screening European sites that could be affected by the Plan.
- 3.7 On behalf of, and in conjunction with, the Places for Everyone (PfE) local planning authorities (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan) the Greater Manchester Combined Authority has prepared a Joint Supplementary Planning Document (SPD) relating to Holcroft Moss. This SPD has been adopted by Bolton Council. An SPD has also been adopted by Oldham, Rochdale and Tameside Councils covering the South Pennines SAC/SPA. These documents have also been taken into account when Screening European sites that could be affected by the plan.
- 3.8 Although guidance concerning buffer zones/risk zones has been taken into account when screening European protected sites, in the case of a Plan affecting the development of an entire metropolitan area, buffer/risk zones should be regarded as important but **not** as definitive; for example, this buffer zone may not be sufficient when assessing certain very large-scale developments, secondary impacts, or cumulative impacts where pathways to receptor sites are rivers, air pollution is a factor or the receptor site is sensitive to recreational pressure resulting from an increase in population.
- 3.9 Taking the above into account, three European sites are screened in owing to proximity to the Borough of Bolton.
- Manchester Mosses SAC
 - Rixton Clay Pits SAC
 - Martin Mere SPA / Ramsar

Taking a precautionary approach, the following sites have also been screened into the assessment because there are identified pathways to these sites from Borough of Bolton.

- Mersey Estuary SPA/Ramsar (hydrological connectivity via tributaries of small brooks connecting to Glaze Brook, potential recreational destination)
- Ribble & Alt Estuary SPA/Ramsar (hydrological connectivity via River Douglas, potential recreational destination)
- South Pennines Moors SAC/SPAs (diffuse air quality impacts).
- Sefton Coast SAC (potential recreational destination).

Other European sites considered but screened-out of the assessment include:

- Rochdale Canal SAC – whilst connectivity for leisure boats via the Manchester, Bolton & Bury Canal exists and disturbance of floating water-plantain (the qualifying species)

by leisure boats is an identified source of likely significant effect, it is approximately 17km from the Bolton Borough boundary via the canal network to the SAC, and the current trigger for likely significant effects of 800 boat movements per annum is very unlikely to be exceeded in isolation or in-combination given that the most recent lockage report (2024) indicates less than 200 boat movements per annum.

- Liverpool Bay SPA – whilst hydrologically linked to Bolton, the volume of water in Liverpool Bay is such that any pollutants generated in the Borough of Bolton could not be reasonably attributed to any likely significant effects owing to a reduction in Water quality detected in Liverpool Bay SPA.
- Dee Estuary SPA/Ramsar– whilst hydrologically linked to Bolton, any pollutants generated in the Borough of Bolton could not be reasonably attributed to any likely significant effects owing to a reduction in water quality detected in the Dee Estuary SPA/Ramsar.
- Mersey Narrow & Wirral Foreshore SAC – whilst hydrologically linked to Bolton, any pollutants generated in the Borough of Bolton could not be reasonably attributed to the Borough of Bolton.
- Rostherne Mere Ramsar – too distant from Bolton, with no apparent pathways (there is no public access to this site).

4. Initial Screening of potential Likely Significant Effects (LSE)

- 4.1 Sources are described and considered in more detail below. The aim of this section is to provide reasoned justification for the decisions made later in the Screening exercise.
- 4.2 Given the distances of the proposed allocations within Bolton from the European sites concerned, and the special nature conservation interests of the European sites screened in, the following impacts can be effectively be screened out of the assessment as being very unlikely to be caused through the operation of the Plan, or any effects will be so diffuse or diluted so as to be *nugatory* (that is, too small to be distinguished from background):
- Direct Habitat Loss (no European sites are within the Bolton Council local authority boundary)
 - Noise Disturbance (the Manchester Mosses SAC does not fall into Bolton and noise does not represent a risk to restoration of the degraded lowland bog.);
 - Light Spillage or shading (the Manchester Mosses SAC does not fall into Bolton and light pollution does not represent a risk to restoration of the degraded lowland bog.);
 - Risk of invasive non-native species introduction (whilst theoretically introduced species could be transported down to the Mersey or Ribble Estuaries, since the river is freshwater and the estuary is salt water the risks are negligible. Invasive species are not listed as a constraint to the restoration of the Manchester Mosses SAC).
- 4.3 The following impacts have been 'Screened In' to the assessment as considered to have the potential to cause likely significant effects:
- Water pollution,
 - Air pollution (primarily that generated by vehicles),
 - Increased recreational pressure,

The following brief discussion of these impacts is included to give an understanding of the rationale for the conclusions reached in the subsequent Screening process, summarised in Table 6.1 and Table 6.2.

Water Quality

- 4.4 Negative effects on distant European sites, both habitats and qualifying species can occur through increases in water pollution such as nutrient enrichment from diffuse pollution discharged from wastewater treatment works, agricultural run-off and/or industrial processes as well as increases in sediment load.
- 4.5 Of the list of sites considered, diffuse water pollution could have an effect on the Mersey Estuary SPA/Ramsar Site, via pathways such as the Glaze Brook into the River Mersey and the Estuary and on the Ribble & Alt SPA/Ramsar via the River Douglas.
- 4.6 Prior to discharging into the Estuaries these watercourses pass through other Metropolitan areas and districts within the Mersey basin adjacent to the very large Merseyside conurbation. Both estuaries receive inputs from many disparate sources. It will therefore be very difficult to establish whether any water pollution arising from development in Bolton was responsible for a significant effect on pollution of either Estuary. However, given the need to take a precautionary approach when preparing an HRA, the Mersey Estuary & Ribble & Alt Estuaries have been 'Screened In' to this assessment.

- 4.7 It is unlikely that water pollution generated in the Borough of Bolton would impact the Rochdale Canal SAC as whilst there is theoretical hydrological connectivity via the Canal system, any effects which arose in Bolton would not be measurable.
- 4.8 Water quality effects on the Manchester Mosses could theoretically occur if hydrological linkages could be proven.

Air Quality

- 4.9 Air can transport pollution, dust and odours over significant distance and air pollution can cause significant harm to habitats and species. The main types of air pollutants likely to have an adverse effect on an ecologically important site are:
- Oxides of Nitrogen (NO_x),
 - Ammonia (NH₃),
 - Dust,
 - Sulphur Dioxide (SO₂),
 - Low level Ozone (O₃) and,
 - Acid deposition caused from chemical reactions to NO_x, SO₂ and CO₂.
- 4.10 Of these NO_x (nitrates) are the most likely to arise as a result of development controlled by the Plan under consideration here. Dust and low-level ozone only have effects very close to the source. Ammonia emissions are most closely associated with certain types of intensive agricultural production not identified as a significant land-use within the Borough of Bolton. SO₂ are associated with certain industrial operations such as paper pulp, cement and smelting and burning of fossil fuels such as coal and oil.
- The main sources of these pollutants are road traffic. The greatest damage caused by nitrates occurs within 200 - 250m of the source. Although any allocations in Bolton will be located further than 250m from any European sites, it is recognised that development within Bolton will generate road traffic over a much wider area and some of this traffic may subsequently pass within 250m of a European site. Proposed developments within Bolton may result in these pollutants arising, they have been screened-in to this Assessment.
- 4.11 The issue of diffuse air pollution is complicated by the fact that two of the European sites of concern to this Assessment (the Manchester Mosses SAC and Rixton Clay Pits SAC) are already exceeding nitrate levels which would be considered harmful to sensitive habitats on these sites (*source* Natural England and Air Pollution Information System (APIS)), so any level of increased nitrate pollution no matter how small could be considered to be harmful. Habitats in the South Pennines SAC are also susceptible to air pollution.
- 4.12 A joint SPD has been adopted by the nine Places for Everyone authorities and Warrington Borough Council providing guidance on when levels of traffic generation are likely to require mitigation with regards to Holcroft Moss, part of the Manchester Mosses SAC. The current guidance is that any development that generates more than 100 vehicle movements per day or 20 Heavy Goods Vehicles per day will exceed the threshold and will trigger a need for mitigation of effects on the Manchester Mosses SAC.
- 4.13 For the South Pennines SAC/SPA and other parts of the Manchester Mosses SAC no guidance is currently available. They have therefore been screened-in on the precautionary principle.

- 4.14 Whilst no new significant industrial processes are currently proposed in the Plan, proposals may come forward that have emissions that would require permitting by the Environment Agency. Any such proposals must be accompanied by an Air Quality Assessment that includes potential effects on European protected sites.

Recreational Pressure

- 4.15 The effects of significantly increased populations and associated recreational pressures on the regions' European protected sites has been considered in this Assessment because it is recognised that this could have a negative effect on the special interest of some European sites.

Recreational use of an internationally designated site has potential to:

- Cause damage through excessive erosion (trampling, wear and tear),
 - Cause nutrient enrichment,
 - Cause disturbance to sensitive species, particularly nesting and overwintering birds and,
 - Prevent appropriate management or exacerbate existing management difficulties.
- 4.16 The European protected sites closest to the Borough of Bolton are the Manchester Mosses SAC, Rochdale Canal SAC and Martin Mere SPA/Ramsar. Managed access occurs at parts of the Manchester Mosses SAC, (Risley Moss Country Park) and Martin Mere SPA/Ramsar. Any changes to population levels or access arrangements (e.g. promotion, improved footpaths, facilities, events etc) could have impacts on these sites.
- 4.17 Of the other European sites located at a greater distance, the Ribble & Alt Estuaries SPA/Ramsar and the South Pennines SPA and SAC are in part promoted as recreation destinations and are therefore potentially vulnerable to an increase in population in the Borough of Bolton. However, Natural England have advised that they do not have sufficient evidence to show that recreational disturbance of the South Pennines SPA or SAC will result in any likely significant effect (ref. letter dated 7th August 2024 to GMCA). The Ribble & Alt Estuaries SPA/Ramsar are therefore screened-in and the South Pennines SPA/SAC screened-out.
- 4.18 The qualifying habitats of lowland raised bog such as found in the Manchester Mosses SAC are sensitive to recreational activity. These include increased access by pedestrian off-road 4x4 vehicles, motorbikes, trail/mountain bikes and horse riding that can cause erosion of the peat. Increased access can also result in an increase in the number of accidental fires which on peat habitats can result in long-term habitat degradation.
- 4.19 The qualifying species of Martin Mere SPA/Ramsar, the Ribble & Alt Estuaries SPA/Ramsar and Mersey Estuary SPA/Ramsar which include breeding and wintering birds are also at risk from recreational disturbance. These European sites are therefore screened-in for recreational disturbance.
- 4.20 It is therefore, considered that the additional recreational pressures arising from the likely increased population resulting from development within the Borough of Bolton on European protected sites will need to be screened-in.

Summary Results of Screening of Sites

4.21 From the screening process, the following European designated sites have been identified as having some potential to be affected by development proposed and planned for within the Bolton Local Plan:

- Manchester Mosses SAC,
- Rixton Clay Pits SAC,
- Martin Mere SPA/Ramsar site,
- Mersey Estuary SPA/Ramsar,
- Ribble & Alt Estuaries SPA,
- South Pennine Moors SPA/SAC,
- Sefton Coast SAC.

The Rochdale Canal SAC has been screened-out as there are limited likely pathways identified.

5. The Nature Conservation Interest of the “Screened In” European Sites

The following information is derived from information available from Natural England and the Joint Nature Conservation Committee.

Manchester Mosses SAC

5.1 Description of the Manchester Mosses SAC

Mossland formerly covered a large part of low-lying Greater Manchester, Merseyside and southern Lancashire, and provided an obstacle to industrial and agricultural expansion. While most has now been converted to agriculture or lost to development, several examples have survived as degraded raised bog, such as Astley & Bedford Mosses (Wigan), Risley Moss (Warrington) and Holcroft Moss (Warrington). Their surfaces are now elevated above surrounding land due to shrinkage of the surrounding tilled land, and all except Holcroft Moss have been cut for peat at some time in the past. While historic drainage has resulted in purple moor-grass (*Molinia caerulea*), bracken (*Pteridium aquilinum*) and birch (*Betula*) spp. scrub or woodland colonising the lowland bog habitat, wetter pockets have enabled the peat-forming species to survive. Habitat management including rewetting and reintroduction of appropriate lowland bog species has started to reverse the degradation of these sites.

5.2 Primary Reason for Designation of the Manchester Mosses SAC

The site supports degraded bog still capable of natural regeneration (JNCC code 7120), which has the potential to be restored to active raised bog (JNCC code 7110).

5.3 Conservation Objectives of the Manchester Mosses

The conservation objectives (Natural England 2018) for this site are:

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats;
- The structure and function (including typical species) of qualifying natural habitats, and;
- The supporting processes on which qualifying natural habitats rely.

5.4 Supplementary Advice on Conserving and Restoring

On this site, favourable condition requires the maintenance of the extent of each designated habitat type. A series of site-specific targets, which will contribute to favourable condition, have been produced by Natural England. However, many of these relate to management of the habitats on the site and are not particularly applicable to assessing the effects of development proposals on the SAC whilst others relate to direct impacts. Therefore, the operations that may damage the special interest of the SAC resulting from development in Bolton have been restricted to:

- Pollution including atmospheric pollutants and NOxs,
- Hydrological impacts and;
- Recreational activities.

Rixton Clay Pits SAC

5.5 Description of Rixton Clay Pits SAC

Situated east of Warrington, this site comprises parts of an extensive disused brickworks excavated in glacial boulder clay. The excavation has left a series of hollows, which have filled with water since workings ceased in the 1960s, leading to a variety of pond sizes. New ponds have also been created more recently for wildlife and amenity purposes. Great crested newts (*Triturus cristatus*) are known to occur in at least 20 ponds across the site. The site also supports species-rich grassland, scrub and mature secondary woodland.

5.6 Primary Reason for Designation of Rixton Clay Pits

The primary reason for the designation of Rixton Clay Pits is its significant population of great crested newts (*Triturus cristatus*), a European protected species. Sites are selected as SACs where there is evidence of a relatively large and robust population of great crested newts, based on reliable recent survey data.

5.7 Conservation Objectives for Rixton Clay Pits

The conservation objectives (Natural England 2018) for this site are:

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of the habitats of qualifying species;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which the habitats of qualifying species rely;
- The populations of qualifying species, and;
- The distribution of qualifying species within the site.

5.8 List of operations that could potentially damage the special interests of the European Site include:

- Human intrusions and disturbances.

Additionally, Natural England also states that the site is sensitive to air quality.

Martin Mere SPA & Ramsar Site

5.9 Description of Martin Mere SPA/Ramsar

Martin Mere is a low-lying wetland complex of open-water, marsh and grassland habitats overlying deep peat. It is situated to the north of Burscough and occupies part of the site of the old Martin Mere which, prior to drainage, was probably the largest lake in Lancashire. Acquired by the Wildfowl and Wetland Trust in 1974, the site has been transformed into a reserve of international importance for waterfowl.

5.10 Primary Reason for Designation of Martin Mere SPA/Ramsar

The principal interest of the site lies in the number of migrant birds it supports during the winter months. Of particular importance are wintering populations of pink-footed geese,

teal and pintail in excess of 1% of the NW European population. Martin Mere also supports nationally important numbers of bewick swan, gadwall, mallard, whooper swan and shoveller and nationally important numbers of snipe, lapwing, black-tailed godwit and ruff.

Qualifying Species

This site qualifies under Article 4.1 of the Conservation of Wild Birds Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:

Over winter

- Bewick Swan *Cygnus columbianus bewickii*
- Whooper Swan *Cygnus cygnus*

The site qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed.

Over winter

- Pintail *Anas acuta*
- Pink-footed Geese *Anser brachyrhynchus*
- Teal *Anas crecca*

Assemblage qualification: A wetland of international importance.

The area qualifies under Article 4.2 of the Conservation of Wild Birds Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl. Over winter, the site regularly supports 46,196 individual waterfowl (5 year peak mean 1991/2 – 1995/6) including: pochard *Aythya farina*, mallard *Anas platyrhynchos*, teal *Anas crecca*, wigeon *Anas penelope*, pintail *Anas acuta*, pink-footed goose *Anser brachyrhynchus*, whooper swan *Cygnus cygnus* and Bewick's swan *Cygnus columbianus bewickii*.

5.11 Conservation Objectives

The conservation objectives for this site (Natural England 2018) are to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and
- The distribution of the qualifying features within the site.

5.12 List of operations that could potentially damage the special interests of the European Site ~~include from the JNCC standard data sheet and Natural England advice on operations:~~

- Invasive non-native species;
- Pollution to ground water (point sources and diffuse pollution)
- Human induced changes in hydraulic conditions (impacts of drainage and peat shrinkage)

5.13 Description

The Mersey Estuary is located on the Irish Sea coast of north-west England. It is a large, sheltered estuary that comprises large areas of saltmarsh and extensive intertidal sand- and mud-flats, with limited areas of brackish marsh, rocky shoreline and boulder clay cliffs, within a rural and industrial environment. The intertidal flats and saltmarshes provide feeding and roosting sites for large populations of waterbirds. During the winter, the site is of major importance for ducks and waders. The site is also important during the spring and autumn migration periods, particularly for wader populations moving along the west coast of Britain.

5.14 Primary Reason for Designation

Qualifying species

This site qualifies under **Article 4.1** of the Conservation of Wild Birds Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:

Over winter

- Golden Plover *Pluvialis apricaria*, 3,070 individuals representing at least 1.2% of the wintering population in Great Britain (5 year peak mean 1991/2 - 1995/6)

This site also qualifies under **Article 4.2** of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:

On passage

- Redshank *Tringa totanus*, 3,516 individuals representing at least 2.0% of the Eastern Atlantic - wintering population (5 year peak mean, 1987-1991)
- Ringed Plover *Charadrius hiaticula*, 1,453 individuals representing at least 2.9% of the Europe/Northern Africa - wintering population (Count, as at 1989)

Over winter

- Dunlin *Calidris alpina*, 44,300 individuals representing at least 3.2% of the wintering Northern Siberia/Europe/Western Africa population (5 year peak mean 1991/2 - 1995/6)
- Pintail *Anas acuta*, 2,744 individuals representing at least 4.6% of the wintering North-western Europe population (5 year peak mean 1991/2 - 1995/6)
- Redshank *Tringa totanus*, 4,689 individuals representing at least 3.1% of the wintering Eastern Atlantic - wintering population (5 year peak mean 1991/2 - 1995/6)
- Shelduck *Tadorna*, 5,039 individuals representing at least 1.7% of the wintering North-western Europe population (5 year peak mean 1991/2 - 1995/6)
- Teal *Anas crecca*, 11,667 individuals representing at least 2.9% of the wintering North-western Europe population (5 year peak mean 1991/2 - 1995/6)

Assemblage qualification: A wetland of international importance.

The area qualifies under Article 4.2 of the Conservation of Wild Birds Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl

Over winter, the area regularly supports 99,467 individual waterfowl (5 year peak mean 1991/2 - 1995/6) including: Curlew *Numenius arquata*, Black-tailed Godwit *Limosa limosa islandica*, Lapwing *Vanellus vanellus*, Grey Plover *Pluvialis squatarola*, Wigeon *Anas penelope*, Great Crested Grebe *Podiceps cristatus*, Redshank *Tringa totanus*, Dunlin *Calidris alpina alpina*, Pintail *Anas acuta*, Teal *Anas crecca*, Shelduck *Tadorna tadorna*, Golden Plover *Pluvialis apricaria*.

5.15 Conservation Objectives

The conservation objectives for this site (Natural England 2018) are to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Conservation of Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features and;
- The distribution of the qualifying features within the site.

5.16 List of operations that could potentially damage the special interests of the European Site -

- Outdoor sports and leisure activities, recreational activities;
- Invasive non-native species;
- Changes in biotic conditions;
- Commercial shipping;
- Construction of port and harbour structures and;
- Dredging proposals.

Ribble & Alt Estuaries SPA/Ramsar

5.17 Description

The Ribble and Alt Estuaries SPA is composed of extensive intertidal mud and sandflats and large areas of saltmarsh. The inner flats of the Ribble Estuary are flanked by very large areas of saltmarsh. The outer flats of the Ribble Estuary are sandy. They run south as a wide sandy shore along the Sefton Coast, merging into the Alt Estuary and extending as far south as Crosby. The intertidal sandflats on the Sefton Coast are extensive and have the highest exposure to wave action. The central flats of the Alt Estuary are also sandy but with a higher mud content, and a small saltmarsh on the east bank of the channel.

They provide an important feeding habitat for birds. The estuary also provides extensive roosting sites for large populations of water birds. It is of major importance during the winter for duck and wader species and for supporting wader populations moving along the west coast of Britain during the spring and autumn migration periods.

5.18 Primary Reason for Designation

Qualifying species

This site qualifies under Article 4.1 of the Conservation of Wild Birds Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:

Over winter

- Bewick Swan *Cygnus columbianus bewickii* 276 individuals representing at least 3.9% of the wintering population in Great Britain (5 year peak mean 1993/94 - 1997/98)
- Whooper Swan *Cygnus cygnus* 182 individuals representing at least 3.3% of the wintering population in Great Britain (5 year peak mean 1993/94 - 1997/98)
- Golden Plover *Pluvialis apricaria*, 3,598 individuals representing at least 1.4% of the wintering population in Great Britain (5 year peak mean 1993/94 - 1997/98)
- Bar-tailed Godwit *Limosa lapponica* 20,086 individuals representing at least 37.9% of the wintering population in Great Britain (5 year peak mean 1993/94 - 1997/98)

Breeding

- Ruff *Philomachus pugnax* 1 nest representing at 9.1% of the breeding population in Great Britain (1980's count)
- Common Tern *Sterna Hirundo* 182 pairs representing at least 1.5% of the breeding population in Great Britain (1996 count)

The site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European bio-regional importance of the following species listed.

On Passage

- Ringed Plover *Charadrius hiaticula* 1,657 representing at least 3.3% of the North African population (5 year peak mean 1993 - 1997)
- Sanderling *Calidris alba* 6,535 individuals representing at least 6.5% of the East Atlantic Western and south African population (5 year peak mean 1993 - 1997)
- Redshank *Tringa totanus*, 3,247 individuals representing at least 2.2% of the Eastern Atlantic population (5 year peak mean 1993 - 1997)

Over winter

- Pink-footed Geese Anser brachyrhynchus 11,764 individuals representing at least 5.2% of the Greenland/Iceland/UK population (5 year peak mean 1993/94 - 1997/98)
- Shelduck *Tadorna tadorna*, 4,925 individuals representing at least 1.6% of the wintering North-western Europe population (5 year peak mean 1993/94 - 1997/98)
- Wigeon *Anas penelope* 85,259 individuals represent at least 6.8% of the West Siberia and NW/NE European population (5 year peak mean 1993/94 - 1997/98)
- Teal *Anas crecca*, 7,157 individuals representing at least 1.8% of the North-western Europe population (5 year peak mean 1993/94 - 1997/98)

- Pintail *Anas acuta*, 2,731 individuals representing at least 4.6% of the North-western Europe population (5 year peak mean 1993/94 - 1997/98)
- Oystercatcher *Haematopus ostralegus*, 18,535 individuals representing at least 2.1% of the European and North-western African population (5 year peak mean 1993/94 - 1997/98)
- Grey Plover *Pluvialis squatarola* 9,355 individuals representing at least 6.2% of the Eastern Atlantic population (5 year peak mean 1993/94 - 1997/98)
- Knot *Calidris canutus islandica* 68,922 individuals representing at least 19.7% of the Canada/Greenland/Iceland and NW Europe population (5 year peak mean 1993/94 - 1997/98)
- Sanderling *Calidris alba* 2,882 individuals representing at least 2.9% of the East Atlantic Western and south African population (5 year peak mean 1993/94 - 1997/98)
- Dunlin *Calidris alpina alpina*, 39,376 individuals representing at least 2.8% of the Northern Siberia/Europe/Western Africa population (5 year peak mean 1993/94 - 1997/98)
- Black-tailed Godwit *Limosa limosa*, 1,273 individuals representing at least 1.8% of the Iceland population (5 year peak mean 1993/94 - 1997/98)
- Redshank *Tringa totanus*, 2,505 individuals representing at least 1.7% of the Eastern Atlantic population (5 year peak mean 1993/94 - 1997/98)

Breeding

- Lesser Black-backed Gull *Larus fuscus graellsii* 1,800 pairs representing at least 1.5% of the Western Europe/Mediterranean/West African population (1993 count)

Assemblages

The area also qualifies under Article 4.2 of the Conservation of Wild Birds Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl

In the non-breeding season, the area regularly supports 323,861 individual waterbirds (5 year peak mean 1993/94 - 1997/98), including Cormorant *Phalacrocorax carbo*, Bewick's Swan *Cygnus columbianus bewickii*, Whooper Swan *Cygnus cygnus*, Pink-footed Goose *Anser brachyrhynchus*, Shelduck *Tadorna tadorna*, Wigeon *Anas penelope*, Teal *Anas crecca*, Pintail *Anas acuta*, Scaup *Aythya marila*, Common Scoter *Melanitta nigra*, Oystercatcher *Haematopus ostralegus*, Ringed Plover *Charadrius dubius*, Golden Plover *Pluvialis apricaria*, Grey Plover *Pluvialis squatarola*, Lapwing *Vanellus vanellus*, Knot *Calidris canutus islandica*, Sanderling *Calidris alba*, Dunlin *Calidris alpina alpina*, Black-tailed Godwit *Limosa limosa islandica*, Bar-tailed Godwit *Limosa lapponica*, Whimbrel *Numenius phaeopus*, Curlew *Numenius arquata* and Redshank *Tringa tetanus*.

The site also qualifies under article 4.2 of the Directive (79/409/EEC) as it is used regularly by over 20,000 seabirds in any season: In the breeding season, the area regularly supports 29,236 individual seabirds (count period ongoing), including Black-headed Gull *Larus ridibundus*, Lesser Black-backed Gull *Larus fuscus graellsii* and Common Tern *Sterna hirundo*.

5.19 Conservation Objectives

The conservation objectives for this site (Natural England 2018) To ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Conservation of Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features and;
- The distribution of the qualifying features within the site.

5.20 List of operations that could potentially damage the special interests of the European Site

- Human induced changes in hydraulic conditions
- Invasive non-native species;
- Changes in abiotic conditions;
- Air pollution, air-borne pollutants;
- Biocenotic evolution, succession.

South Pennines Moors (Phase 1 and Phase 2) SPA

5.21 Description

The site is an extensive tract of moorland and moorland-fringe habitat. It includes most of the unenclosed moorland areas of the north, eastern and south-western Peak District, where it also extends into enclosed farmland of wet rushy pasture, hay meadows and small wetlands in the valley bottoms. The moorland habitats include extensive tracts of blanket bog and dry heath, which together with wet heath, acid grassland, small flushes, gritstone edges and boulder slopes, streams and moorland reservoirs, fringing semi-natural woodland and enclosed farmland, represents the full range of upland vegetation characteristic of the South Pennines. The site supports several important species assemblages, including higher plants, lower plants and insects, as well as breeding birds. Many physical features are of geological interest.

5.22 Primary Reason for Designation

Qualifying species

This site qualifies under Article 4.1 of the Conservation of Wild Birds Directive (79/409/EEC) as it is used regularly by 1% or more of the Great Britain population of species listed in Annex I.

In any season:

- Merlin (*Falco columbarius*) 30 – 36 breeding pairs representing 2.3-2.8% of the breeding population in Great Britain (period 1990/1998)
- Golden Plover *Pluvialis apricaria*) 435 - 445 breeding pairs representing 1.9-2.0% of the breeding population in Great Britain (period 1990/1998)

- Short-eared Owl (*Asio flammeus*) 22 - 25 breeding pairs representing 2.2 - 2.5% of the breeding population in Great Britain (period 1990/1998)

Non-qualifying species of interest:

The site supports a rich upland breeding bird assemblage which, as well as the qualifying species listed above, includes important numbers of Peregrine (*Falco peregrinus*), Lapwing (*Vanellus vanellus*), Dunlin (*Calidris alpina schinzii*), Snipe (*Gallinago gallinago*), Curlew (*Numenius arquata*), Redshank (*Tringa tetanus*), Common Sandpiper (*Actitis hypoleucos*), Whinchat (*Saxicola rubetra*), Wheatear (*Oenanthe oenanthe*), Ring Ouzel (*Turdus torquatus*) and Twite (*Carduelis flavirostris*).

5.23 Conservation Objectives

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features and;
- The distribution of the qualifying features within the site.

5.24 List of operations that could potentially damage the special interests of the European Site include:

- Hunting and collection of Wild Animals;
- Fire and Fire Prevention;
- Human induced changes in hydraulic conditions;
- Outdoor sports, leisure and Recreational Activities;
- Outdoor sports, leisure and recreational activities to functionally linked land and;
- Reduced fecundity and genetic suppression.

South Pennine Moors SAC

5.25 Description

This site covers the key moorland blocks of the Southern Pennines from Ilkley Moor in the north to the Peak District in the south. The moorlands are on a rolling dissected plateau formed from rocks of Millstone Grit at altitudes of between 300m – 600m and a high point of over 630m at Kinder Scout. The greater part of the gritstone is overlain by blanket peat with the coarse gravelly mineral soils occurring only on the lower slopes. The moorlands as a whole support a breeding bird community of national and international importance. The site is representative of upland dry heath, which covers extensive areas, occupies the lower slopes of the moors on mineral soils or where peat is thin, and occurs in transitions to acid grassland, wet heath and blanket bogs. The upland heath of the South Pennines is strongly dominated by *Calluna vulgaris* – *Deschampsia flexuosa* heath and *C. vulgaris* – *Vaccinium myrtillus* heath. More rarely *C. vulgaris* – *Ulex gallii* heath and *C. vulgaris* – *Erica cinerea* heath are found. On the higher, more exposed ground *V. myrtillus* – *D. flexuosa* heath becomes more prominent. The smaller area of wet heath is characterised by cross-leaved heath *Erica tetralix* and purple moor grass *Molinia careulea*. The site also supports extensive areas of acid grassland largely derived from dry and wet heath. In the cloughs, or valleys, which extend into the heather moorlands, a greater mix of dwarf

shrubs can be found together with more lichens and mosses. The moors support a rich invertebrate fauna, especially moths, and important bird assemblages. This site also contains areas of blanket bog, although the bog vegetation communities are botanically poor. Hare's-tail cotton-grass *Eriophorum vaginatum* is often overwhelmingly dominant and the usual bog-building Sphagnum mosses are scarce. Where the blanket peats are slightly drier, heather *C. vulgaris*, crowberry *Empetrum nigrum* and bilberry *V. myrtillus* become more prominent. The cranberry *Vaccinium oxycoccus* and the uncommon cloudberry *Rubus chamaemorus* is locally abundant in bog vegetation. Bog pools provide diversity and are often characterised by common cotton-grass *E. angustifolium*. Substantial areas of the bog surface are eroding, and there are extensive areas of bare peat. In some areas, erosion may be a natural process reflecting the great age (up to 9000 years) of the South Pennine peats. Around the fringes of the upland heath and areas of bog are blocks of old sessile oak woods, usually on slopes. These tend to be dryer than those further north and west, such that the bryophyte communities are less developed (although this lowered diversity may in some instances have been exaggerated by the effects of 19th century air pollution). Other components of the ground flora such as grasses, dwarf shrubs and ferns are common. Small areas of alder woodland along stream-sides add to the overall richness of the woods. The moorland also supports a range of flush and fen habitats associated with bogs, cloughs, rivers and streams. Although generally small scale features they have a specialised flora and fauna, which makes a great contribution to the overall biodiversity of the moors. Acid flushes are the most common type and these include transition mires and quaking bogs characterised by a luxuriant carpet of bog mosses Sphagnum spp., rushes and sedges.

5.26 Qualifying Features

Under Article 4(4) of the Council Directive (92/43/EEC) on the conservation of natural habitats and of wild fauna and flora as it hosts the following habitats listed in Annex I:

- Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath (JNCC Habitat code H4010);
- European dry heaths (JNCC Habitat code H4030);
- Blanket bogs* (JNCC Habitat code H7130);
- Transition mires and quaking bogs; Very wet mires often identified by an unstable 'quaking' surface (JNCC Habitat code H7140) and;
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles (JNCC Habitat code H91A0).

5.27 Conservation Objectives

The conservation objectives for this site are to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of the qualifying natural habitats;
- The structure and function (including typical species) of the qualifying natural habitats and;
- The supporting processes on which the qualifying natural habitats rely.

5.28 List of operations that could potentially damage the special interests of the European Site include:

- Agricultural activities;
- Fire and Fire Prevention;
- Human induced changes in hydraulic conditions;
- Outdoor sports, leisure and Recreational Activities;
- Air Pollution and air borne pollutants.

Sefton Coast SAC

5.6.1 Description

The Sefton Coast in north-west England displays both rapid erosion and active shifting dunes. A substantial stretch of the dune system is fronted by shifting dunes.

The sequence of habitats from foredunes to dune grassland and dune slack is extensive, and substantial areas of open dune vegetation remain. There are large areas of semi-fixed and fixed dunes with herbaceous vegetation exhibiting considerable variation from calcareous to acidic.

5.6.2 Primary Reasons For Designation of the Sefton Coast SAC

Qualifying habitats: The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Atlantic decalcified fixed dunes (*Calluno-Ulicetea*). (Coastal dune heathland)*
- Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*). (Dunes with creeping willow)
- Embryonic shifting dunes
- Fixed dunes with herbaceous vegetation ("grey dunes"). (Dune grassland)*
- Humid dune slacks
- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"). (Shifting dunes with marram)

Qualifying species: The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:

- Great crested newt *Triturus cristatus*
- Petalwort *Petalophyllum ralfsii*

Annex I priority habitats are denoted by an asterisk (*).

5.6.3 Conservation Objective for Sefton Coast SAC

The conservation objectives (Natural England 2018) for this site are:

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of the habitats of qualifying species
- The structure and function (including typical species) of qualify natural habitats

- The supporting processes on which qualifying natura habitats and the habitats of the qualifying species rely
- The populations of qualifying species and
- The distribution of qualifying species within the site.

5.6.4 List of operations that could potentially damage the special interests of the European Site include from the JNCC standard data sheet and Natural England advice on operations:

- Human induced changes in hydraulic conditions
- Invasive non-native species;
- Changes in abiotic conditions;
- Air pollution, air-borne pollutants;
- Biocenotic evolution, succession.

6. Initial Screening Opinion

6.1. The Screening Criteria

The first stage of an HRA is a Likely Significant Effect Test (Screening). This is essentially a risk assessment to decide whether a particular Policy or site can be effectively 'screened out' from further, more detailed assessment or needs to go forward for more detailed Assessment. The essential question to ask is:

"Is the Policy or the Site, either alone or in combination with other relevant Policies and Plans, likely to result in a significant effect upon the integrity of European sites?"

In carrying out this Screening process the Assessment has considered the main possible sources of effects on the European sites arising from the implementation of the Plan, possible pathways to the European sites and the effects on possible sensitive receptors in the European sites.

- The source is the direct or indirect changes (land take, emissions to air or water, hydrological changes) potentially occurring as a result of the development at an identified site.
- The pathway is the route or mechanism by which any likely significant effect would manifest in the environment and would reach the receptor.
- The receptor is the European Site and more specifically the qualifying features and conservation objectives for the site.

Only if there is an identifiable source, a pathway and a receptor is there likely to be a significant effect.

Possible sources and pathways for (unmitigated) effects used in the screening of potential policy impacts on European sites are considered to be:

- Water Pollution via River Douglas or tributaries of the River Mersey;
- Air pollution resulting from vehicular emissions and industry; and
- Increased recreational pressure.

6.2. The results of the screening are shown in the 'Screening Summary' table below (Table 6.1).

6.3. Given that the Bolton Local Plan is a high-level strategic plan, only a high-level Habitat Regulations Assessment (HRA) can currently be carried out.

6.4. Each of the Objectives and Policy Areas identified within the Bolton Local Plan has been assessed to determine whether they are:

- Unlikely to have an effect on a European Site – Screened Out,
- Could have a potential positive effect on a European Site – Screened Out,
- Could have a potential negative effect on a European Site – Screened In,
- Would be likely to have a significant negative effect on a European Site – Screened In.

6.5. Only policies and allocations with potential negative effects or significant effects have been "Screened In" for further Assessment. This assessment has been made based on the content and type of each policy and the HRA must be read together with the plan.

- 6.6. The timescales over which effects (both stand-alone and in-combination) have been considered are the lifetime of the plan and the lifetime of any proposals (including operational and restoration timescales) that may come forward during the plan period.

Table 6.1 - Initial Screening Summary of impacts of Bolton Local Plan: 2022 to 2042: Consultation on European Sites.

- Policies and site allocations screened into this assessment are identified in the end column of the table below in red text.
- For full Policy descriptions refer to the full text in the Plan

Policy	Summary policy description	Policy type	Possible impacts on European sites	Screening outcome
SP2	Land for Employment The Local Plan identifies a sufficient supply of sites to meet Bolton's need for industrial, warehousing and office floorspace over the plan period 2022 to 2042. Bolton has a need for 811,727 sqm of industrial and warehousing floorspace over the Plan period. Bolton has a minimum need for 16,700 sqm of office floorspace over the Plan period.	Strategic Policy - Employment	Potential significant effect from negative impacts on: • air quality to the Manchester Mosses SAC, • water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC, • recreational pressures to a number of European Sites.	Screened In
SP3	Land for Housing The Local Plan identifies sufficient supply of sites to deliver a minimum of 787 homes a year over the Plan period. Places for Everyone Policy JP-H1 establishes Bolton's minimum housing requirement of 787 net additional homes per year. 2,023 homes were provided 2022 to 2025, leaving a requirement for at least 13,717 homes over 2025 to 2042, to be met from sites with planning permission (4,976), neighbourhood plan allocations (20), SHLAA sites (1,741), windfall sites (1,600) and strategic housing allocations BSA01 to BSA06 (5,715), a total identified supply of 14,052 homes.	Strategic Policy - Housing	Potential significant effect from negative impacts on: • air quality to the Manchester Mosses SAC, • water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC, • recreational pressures to a number of European Sites.	Screened In
SP7	Green Belt Green Belt land will be protected in line with national policy. The Plan alters the Green Belt boundary only in exceptional circumstances and removes land from the Green Belt at Health Innovation Bolton (BSA02), Blackrod Employment Cluster (BSA07), Logistics North Extension (BSA08) and Land off The Alders, Tonge Moor (BSA09). Development on	Strategic Policy - Housing	Potential significant effect from negative impacts on: • air quality to the Manchester Mosses SAC, • water quality to the Mersey Estuary SPA, Ribble & Alt	Screened In

Policy	Summary policy description	Policy type	Possible impacts on European sites	Screening outcome
	released land must secure compensatory improvements to the environmental quality and accessibility of the remaining Green Belt.		Estuaries and Manchester Mosses SAC, recreational pressures to a number of European Sites.	
INF3	Social and Community Infrastructure Development in Bolton must mitigate the additional demand it generates for education, health and community infrastructure, so that the access to services for new residents is provided and access existing residents is not reduced by it.	Infrastructure	Potential significant effect from negative impacts on: - air quality to the Manchester Mosses SAC, - water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC, - recreational pressures to a number of European Sites.	Screened In
INF8	Digital and Utilities Infrastructure Development in Bolton will be permitted where it provides the digital and utilities infrastructure it needs and does not place unacceptable demand on existing networks.	Infrastructure	Potential significant effect from negative impacts on: - air quality to the Manchester Mosses SAC, - water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC, - recreational pressures to a number of European Sites.	Screened In
PQ3	Density and Tall Buildings Development in Bolton will be supported at densities that reflect the accessibility and context of the location, consistent with the approach set out in Places for Everyone (2024) to achieve the efficient use of land and high-quality design, and respond positively to the landscape, heritage and built environment setting. Proposals will be assessed according to the definition provided for tall buildings in Bolton, and will be supported where they meet the locational, environmental, technical, heritage and design	Placemaking	Potential significant effect from negative impacts on: - air quality to the Manchester Mosses SAC, - water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC, - recreational pressures to a number of European Sites.	Screened In

Policy	Summary policy description	Policy type	Possible impacts on European sites	Screening outcome
	requirements set out to support regeneration and placemaking.			
EC2	New Employment Development Bolton's existing office, industry and warehousing businesses will be supported to intensify, grow and expand. New development for these uses should be located on land allocated for that use, consistent with the spatial strategy. New office, industrial and warehousing development outside land allocated for these uses will also be permitted where it is consistent with the spatial strategy, and other plan policies. This relates to office, industrial and warehousing uses.	Economy	Potential significant effect from negative impacts on: - air quality to the Manchester Mosses SAC, - water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC.	Screened In
EC5	Ancillary Uses in Industrial and Warehousing Allocations and Development Sustainable ancillary uses of an appropriate type and scale will be allowed within industrial and warehousing allocations and development, where they serve the employment area.	Economy	Potential significant effect from negative impacts on: - air quality to the Manchester Mosses SAC, - water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC.	Screened In
HS1	Affordable Homes Affordable, secure, quality homes should be provided for those who cannot afford homes available on the open market as part of new development. Tenure blind affordable housing must be provided on site on residential development of 10 or more dwellings or 0.5ha or more, at a rate set by value zone, with a nil rate in the Central Bolton Policy Area. The tenure mix will be at least 53% social rent, no more than 21% affordable rent and no more than 26% affordable home ownership.	Housing	Potential significant effect from negative impacts on: - air quality to the Manchester Mosses SAC, - water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC, - recreational pressures to a number of European Sites.	Screened In

Policy	Summary policy description	Policy type	Possible impacts on European sites	Screening outcome
CB01 - CB04	Chapter 10 - Development Framework for Places and Sites	Place-specific Policies	See Site Allocations in Table 6.2	See Site Allocations in Table 6.2

Table 6.2 - Initial Screening Summary of impacts of Bolton Local Plan: 2022 to 2042 (Major Allocations) Consultation on European Sites.

- Policies and site allocations screened into this assessment are identified in the end column of the table below in red text.
- Sites previously assessed by the HRA of Places for Everyone excluded from re-assessment

Policy	Strategic Allocation Site Name	Allocation Type	Possible impacts on European sites	Screening outcome
BSA01	Crompton Place 340 homes and around 10,500 sqm office development	Draft Housing Allocation / Mixed Use	Potential significant effect from negative impacts on: • air quality to the Manchester Mosses SAC, • water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC, • recreational pressures to a number of European Sites.	Screened In
BSA02	Health Innovation Bolton 2,225 homes, of which 1,895 expected to be delivered in the Plan period, and around 200,000 sqm of employment-led, health innovation and community floorspace	Draft Housing Allocation / Mixed Use	Potential significant effect from negative impacts on: • air quality to the Manchester Mosses SAC, • water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC, • recreational pressures to a number of European Sites.	Screened In
BSA03	Anchor Lane, Farnworth Minimum of 460 homes	Draft Housing Allocation	Potential significant effect from negative impacts on: • air quality to the Manchester Mosses SAC, • water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC, • recreational pressures to a number of European Sites.	Screened In
BSA04	Lee Hall 1,450 homes as a residential mixed-use neighbourhood	Draft Housing Allocation / Mixed Use	Potential significant effect from negative impacts on: • air quality to the Manchester Mosses SAC, • water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC, • recreational pressures to a number of European Sites.	Screened In
BSA05	Ditchers Farm, Westhoughton Minimum of 570 homes	Draft Housing Allocation	Potential significant effect from negative impacts on: • air quality to the Manchester Mosses SAC, • water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC,	Screened In

Policy	Strategic Allocation Site Name	Allocation Type	Possible impacts on European sites	Screening outcome
			recreational pressures to a number of European Sites.	
BSA06	Burden Way, Middlebrook Minimum 1,000 homes with affordable housing and around 2,500 sqm of office development	Draft Housing Allocation / Mixed Use	Potential significant effect from negative impacts on: - air quality to the Manchester Mosses SAC, - water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC, - recreational pressures to a number of European Sites.	Screened In
BSA07	Blackrod Employment Cluster The site is allocated as an employment cluster with around 44,800 sqm industrial and warehousing floorspace.	Draft Employment Allocation	Potential significant effect from negative impacts on: - air quality to the Manchester Mosses SAC, - water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC.	Screened In
BSA08	Logistics North Extension 30,000-80,000 sqm of industrial and warehousing development to be maximised. Housing mix in accordance with Policy HS1 and HS2.	Draft Employment-led / Mixed Use Allocation	Potential significant effect from negative impacts on: - air quality to the Manchester Mosses SAC, - water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC, - recreational pressures to a number of European Sites.	Screened In
BSA09	The Alders, Tonge Allocated for accommodation for Travelling Showpeople, with up to 50 plots in accordance with Policy HS7 (Green Belt release).	Draft Travelling Showpeople Allocation	Potential significant effect from negative impacts on: - air quality to the Manchester Mosses SAC, - water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC, - recreational pressures to a number of European Sites.	Screened In
BSA11	Express Industrial Estate B 2,695 sqm industrial and warehousing	Draft Employment Allocation	Potential significant effect from negative impacts on: - air quality to the Manchester Mosses SAC, - water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC.	Screened In
BSA12	Barrs Fold Close 1,645 sqm industrial and warehousing	Draft Employment Allocation	Potential significant effect from negative impacts on: air quality to the Manchester Mosses SAC,	Screened In

Policy	Strategic Allocation Site Name	Allocation Type	Possible impacts on European sites	Screening outcome
			water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC.	
BSA13	Watermead 13,265 sqm industrial and warehousing	Draft Employment Allocation	Potential significant effect from negative impacts on: - air quality to the Manchester Mosses SAC, - water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC.	Screened In
BSA14	Mill Street 1,855 sqm industrial and warehousing	Draft Employment Allocation	Potential significant effect from negative impacts on: - air quality to the Manchester Mosses SAC, - water quality to the Mersey Estuary SPA, Ribble & Alt Estuaries and Manchester Mosses SAC.	Screened In

7. Summary of Objectives and Policy Areas Screened In

- 7.1 The following Policies have been provisionally 'Screened In' to the Assessment because it is considered that the implementation of these Policies may have harmful effects on the special interest of one or more European protected sites:
- SP2 - Land for Employment
 - SP3 - Land for Housing
 - SP7 - Green Belt
 - INF3 - Social and Community Infrastructure
 - INF8 - Digital and Utilities Infrastructure
 - PQ3 - Density and Tall Buildings
 - EC2 - New Employment Development
 - EC5 - Ancillary Uses within Industrial and Warehousing Allocations and Development
 - HS1 - Affordable Homes
 - Policies CB01 to CB04 and BSA01 to BSA09 related to Chapter 10 Development Framework for Places and Sites and employment allocations BSA11 to BSA14 in Policy SP2
- 7.2 The above have all been screened in owing to potential for impacts on European sites through increases in water pollution, changes to hydrology, air pollution effects and increases to recreational disturbance effects.
- 7.3 The details of potential increases in air and water pollution, hydrological effects and recreational disturbance and consequent effects on European sites, are difficult to empirically determine at this time. It is the *broad principles* of whether the scale and type of development planned for Bolton can be implemented without harming the special interest of any European Protected Sites that is being tested in this Assessment.
- 7.4 When preparing HRAs for individual projects (such as will take place within allocations) it is normally anticipated that where developments are 'Screened In' to the appraisal they will then be subject to more detailed Assessment at the planning application stage. Detailed assessment is not possible for a Strategic Plan at least at this stage. Rather, the Screening exercise provides indications of where future Assessments may need to be considered. No European designated sites are located in Bolton and none of the proposed allocations will cause direct losses to designated sites. Rather, the assessment considers the potential impacts on the plan as a whole, advises on mitigation measures, provides indications of where future assessments may need to be considered, and also indicates areas where future assessments can be ruled out.
- 7.5 In addition, recommendations can be made at this stage about further necessary safeguards that should be incorporated into the Plan to ensure that no harm will result to European sites from the scale and type of development planned.
- 7.6 Taking the precautionary approach recommended in the legislation, further Screening and Assessment will be required as further stages of the plan and as details of plan implementation become available.
- 7.7 There are also significant safeguards in other Policies in the Plan to ensure that special interest of the European sites concerned will be able to be protected and enhanced. Both

the Local Plan and PfE are plans with strong 'green' credentials and with sustainability at their heart.

7.8 Policies in the Plan that have in-built measures to potentially mitigate negative effects or are generally positive to European Sites include:

- SP5 - Historic Built Environment and Landscape
- SP6 - Natural Environment
- INF5 - Open Space Standards & Green Infrastructure
- ENV2 - Flood Risk and Sustainable Drainage
- ENV3 - Green and Blue Infrastructure
- ENV4 - Biodiversity and the Natural Environment
- EN5 - Pollution Air Quality, Noise, Odour and Light
- ENV7 - Watercourses and The Water Environment

7.9 Policies in Places for Everyone that have in-built measure to potentially mitigate negative effects or are generally positive to European Sites include:

- Policy JP-S1: Sustainable Development
- Policy JP-S4: Flood risk and the water environment
- Policy JP-S5: Clean air
- Policy JP-G2: Green Infrastructure network
- Policy JP-G3: River Valleys and waterways
- Policy JP-G4: Lowland Wetlands and uplands
- Policy JP-G6: Urban Green Space
- Policy JP-G7: Trees and woodland
- Policy JP-G8: A Net Enhancement of biodiversity and geodiversity
- Policy JP-P1: Sustainable Places

7.10 The following impact pathways that could affect the integrity of European sites arising from the plan have however been identified.

- Recreational pressure – pathways to Manchester Mosses SAC (Risley Moss and Bedford and Astley Moss by car), Rixton Claypit SAC (by car), Sefton Coast SAC (by car/train), Ribble & Alt Estuaries SPA/Ramsar (by car/train), Mersey Estuary (car); Martin Mere SPA/Ramsar (by car).
- Air quality – vehicular pathway to Manchester Mosses SAC (primarily Holcroft Moss), the South Pennine Moors and Rixton Claypits SAC;
- Water quality – pathway via the Manchester Ship Canal to Mersey Estuary SPA/Ramsar site; surface and groundwater to Manchester Mosses SAC (Astley & Bedford Mosses part only)

7.11 A stage 2 appropriate assessment is therefore required of the potential effects.

8. Appropriate Assessment

- 8.1 The screening process identifies the following sources of likely significant effect on European sites:
- Water quality (Mersey Estuary SPA/Ramsar, Ribble & Alt Estuaries SPA/Ramsar and Manchester Mosses SAC);
 - Air quality (Manchester Mosses SAC, South Pennine Moors SAC/SPA, Rixton Clay Pits SAC); and
 - Recreational pressure (all screened-in sites).

Air Quality

- 8.2 The air pollutants most likely to have a significant effect on European sites are the oxides of nitrogen (NO_x) resulting from traffic emissions. Modern regulation of commercial emissions makes any other form of air pollutant unlikely. The increased popularity of wood burners is however resulting in an increase in particulate levels in the air. Particulate matter however only impacts on vegetation at very high concentrations through accumulation on leaf structure, blocking pores and stomata and through chemical changes to soil if the particulate source contains other pollutants.
- 8.3 NO_x deposition results in an increase in nitrates and can have a significant impact on certain habitats including lowland mosses and upland blanket bogs. Open water habitats can also be susceptible where the importance is linked to low nutrient levels in the water.
- 8.4 NO_x can also impact existing vegetation by lowering the pH ie acidification analogous to the acidification caused by high levels of SO₂ to the South Pennines from coal fires.
- 8.5 Studies indicate that the main impact of NO_x is when within 200m of a pollution source i.e. road or major transport depot.

Manchester Mosses SAC

- 8.6 This habitat type is considered sensitive to changes in air quality, especially acidity and nitrogen. Critical values are currently being exceeded at this SAC (APIS, 2016).
- 8.7 Exceedance of these critical values for air pollutants may modify the chemical status of its substrate, accelerating or damaging plant growth, altering its vegetation structure and composition and causing the loss of sensitive typical species associated with it.
- 8.8 The part of this SAC most at risk is Holcroft Moss as it lies immediately adjacent to the M62 with an estimated 129,000 vehicle movement per day between the M6 and M60 in 2024. As the critical nitrogen and NO_x levels are already regarded as above the critical load for the Manchester Mosses, theoretically any increase in road traffic along the M62 as a result of the Bolton Local Plan could have a negative impact on this part of the SAC. Both Risley Moss and Bedford Moss are located at significant distance from any trunk road and are unlikely to be impacted upon by traffic issues originating as a result of this plan.
- 8.9 Any allocation policies in Bolton could theoretically increase traffic levels on this section of the M62 given that it's connected to Bolton via the M60 and M61.

- 8.10 No air quality modelling has been undertaken for the development proposals in the Bolton Local Plan. However, air quality guidance has been adopted in the form of a Supplementary Planning Document (SPD) for Holcroft Moss by the nine Places for Everyone authorities (including Bolton) in consultation with Natural England. Warrington Borough Council has separately also adopted an SPD relating to Holcroft Moss.
- 8.11 This SPD provides guidance on when mitigation is required for Holcroft Moss as a result of additional vehicle movements along the M62 corridor past Holcroft Moss (between junction 11 Birchwood and Junction 12 Worsley). The triggers are 100 vehicles or 20 Heavy Good Vehicles per day along the M62 corridor past Holcroft Moss.
- 8.12 As Bolton has adopted this SPD it is reasonable to use the same criteria to assess allocations proposed in the Bolton Local Plan. Any development likely to increase traffic in excess of 100 vehicles or 20 HGV's along the M62 corridor past Holcroft Moss would be required to provide a proportionate contribution towards restoration measures to benefit Holcroft Moss as required by the SPD. Policy DEL1 (Developer Contributions) of the Local Plan identifies this contribution as a planning obligation, triggered where development would increase traffic flows on the M62 past Holcroft Moss by more than 100 vehicles or 20 HGVs per day, with the contribution sized to the impact of the scheme.

Rixton Clay Pits SAC

- 8.13 The supporting freshwater and terrestrial habitat of this SAC is considered sensitive to changes in air quality. There may be critical levels for ammonia (NH₃), oxides of nitrogen (NO_x) and sulphur dioxide (SO₂), and critical loads for nutrient nitrogen deposition and acid deposition.
- 8.14 Rixton Clay Pits is immediately adjacent to the A57, Manchester Rd linking Junction 21 on the M6 (Warrington north) to the M60 and M61. Some vehicular movements originating in Bolton may occur.
- 8.15 Other assessments have concluded that APIS indicates that it is not clear whether critical loads for overall nitrogen are being exceeded, assuming the habitats are relatively base rich, as a range of critical loads is given. Nitrous oxides are probably below critical loads. Natural England also does not currently list air quality as a concern for this SAC.
- 8.16 Air quality modelling and assessment for the Warrington Local Plan by AECOM (March 2023), concluded that there were no likely significant effects resulting from vehicle generated air quality issues to Rixton Claypits SAC, the vegetation in ponds being phosphate limited as opposed to nitrogen limited. They also concluded that the qualifying species great crested newts, were very unlikely to be affected by increased nitrogen deposition. The Warrington local plan has since been adopted and the HRA accepted by Natural England.
- 8.17 Given that the Bolton Local Plan and allocations will likely have a significantly lower impact on the level of traffic on the A57 than the Warrington Local Plan which concluded increased road traffic would not have a significant effect on the qualifying species for the Rixton Clay Pits SAC, it is reasonable to conclude no likely significant

effect will occur to Rixton Clay Pits SAC from any reduction in air quality resulting from the Bolton Local Plan.

- 8.18 Given the above, it is reasonable to conclude that development in Bolton will not result in any increased harm to designated sites resulting from increases in air pollution.

South Pennine Moors SPA & SAC

- 8.19 As with the Manchester Mosses SAC habitats within the above SAC are known to be particularly susceptible to nitrogen inputs, and in places on the Moors nitrate loads are known to exceed critical thresholds for harm (given as 5-10 kg N/ha/yr for blanket bog, source – Apis). There is therefore the potential for an AEOI on the conservation objectives of the South Pennine SAC and SPA through nutrification of habitats and decline of the species assemblage typical of the qualify habitats i.e.
- The extent and distribution of the qualifying natural habitats;
 - The structure and function (including typical species) of the qualifying natural habitats and;
 - The supporting processes on which the qualifying natural habitats rely.
- 8.20 The M62 crosses the Pennines running close to sensitive habitats and takes a significant amount of traffic from Greater Manchester. Traffic modelling (screening) undertaken to inform Places for Everyone has identified that the Plan may cause effects on the South Pennine Moors Phase 1 European site from increased traffic flows.
- 8.21 Development in the Borough of Bolton will be contributing towards this, particularly employment sites, reliant on freight transport using HGV's to source materials and distribute their products.
- 8.22 However Places for Everyone did not identify any strategic allocations within Bolton as having an adverse effect on the integrity of the South Pennines SAC/SPA and concluded that the overall PfE plan would not have any adverse effects on the integrity of the SPA/SAC as a result of air quality effects resulting from increased traffic movements.
- 8.23 Whilst an additional 135,099 to 185,099 sqm of industrial and warehousing floorspace, and 39,000 sqm of office and R&D floorspace is proposed in the Bolton Local Plan above PfE targets it is reasonable to conclude no adverse effects on the integrity will occur to South Pennine Moors SPA/SAC from any reduction in air quality resulting from the plan in isolation.

Recreational Pressure

- 8.24 The impact of recreational pressure varies dependent on the habitat and the qualifying species, some habitats being quickly physically damaged by trampling, other sensitive to nutrient inputs from dog fouling and other holding qualifying species sensitive to disturbance.
- 8.25 The likelihood of recreational pressure also varies dependent on the nature of the site, with coastal or upland habitats likely to attract recreational visits from a greater distance than other habitats and sites promoted as recreational destination likely to attract visitors from even greater distances. Those with no official public access or

deemed as dangerous are only likely to attract occasional local residents and naturalists.

Manchester Mosses SAC

- 8.26 Mosslands are habitats that do not normally attract significant recreational visits owing to being waterlogged and difficult to walk over. There is also the public perception that such sites are dangerous. Currently there is no public access to Astley and Bedford Mosses or Holcroft Moss, and access to Risley Moss is actively controlled by rangers employed by Warrington Borough Council.
- 8.27 Of the three distinct parts to the Manchester Mosses SAC, Astley and Bedford Mosses falls closest to Bolton (5.5km south), with Holcroft Moss and, Risley Moss located 10.5km and 12km respectively as the crow flies to the nearest point of the Bolton district boundary.

Rixton Clay Pits

- 8.28 Rixton Clay Pits is over 13km from Bolton at its closest point, over 14km from the nearest proposed housing allocation, and is managed as recreational open space. The qualifying species, great crested newt, is not regarded as particularly sensitive to recreational disturbance. No likely significant effects on Rixton Clay Pits were identified through the PfE plan. Given all this it is therefore reasonable to conclude no likely significant effects on Rixton Clay Pits SAC from recreational pressure will arise from the operation of the Bolton Local Plan.

Mersey Estuary SPA and Ramsar Site

- 8.29 The qualifying species of the Mersey Estuary SPA are regarded as sensitive to recreational pressure. Guidance from Natural England is that coastal designated sites within 10km of a potential source of likely significant effects should be screened in. The Mersey Estuary SPA is just over 24km from Bolton and whilst in part coastal, would not normally be regarded as more than a local visitor destination. It was also not screened in for recreation as part of Places for Everyone, with no objection raised from Natural England.
- 8.30 It is therefore reasonable to conclude no likely significant effects on the Mersey Estuary SPA/Ramsar from recreational pressure.

Ribble & Alt Estuaries SPA/Ramsar

- 8.31 The qualifying species of the Ribble & Alt Estuary SPA, a range of waders and wildfowl, are regarded as sensitive to recreational pressure. Guidance from Natural England is that coastal sites within 10km should be screened in. The Ribble & Alt Estuary is just over 19km from the Bolton boundary. However, the SPA includes the Sefton Coast a regionally important visitor destinations, that includes Southport and Formby. It is therefore likely that day trips by residents of the Borough to these locations will occur, given the journey time by car is around 55 minutes (from north-western edge of Bolton borough) and there is a direct train service from Bolton and Westhoughton (via Wigan) to Southport, approximate average train journey time from Bolton to Southport is one hour.

- 8.32 Research for the Sefton Local Plan in 2008, found that approximately 50% of visitor were local with a further 17% from other parts of Merseyside. 50% of visits were by dog walkers, with 20% visiting for nature-based reasons. The majority of visitors were focused on Formby and Crosby. This is in line with research by Footprint Ecology in 2020 for Natural England, on the NW coastline, which included the Sefton Coast where 75% of visitor lived with 5.2km of the coast and Formby was identified as the most visited location of the sites surveyed. 63% of visitors were dog walkers.
- 8.33 The Sefton Coast Management Scheme established in 1978, co-ordinates nature conservation and recreational issues along the Sefton Coast including the Ribble & Alt Estuaries from the southern part end of the SPA to north of Southport. To date this has worked adequately i.e. balanced the nature conservation and recreational issues. It concluded in the Sefton Local Plan however that additional recreational pressure from development would need to be accompanied by an HRA and potentially provide recreational mitigation.
- 8.34 A joint SPD titled Liverpool City Region and West Lancs Joint recreation mitigation strategy went out for public consultation in 2023, with Sefton Council as the lead. One objective of the SPD is to protect the European designations from recreational pressure. The web link is however currently inactive, with no evidence that the SPD was ratified. An interim advice note produced by Sefton Council requires recreational contributions based on distance from the Sefton Coast. The Central Lancashire Plan HRA noting the inner zone being set at 5km and outer at 11.5km. As a consequence, the Central Lancashire authorities have taken a precautionary approach and screened in any development within 15km of the coast.
- 8.35 On balance given that:
- the majority of the visitors are local with the percentage of visitors from Bolton that make up the remaining visitors likely to be below 1%,
 - a visitor management strategy is currently in place that is regarded as coping and
 - the nearest allocations are over 15km from the coast,

It is therefore reasonable to conclude that no adverse effects on the integrity of the Ribble & Alt Estuaries SPA/Ramsar from recreational pressure originating from Bolton in isolation will occur.

Sefton Coast SAC

- 8.36 The Sefton Coast SAC habitats are vulnerable to recreational disturbance and people in Bolton may use the coast for recreation. However, the Sefton Coast SAC is highly managed for visitor access and already receives high numbers of visitors. Attributing harm to the SAC arising from recreational pressures arising from Bolton would be very difficult.
- 8.37 It is therefore concluded that no likely significant effects on the Sefton Coast SAC from recreational pressure originating from Bolton in isolation will occur.

Martin Mere SPA/Ramsar

- 8.38 Martin Mere SPA/Ramsar is managed as a regionally important visitor destination. Residents of Bolton will visit this site. It should be noted Martin Mere was a visitor destination prior to its designation as an SPA.
- 8.39 The West Lancashire Plan HRA, in which area Martin Mere SPA/Ramsar is located, reached a conclusion that recreational disturbance effects on Martin Mere could be Screened Out because it was actively and intensively managed as a visitor destination, with nature conservation interests as the primary aim of management. The Sefton Council Local Plan HRA also notes that Natural England have accepted that recreational disturbance effects on Martin Mere SPA could be screened out.
- 8.40 It is therefore concluded that no likely significant effects on Martin Mere SPA/Ramsar from recreational pressure will occur as a result of recreational pressure originating from Bolton.

Water Quality

- 8.41 Negative effects on European sites can be due to a lowering of water quality i.e. pollution leading to higher mortality of qualifying species, food sources they are reliant on or through accumulation of pollutants; changes in nutrient status such as raised levels of nitrate or phosphate, leading to a change in the vegetation structure of the European site and potentially any qualifying species and; changes in water clarity through increase sediment load or increase levels of algae in the water.
- 8.42 Generally, for such an impact to occur there needs to be a hydrological pathway such as a water course or ground water, though high levels of air pollution could in theory impact on water quality. European sites with hydrological connectivity to Bolton include the Mersey Estuary SPA/Ramsar via Glaze Brook and the River Mersey.

Manchester Mosses SAC

- 8.43 Part of the Manchester Mosses SAC falls within 5.5km of the Bolton boundary. There is therefore the potential for surface water and groundwater connectivity to development within Bolton.
- 8.44 Currently no major allocations are located in close proximity to any part of the Manchester Mosses SAC, with no direct surface water or groundwater connectivity likely to any such developments. The closest development allocation (Unimplemented Permission 5P1.1_Plots G1/G2) is more than 5km from the nearest designated site.
- 8.45 The nearest neighbourhood area to the Manchester Mosses SAC is Daisy Hill. Lee Hall (BSA04) is allocated here as a residential-led mixed-use neighbourhood of 1,450 homes. The allocation is located over 7km from Manchester Mosses SAC. The area adjacent to the Manchester Mosses SAC is designated as Green Belt.
- 8.46 The peat mass at Astley and Bedford Moss is also perched above the surrounding farmland with surface water draining away from the site not into it.
- 8.47 With regards to groundwater, the latest peat maps indicate that there is peat mass at Red Moss (SSSI) and there is an allocation partially within this area (Unimplemented

Permission 3P1.1_91352/14). However, this appears to be an isolated area of peat mass and has no substrate connectivity to Manchester Mosses SAC.

- 8.48 It is therefore reasonable to conclude that there will be no effects on the integrity of the Manchester Mosses SAC arising from water borne pollutants as a result of policies within the Bolton Local Plan.

Mersey Estuary SPA and Ramsar Site

- 8.49 The Mersey Estuary is hydrologically linked to Bolton via Glaze Brook and the River Mersey and the Manchester Ship Canal.
- 8.50 Bolton falls within the Mersey Basin. Development proposals in the Bolton Local Plan could therefore have the theoretical potential to have negative effects on water quality.
- 8.51 Environmental policies in the local plan will act to effectively prevent harm to designated sites from development, including from water pollution. This includes Policies ENV1 (Meeting Energy and Water Standards), ENV2 (Flood Risk and Sustainable Drainage), ENV4 (Biodiversity and the Natural Environment) and ENV7 (Watercourses and the Water Environment), which requires that development must not cause deterioration in the condition of any waterbody and sets undeveloped buffers to watercourses.
- 8.52 The Mersey Estuary SPA and Ramsar are around 38km downstream of the Bolton boundary, with the estuary subject to very large water flows each day owing to the ebb and flow of the tide (a dilution factor, estimated in the Warrington Local Plan HRA at 5 million cubic meters of water between Warrington and the SPA). It also receives drainage from the majority of the other districts in Greater Manchester, Merseyside, Warrington and parts of Cheshire.
- 8.53 Places for Everyone accepted that likely significant effects could occur to the Mersey Estuary as a result of Water Quality. This however covered nine Greater Manchester districts, all of which fall within or partly within the Mersey catchment, located at just 20km from the estuary.
- 8.54 Currently the effect of water quality on the SPA is not recorded as a significant risk on the standard data form for the site or an issue raised by the most recent site improvement plan. The Mersey Estuary SPA/Ramsar/SSSI was also not listed in the open letter to LPA's dated 16th March 2022, regarding protected sites at risk from negative water quality effects resulting from nitrates and phosphates, where additional assessment would be required.
- 8.55 It is concluded from the above, that despite the pathway and conclusion of Places for Everyone, that Bolton's distance from the Mersey Estuary, combined with water quality not being regarded as a significant risk by Natural England, the relative proportion of overall water pollution generated by the development proposed in Bolton compared to the entire catchment, and the policies in place to safeguard the water environment, that there will be no effects on the integrity of the Mersey Estuary designated sites as a result of water borne pollutants arising from the allocations and the overall scale and distribution of development proposed in the Bolton Local Plan.

9. Consideration of 'In Combination' Effects with Other Plans and Proposals

- 9.1 The Habitats Regulation Assessment must consider the likely significant effect of the Plan in relation to other proposals and plans current or planned within the relevant administrative area, other administrative authorities and prepared by other statutory organisations (e.g. Environment Agency, United Utilities) and in combination with the identified effects of those plans.
- 9.2 Cumulative effects for air quality, recreational pressure and water quality have been considered. No cumulative effects for direct loss of functionally linked land (FLL) are considered, since FLL is considered to be absent in Bolton.

Air Quality

Rixton Clay Pits SAC

- 9.3 Whilst potential cumulative impacts could occur to Rixton Clay Pits SAC, both the Warrington Local Plan HRA and Places for Everyone HRA, screened out Rixton Claypits at stage 1 of the HRA process because no effects on integrity were identified. GMEU are therefore satisfied that no effects on site integrity will occur in isolation or in-combination to Rixton Clay Pits SAC, resulting from the negative impact of air quality.

Manchester Mosses SAC

- 9.4 Places for Everyone screened in air quality for the Manchester Mosses SAC, accepting that critical loads were already breached for Holcroft Moss and that the additional development across the nine PfE districts would add to these loads. The Warrington Local Plan also screened in the Manchester Mosses SAC because of additional traffic movements past Holcroft Moss. The Bolton Local Plan policies and allocations may add further traffic movements. There is therefore the potential for an effect on site integrity in-combination with the development proposals within Places for Everyone and the Warrington Local Plan, as well as other local plans in preparation across Greater Manchester.
- 9.5 However, an SPD has been produced ([Holcroft Moss Planning Obligations SPD - Greater Manchester Combined Authority](#)) that provides measures to mitigate for the increased air pollution which may result from development proposals in Places for Everyone and the Warrington Local Plan. As Bolton Council has adopted this SPD (with effect from 8th May 2025), which has been agreed with Natural England, as long as the agreed measures in the SPD are applied to development in Bolton no effects on site integrity will occur.

South Pennines SPA/SAC

- 9.6 Places for Everyone concluded that the cumulative impact of the plan could result in slight increases in airborne pollution to parts of this extensive site along the A6024, A627 and A57. The A57 and A6024 are the Snake and Woodhead Passes across the Pennines with no likely significant pathways from the borough of Bolton. The negative effects also primarily relate to impacts on qualifying species. Contributions to cumulative effects from Bolton are screen out for these two roads.
- 9.7 The A627 links Oldham to the M62 at junction 22 with negative effects linked to the A627 around the motorway junction but due to traffic on the A627 as opposed to the

M62. This apparent anomaly is presumably due to the A627 actually falling within the SAC/SPA, whereas the M62 with a moderate buffer of around 50m either side excluded from the SPA/SAC. It is very unlikely that traffic generated in the Borough of Bolton would utilise the A627 as the M62 would be a more direct route to Oldham or over the Pennines.

- 9.8 GMEU are therefore satisfied that there are no likely significant in-combination to the South Pennines SAC/SPA as a resulting from traffic generated by the Bolton Local Plan draft.

Recreational Pressure

- 9.9 Whilst increased recreational pressure due to visitors from Bolton has effectively been screened out, as having no likely significant effects on any European sites in isolation, this does not mean that in combination with other plans a significant effects could not occur.
- 9.10 The sites with pathways from Bolton that were discussed above included Rixton Clay Pits, the Manchester Mosses SAC, Martin Mere SPA/Ramsar, Mersey Estuary SPA/Ramsar, and Sefton Coast SAC. The most relevant in-combination Plans which should be assessed are Places for Everyone; other GM District Local Plans, the Warrington Local Plan, the St Helen's Local Plan, the West Lancs Local Plan, the Sefton Local Plan and Central Lancashire Local Plan.

Manchester Mosses SAC

- 9.11 The most relevant in-combination effects will be as a result of development resulting from Places for Everyone and the Warrington local plan, both of which include parts of the Manchester Mosses SAC, within the geographic area covered by the Plan. All other plans are reasonably discounted given the lack of access to Holcroft Moss and Astley & Bedford Mosses and the management measures and distance from any other development in place at Risley Moss.
- 9.12 Places for Everyone concluded no likely significant effect as a result of recreational access, with Natural England commenting in September 2020 that:
- "We are not concerned about an increase of recreational pressure on these sites as there is a lack of public access. The HRA does not need to try and assess the impacts of possible increased illegal activity"*
- 9.13 The Warrington Local Plan also concluded no likely significant effects on the Manchester Mosses SAC as a result of recreational disturbance.
- 9.14 GMEU are therefore satisfied that there will be no effects on the integrity of the Manchester Mosses SAC as a result of recreational disturbance in isolation or in combination with the Bolton Local Plan.

Rixton Clay Pits SAC

- 9.15 The most relevant in-combination effects will be as a result of housing development proposed by the Warrington Local Plan as the SAC lies within in that Borough. Housing development proposed in Places for Everyone, the Wigan Local Plan, and the Trafford Local Plan are also considered. All other plans are reasonably discounted given the distance of housing within such plans from Rixton Clay Pits SAC.

- 9.16 Places for Everyone concluded no likely significant effect as a result of recreational access on Rixton Clay Pits, in-combination with other plans, concluding that:

"Visitors to the site tend to be very local (source – Warrington BC). There is a comprehensive management plan in place for the site which includes the management of visitor access, and the site is actively managed for visitors by Warrington Council. Conclusion - there are sufficient safeguards in place to ensure that the Places for Everyone will not cause harm to Rixton Claypits through increases in recreational disturbance."

- 9.17 The Warrington Local Plan HRA also concluded no likely significant effects from in-combination recreational pressures to Rixton Clay Pits SAC, when assessed in combination with adjacent authorities including Wigan, Salford, Trafford, Cheshire East, Cheshire West and Halton. The Trafford Local Plan HRA 2020 also identified no in-combination effects.
- 9.18 GMEU are therefore satisfied that there are no effects on site integrity in-combination to the Rixton Claypits SAC as a result of in-combination recreational disturbance with the Bolton Local Plan.

Martin Mere SPA/Ramsar

- 9.19 The most relevant in-combination effects will be as a result of housing development proposed in the West Lancashire Local Plan, the district in which the SPA lies. Other relevant local plans with closer or similar connectivity to this European site include the Sefton Local Plan, Knowsley Local Plan, St Helens Local Plan and Central Lancashire Local Plan as well as Places for Everyone.
- 9.20 The West Lancashire Local Plan screened in disturbance as having a likely significant effect on Martin Mere SPA/Ramsar as a result of the West Lancs plan in isolation and therefore by default in-combination with neighbouring authorities. This was however precautionary as the HRA was carried out on policies only and not allocations. The likely significant effect was also only with respect to noise and visual disturbance during construction. Recreational disturbance was screened out based on the existing visitor management.
- 9.21 The Central Lancashire Plan HRA discounted direct likely significant effects for the same reasons as West Lancashire i.e. visitor management by the Wildfowl and Wetland Trust despite allocations within 7km of the site.
- 9.22 The Sefton Local Plan HRA (2016), screened Martin Mere out at stage 1 as whilst within 5km they quote a ruling by Natural England on the St Helen's Core Strategy that recreational management at Martin Mere was such that it could be screened out. As noted the St Helens Plan HRA (2016) also screened Martin Mere out for direct recreational disturbance. The Knowsley Local Plan HRA (2012) also screened out recreational disturbance.
- 9.23 GMEU are therefore satisfied that there are no likely significant in-combination effects on the Martin Mere SPA/Ramsar as a result of in-combination recreational disturbance associated with the Bolton Local Plan.

Sefton Coast SAC

- 9.24 The Sefton Coast SAC is susceptible to recreational disturbance primarily as a result of trampling of the qualifying habitats.
- 9.25 The most relevant in-combination effects will be as a result of housing development proposed in the borough of Sefton the district in which the SPA/SAC primarily lie. Other relevant local plans with closer or similar connectivity to this European site include the West Lancs Local Plan, Knowsley Local Plan, St Helens Local Plan and Central Lancashire Local Plan as well as Places for Everyone.
- 9.26 Sefton Council, West Lancashire Council and the Merseyside districts have screened in likely significant effects and are currently producing a joint SPD to provide guidance on recreational contributions for the management of coastal habitats.
- 9.27 The Central Lancashire Local Plan has also screened in potential in-combination effect to the Sefton Coast SAC and Ribble & Alt Estuaries SPA/Ramsar, noting that whilst guidance on the zone of influence is still to be determined, as the majority of the development is proposed within 15km of the coast in the Central Lancashire Local Plan, the precautionary approach should be taken. They have therefore screened in all housing development up to 24km from the coast.
- 9.28 Places for Everyone screened the Sefton Coast SAC out at stage 1 as too distant for effects to be discernible.
- 9.29 No housing allocations, or sites which are part of the overall supply of development (as identified in the council's proposed allocations), are located in Bolton within 20km of this coastal European site.
- 9.30 GMEU are therefore satisfied that there are no likely significant in-combination effects to the Sefton Coast SAC as a result of in-combination recreational disturbance associated with the Bolton Local Plan.

Mersey Estuary SPA/Ramsar

- 9.31 The most relevant in-combination effects, for comparison will be as a result of housing development proposed in the boroughs Warrington, St Helens and Places for Everyone as these Plans are located adjacent to or close to Bolton but closer to the Mersey Estuary. Other relevant local plans with recreational pathway to this European site include Liverpool, Halton, St Helens, and Cheshire West, Salford and Trafford Local Plans.
- 9.32 Places for Everyone screened the Mersey Estuary SPA/Ramsar out at stage 1 for recreational disturbance and did not consider in-combination effects because the site was considered too distant for effects to be discernible.
- 9.33 The Warrington Local Plan HRA screened the Mersey Estuary in at stage 1 but concluded no likely significant effect as the nearest accessible part of the SPA was over 10km from the nearest housing allocation in the borough.
- 9.34 The nearest housing allocation to the Mersey Estuary SPA in Bolton is Lee Hall (BSA04, 1,140 homes) , over 40km by car from the Mersey Estuary.

- 9.35 GMEU are therefore satisfied that there will be no in-combination effects to the integrity of the Mersey Estuary SPA/Ramsar as a result of in-combination recreational disturbance effects arising from the Bolton Local Plan.

Water Quality

- 9.36 Whilst deterioration of water quality due to pollutants originating from Bolton has been screened out as having no likely significant effects on any European sites, this does not mean that in combination with other plans could not result in significant effects occurring.
- 9.37 The sites with pathways from Bolton include Manchester Mosses SAC and the Mersey Estuary SPA/Ramsar.

Manchester Mosses SAC

- 9.38 Astley & Bedford Mosses is located in Wigan Borough and is subject to the requirements of the Wigan Local Plan and development within Wigan. All other Plans can be screened out of having any in-combination effects owing to a lack of pathways for surface or groundwater to Astley & Bedford Mosses. There are no surface water pathways from Warrington, with surface water flowing from Wigan into the Glaze Brook, the boundary between these two districts.
- 9.39 With regards to groundwater, Natural England's peat layer indicates peat extending from Astley & Bedford Mosses south and east into Salford. There is no connectivity through to Warrington, with peat maps indicating no peat to west of Astley & Bedford Mosses and the Glaze Brook acting as a barrier to groundwater movement via peat.
- 9.40 In-combination effects with Warrington can therefore be screened out based on a lack of pathways despite the proximity.
- 9.41 Places for Everyone did not screen in the Manchester Mosses SAC for potential significant effects owing to a reduction in water quality as no pathways existed from the major developments proposed in Bolton or other districts. GMEU are therefore satisfied that in-combination effects with Places for Everyone can be screened out.
- 9.42 The Bolton Local Plan has no proposed development allocations, or sites which are part of the overall supply of development located on Chat Moss in proximity to Astley & Bedford Mosses. The area adjacent to the Astley and Bedford Moss is designated as Green Belt and forms part of Chat Moss which is protected as a key component of Greater Manchester's strategic green infrastructure network in part one of Salford's Local Plan (Development Management and Designations) which was adopted in 2023.
- 9.43 GMEU are therefore satisfied that there are no likely significant in-combination effects to the Manchester Mosses SAC as a result of in-combination water quality issues with the Bolton Local Plan.

Mersey Estuary SPA/Ramsar

- 9.44 A large number of local authorities have the potential to have a significant effect on the Mersey Estuary SPA/Ramsar as a result of pollutants and sediment entering the very large catchment that drains into the Mersey Estuary, including the majority of

Merseyside authorities, parts of Cheshire West, parts of Cheshire East, all of Greater Manchester authorities, Warrington and Rossendale.

- 9.45 Of these, the Merseyside authorities, parts of Cheshire West and Warrington are closer to the Mersey Estuary than Bolton.
- 9.46 Places for Everyone screened-in cumulative effects as whilst noting the distance downriver at the nearest point was around 15km, the scale of the development proposed in PfE was such that the contribution towards the overall input of pollutants could be significant. This related primarily to diffuse pollution i.e. pollution that cannot be attributed to any one source.
- 9.47 The Warrington Local Plan however screened the Mersey Estuary SPA/Ramsar out at stage 1 owing to the distance down river from Warrington (approximately 7km).
- 9.48 The St Helen's Local Plan however notes in-combination effects could occur, in particular with Warrington and Wigan, if adequate policy was not in place, with the main pathway the Sankey Brook already polluted and supplying approximately 10% of water to the Estuary. The plan also noted that the St Helen's sewage works also discharged into the Sankey Brook with the HRA recommending the LPA worked with United Utilities Ltd to ensure adequate capacity in the sewage works was available prior to development coming forward. If this sewage works was not capable of accommodating the new development there could be an increased levels of diffuse pollution.
- 9.49 The Halton Local Plan also identified potential in-combination effect as it lies adjacent to the SPA, though concluded it was unlikely, subject to more information that the plan alone would have significant impacts as there was adequate capacity in the drainage system to accommodate the development. It did however conclude there may be in-combination effects from development upstream as far as the Irwell catchment.
- 9.50 The Plan requires evidence of wastewater capacity or agreed reinforcement in Policy INF8 and in each site policy, and the reasoned justification for this Policy notes that United Utilities will keep networks in step with growth. The Council's Infrastructure Delivery Strategy, which records the Council's work with United Utilities on wastewater capacity for the Plan's growth and will be cross-referenced from the reasoned justification to Policy INF8-It is concluded that there are safeguards in place to ensure that any increases in wastewater will not result in likely significant effects on the Mersey Estuary SPA / Ramsar.

10. Summary and Recommendations

10.1 The Bolton Local Plan is a high-level strategic plan. Based on this, a high-level Habitat Regulations Assessment (HRA) has currently been carried out and detailed within this document.

10.2 Based on the current Bolton Local Plan, the initial screening of impacts on European sites has established that there may be pathways to the following European sites that could transport potential effects generated by the Plan:

- Manchester Mosses SAC
- Rixton Clay Pits SAC
- Martin Mere SPA/Ramsar
- Mersey Estuary SPA/Ramsar
- Ribble & Alt Estuaries SPA/Ramsar
- South Pennine Moors SPA/SAC
- Sefton Coast SAC

Rostherne Mere Ramsar, Rochdale Canal SAC, Liverpool Bay SPA, Dee Estuary SPA/Ramsar and Mersey Narrow & Wirral Foreshore have been screened out at stage 1, either because there is no clear pathway or the potential effect is very unlikely to have a significant effect.

10.3 Further, more detailed Assessment of the possible effects of the operation of policies and allocations on the European Sites identified in the Screening process has therefore been undertaken.

10.4 Cumulatively, the Plan was initially identified as potentially having a significant effect on the special nature conservation interest of European Sites due to one or more of the following:

- Water Pollution;
- Air pollution resulting from vehicular emissions and industry; and
- Increased recreational pressure.

10.5 Following further Assessment (stage 2 of the HRA), the following European sites remained Screened In:

- Manchester Mosses SAC (air quality)
- Mersey Estuary SPA/Ramsar (water quality)

10.6 It was concluded that the allocations and overall scale and distribution of development proposed in the Bolton Local Plan cumulatively have the potential to affect the integrity of the Manchester Mosses SAC (in particular, Holcroft Moss), alone and in-combination with allocation in Places for Everyone and Warrington resulting from air quality issues generated by vehicular movements along the M62 between the M6 and the M60.

10.7 A joint SPD, the [Holcroft Moss Planning Obligations SPD - Greater Manchester Combined Authority](#), has already been produced by the relevant PfE authorities, including Bolton. As long as the SPD (or future updates) are applied to the relevant allocations in the Bolton Local Plan, adequate mitigation for likely significant effects will be available.

10.8 Cumulatively, the allocations in the Bolton Local Plan, and the sites which are part of the overall supply of development expected to come forward during the plan period 2022-2042, may have the potential for significant effects on the Mersey Estuary SPA/Ramsar resulting from diffuse pollution in combination with allocations in Places for Everyone, St

Helens, Halton and Warrington Councils. Whilst policies within the Bolton Local Plan will provide some mitigation for this effect, both the St Helens and PfE plans questioned the capacity within existing waste water treatment works to deal with increases in waste water generation which could arise through the operation of the Plans. It is therefore advised that the Council works with utility providers to ensure that sufficient waste water capacity exists to treat increases in waste water generation which could arise from the development coming forward during the plan period.

- 10.9 If the measures proposed above with regards to air quality and water quality are taken, the operation of the Plan should have no effect on the integrity of the Manchester Mosses SAC or Mersey Estuary SPA/Ramar.
- 10.10 However, it is recommended that if any changes are made to the policies or allocations as a result of either public consultations or during the Examination in Public, or if the Holcroft Moss SPD is amended or withdrawn, or new data comes forward on qualifying species, water quality or impacts of recreation then the HRA will need to be revisited and revised to ensure that these changes would not result in a significant effect on any European Sites.

References

1. Warrington Borough Council Updated Proposed Submission version Local Plan: Amended HRA – August 2021 AECOM
2. Habitats Regulations Assessment of the Places for Everyone Joint Development Plan (submission) – February 2022 – GMEU
3. Habitats Regulations Assessment of the Impact on European Protected Sites of Salford Local Plan: Development Management Policies and Designations – Dec 2019 – GMEU
4. Habitats Regulations Assessment of the Impact on European Protected Sites of Trafford Local Plan: First Draft Consultation – Dec 2020 – GMEU
5. St Helens Local Plan 2018 – 2033 Preferred options, Habitat Regulation Assessment – December 2016 – AECOM.
6. Habitats Regulation Assessment of the West Lancashire Local Plan – June 2021 AECOM
7. Habitats Regulation Assessment of the Proposed Modifications to Sefton Local Plan – May 2016 AECOM
8. Information Note: Managing and mitigating the impact of recreation pressure on the Sefton Coast – Sefton’s Interim Approach for housing development – May 2023 Sefton Council
9. Central Lancashire Local Plan: Habitats Regulations Assessment Report, Screening and Appropriate Assessment January 2025 LUC
10. Holcroft Moss Planning Obligations Joint Supplementary Planning Document May 2025
11. South Pennine Moors SAC/SPA Joint Supplementary Planning Document May 2025
12. Annual Lockage Report 2024 - Canal & River Trust 2025
13. Recreational activity and interactions with birds within the SSSIs on the NW coast of England - Footprint Ecology, 2017
14. Habitats Regulations Assessment of the Impact on European Protected Sites of Wigan Council’s Core Strategy (Proposed Submission Version) GMEU 2011

Appendix 1 – Location of European Sites in relation to boundary of Bolton Borough

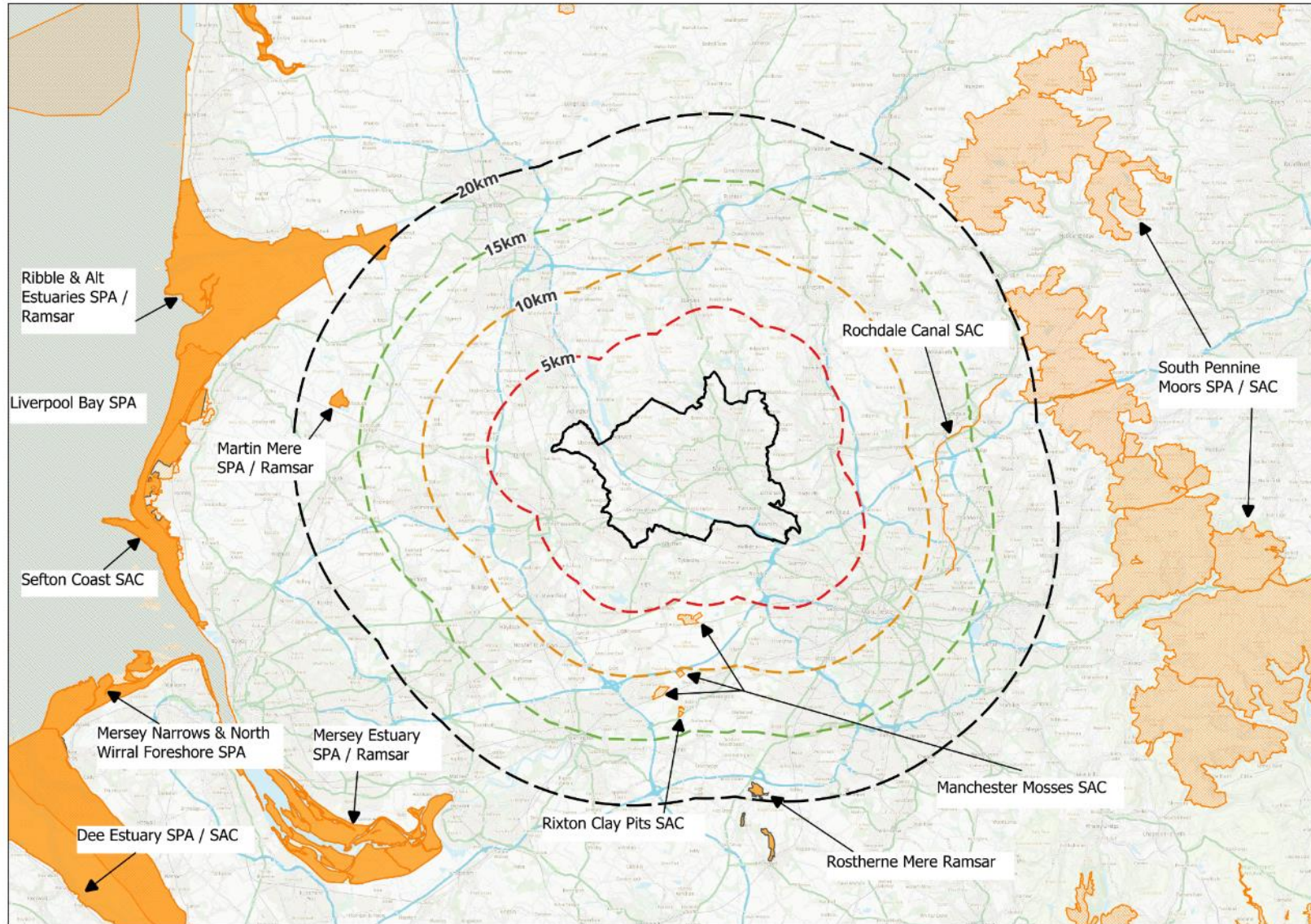


Figure 1 – Location of European Sites considered at Stage 1

Appendix 2 – Pathways to European Sites

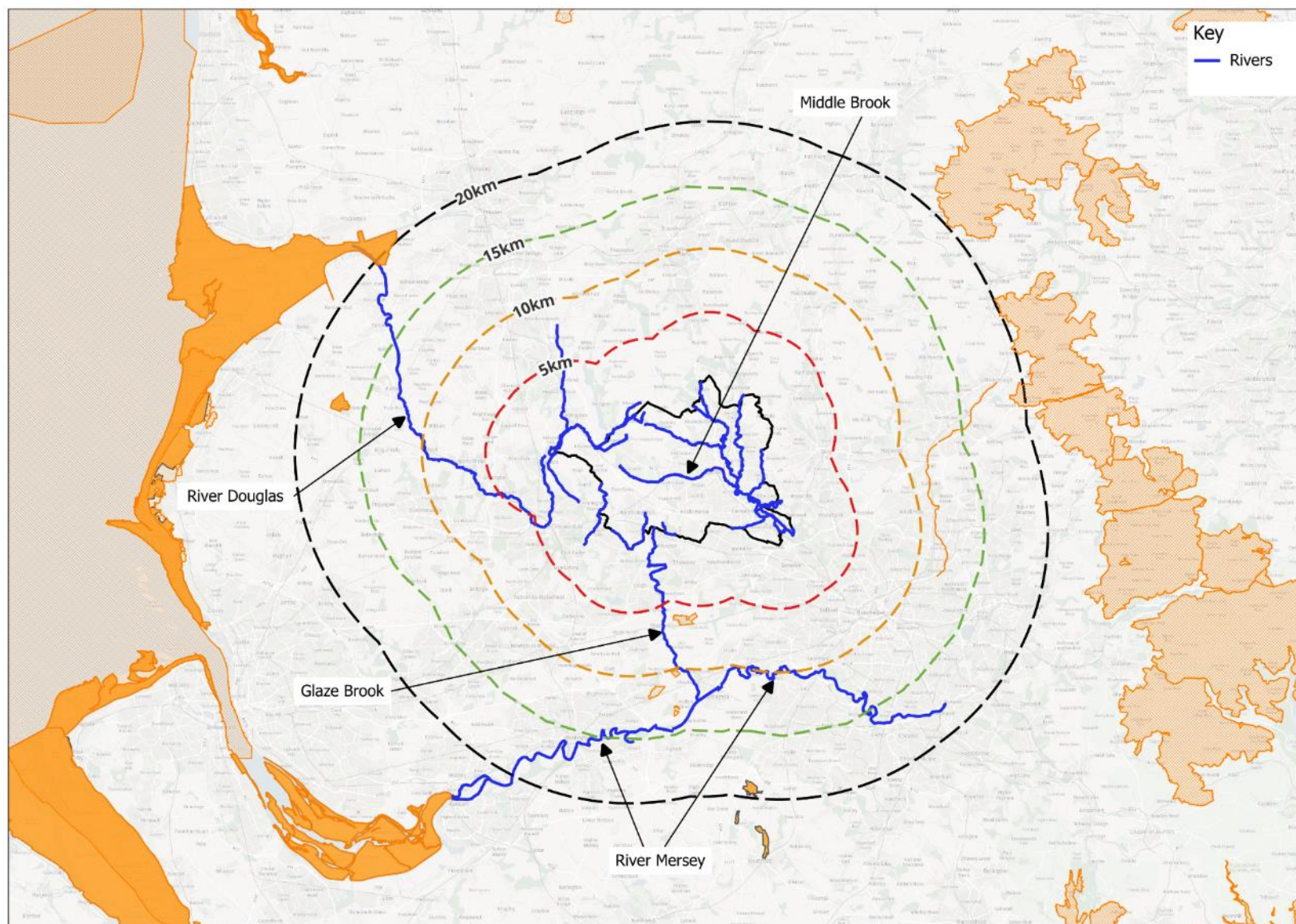


Figure 2 – Surface Water pathways to European Sites

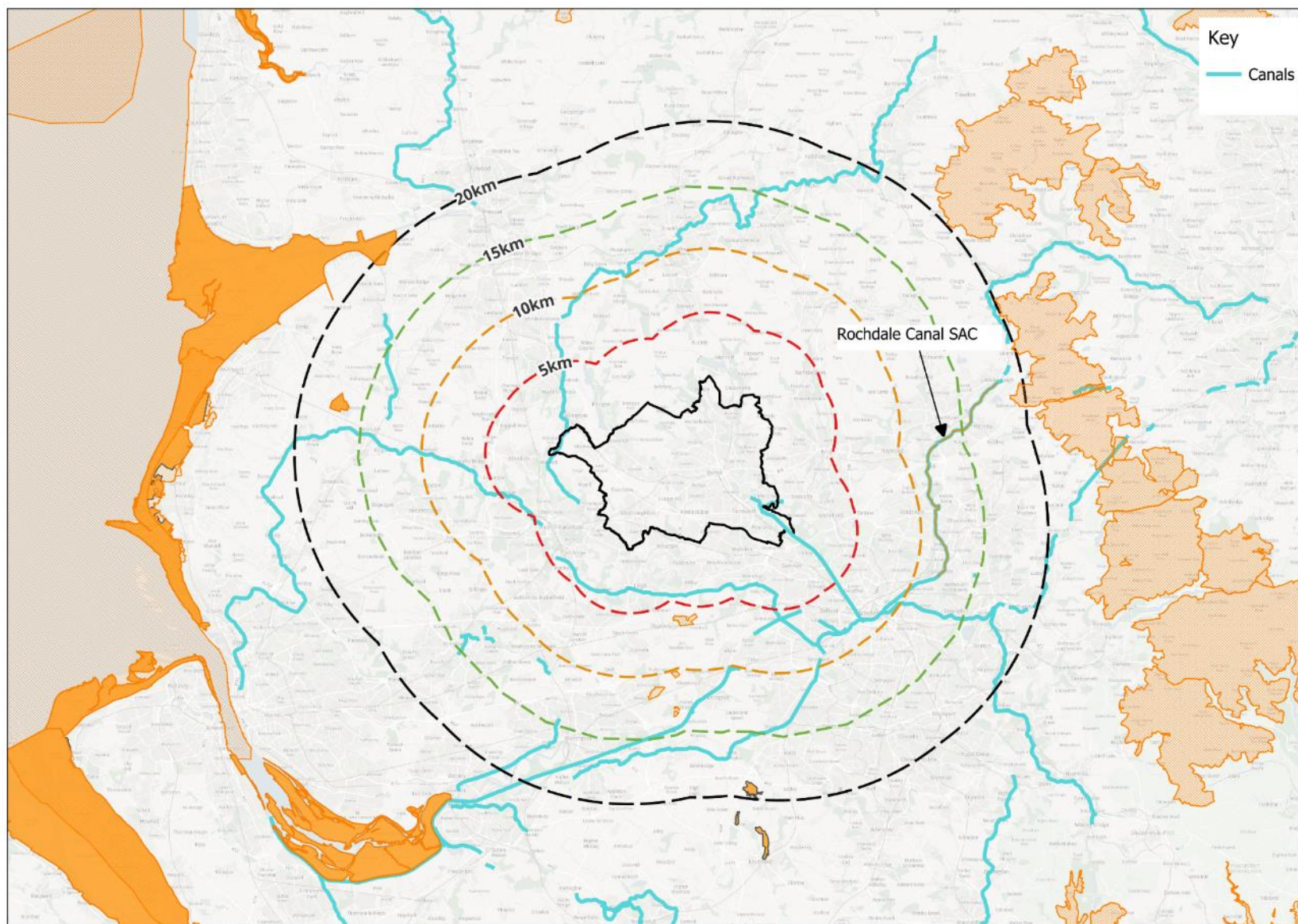


Figure 3– Canal pathways including to Rochdale Canal SAC

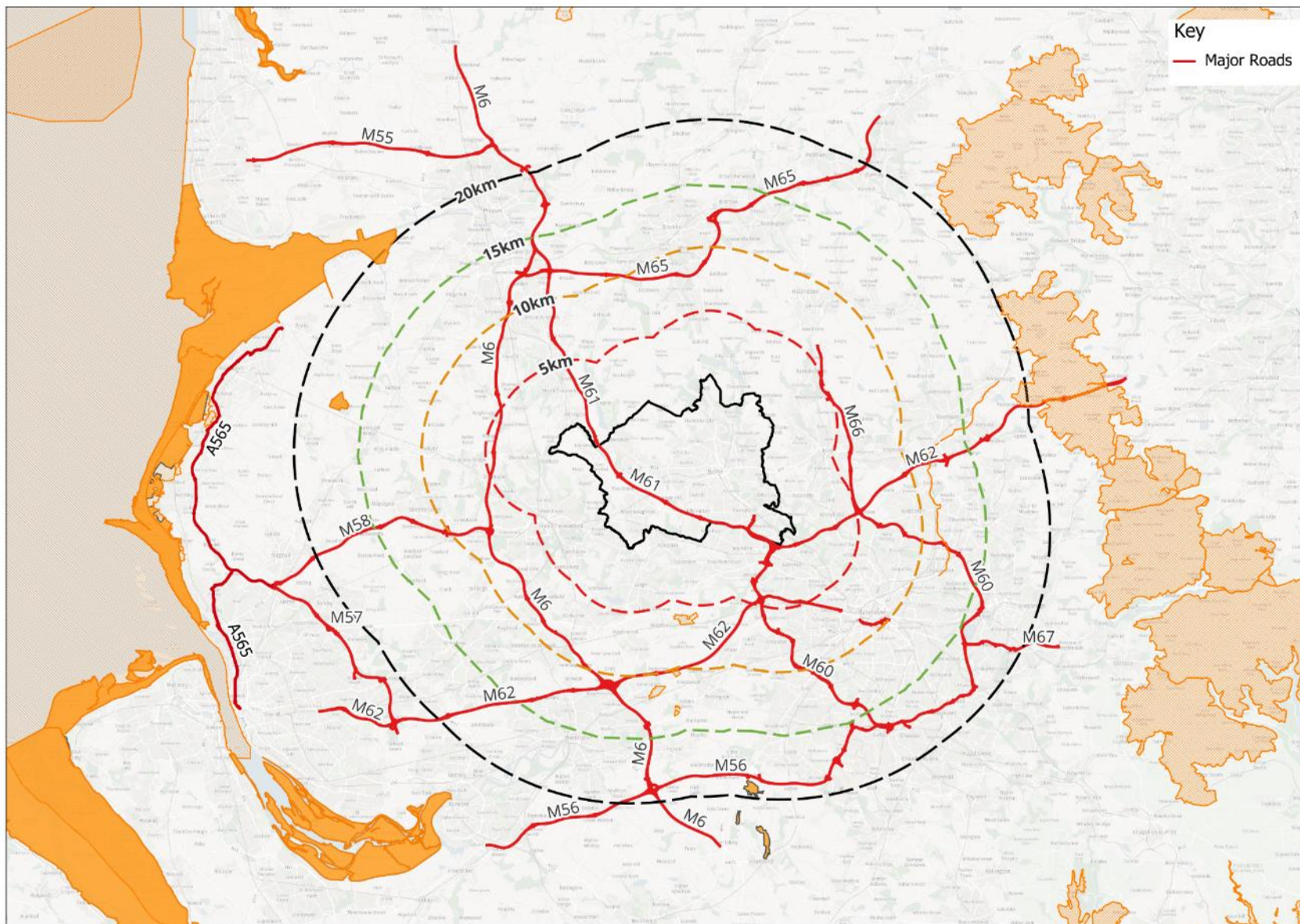


Figure 4– Major Road pathways to European Sites including Holcroft Moss / Manchester Mosses SAC

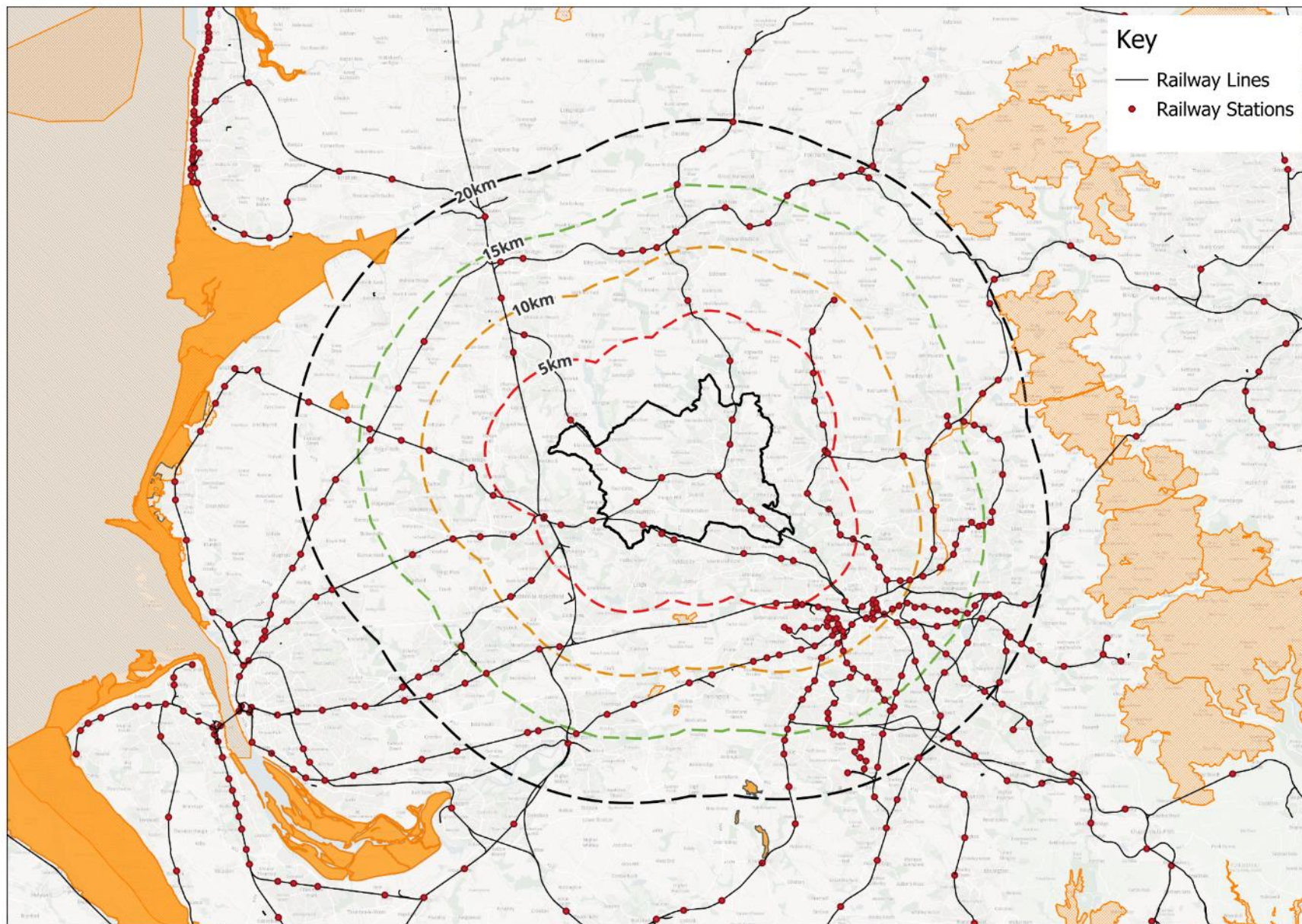


Figure 5 – Railway links including pathways to European Sites