Habitats Regulations Assessment (draft) of the Greater Manchester Spatial Framework Consultation Report – Thematic Policies and Strategic Sites

Prepared by

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For:

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HABITATS REGULATIONS ASSESSMENT OF THE GREATER MANCHESTER SPATIAL FRAMEWORK – THEMATIC POLICIES AND STRATEGIC SITES

1 INTRODUCTION

1.1 Paragraph 6(3) of the European Habitats Directive dealing with the conservation of European protected sites states that:

6(3).—(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which—

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of that site,

must make an **appropriate assessment** of the implications of the plan or project for that site in view of that site's conservation objectives.

1.2 Under the terms of amendments made to the Habitats Directive in 2007 the Greater Manchester Spatial Framework is considered to require a Habitats Regulations Assessment because it is not a Plan concerned with the management of a European site but it is considered to have the potential to cause harm to the special nature conservation interest of European protected sites. The Greater Manchester Spatial Framework (hereafter referred to as 'the Plan') is therefore considered to be a Local Development Document (a 'Plan') that falls under Part IV, 85A-(2) of the 2007 Habitats Regulations Amendments

1.3 European protected sites (the 'Natura 2000 Network') are of exceptional importance for the conservation of important species and natural habitats within the European Union. 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. The network of European protected sites comprises 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.

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

- Stage 1 - Screening
- Stage 2 – Appropriate Assessment
- Stage 3 – Assessment of Alternatives
- Stage 4 – Assessment where no alternatives are available

1.5 This document forms Stage 1 AND Stage 2 (in part) 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 a **Screening Opinion and Assessment** concerned with reaching an opinion as to whether the Plan needs to be amended to avoid harm to European sites or needs to go forward for further, more detailed Assessment of impacts. It is not a stand-alone document and must be read in conjunction with the full Plan.

1.6 It is noted that the Plan being assessed is at a relatively early developmental stage and will be subject to public consultation and likely further amendment. Further Assessments may therefore be required if, as expected, further changes are made as a result of either the current consultation, future consultations or the future Examination in Public. There is no

statutory guidance on what stage of Plan production to prepare an HRA but Natural England recommends that HRA begins at an early stage and if necessary continues through all the stages of Plan production.

There has been a previous iteration of the Plan, a consultation draft released in 2016, and this Plan was also subject to an HRA prepared by GMEU. It is of note that this previous HRA concluded that the Plan would not have significant harmful impacts on European sites providing that available safeguards were implemented appropriately. The new iteration of the Plan released in January of 2019 has been subject to very considerable amendments.

1.7 The Greater Manchester Ecology Unit (GMEU), as the specialist ecological adviser to the Greater Manchester Combined Authority and to Greater Manchester local planning authorities, has prepared this Screening Opinion and Assessment. Natural England and the JNCC were consulted for information on the conservation objectives and favourable condition tables for the European Sites concerned (the information is summarised below). GMEU ecologists, who are familiar with the European sites concerned and their special interests, reviewed the ecological information for the site. The key vulnerabilities and sensitivities of the European sites concerned are well 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.

1.8 This report has appraised the Plan and:

- Identifies by a Screening process any European site that could potentially be affected by the implementation of the Plan.

- Identifies Policies and Strategic Sites that may have impacts on European protected sites, assesses these impacts and assesses the available mitigation for these impacts

- Identifies Policies and Strategic Sites which may require further Assessment as part of the ongoing HRA of the Greater Manchester Spatial Framework as the Plan develops and makes recommendations, where necessary, on possible changes to the wording of future policies and amendments to Strategic Site boundaries.

2 BRIEF DESCRIPTION OF THE PLAN

2.1 The Plan being assessed is the Greater Manchester Spatial Framework Consultation Draft Report (2019).

The Greater Manchester Spatial Framework is a joint Plan across the ten local authorities of Greater Manchester, primarily to plan for and manage the supply of land for jobs and new homes. The Greater Manchester Spatial Framework (GMSF) is aimed at ensuring that Greater Manchester has the right land in the right places to deliver housing and employment land up to 2038, along with identifying the new infrastructure (such as roads, rail, Metrolink and utility networks) required to achieve the aspirations of the Plan and describing the required measures and mechanisms to achieve sustainable growth.

The Plan is inclusive and holistic and includes Policies and proposals for improving public health, reducing carbon emissions, reducing flood risks, improving water quality, protecting and enhancing green infrastructure and the natural environment, protecting built heritage assets, improving education, skills and knowledge, improving social cohesion and enhancing recreation.

The Plan will form an overarching development plan within which Greater Manchester's ten local planning authorities can identify more detailed sites for jobs and homes in their own areas. As such, the GMSF does not cover everything in the detail that a Local Plan would cover and individual districts will continue to produce their own Local Plans.

Although it is the case that the GMSF is planning for growth levels above and beyond those levels already identified in Local Plans, it includes development proposals already put forward as part of Local Plans and therefore includes development proposals that have already been Assessed under the terms of the Habitats Regulations. These proposals have been, or are being, Assessed as part of the Local Plan process and are not therefore Assessed again in this Report, except in relation to the potential cumulative effects when considered in combination with proposals in the GMSF. In particular many sites and areas identified for potential future development and which contribute to the overall projected levels of growth planned for in the GMSF have been, or will be, individually Assessed in other assessments of Local plans.

The GMSF specifically addresses the environmental capacity of Greater Manchester, setting out how the Plan can enhance and protect the quality of the natural environment, conserve wildlife and tackle low carbon and flood risk issues, so that growth can be accommodated sustainably.

The Plan has two distinct parts –

- Thematic Policies
- Proposals for the identification (allocation) of Strategic Sites 'of-scale'

Both the Thematic Policies and the Strategic Sites have been Assessed in this report.

3 IDENTIFICATION OF EUROPEAN DESIGNATED SITES CONCERNED

3.1 This Assessment has first screened European protected sites in the North West of England to decide which of these sites are most likely to be affected by development in Greater Manchester. 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 implementation of the Plan.

3.2 As a useful starting point, the Assessment has considered the suite of European sites assessed within Habitat Regulations Assessments of other, adopted Local Plans in and around Greater Manchester.

The Screening Criteria for identifying relevant European Sites

3.3 In carrying out this 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.

3.4 Possible sources and pathways for effects arising from development implemented as a result of Plan adoption, and used in the screening of European sites, are considered to include:

- Land take
- Cultivation
- Diffuse and localised air pollution including dust and odour
- Noise disturbance
- Light spill or shading
- Human presence/disturbance
- Emissions to water (surface or ground water) containing pollutants
- Ground water depression or flow interception
- Decrease in surface water run-off e.g. through interception in a void
- Introduction and spread of invasive species
- Climate Change (carbon emissions)

More specific sources of harm to particular designated sites are listed in the summary descriptions of these sites given below.

3.5 Guidance from the Environment Agency (EA) concerning distances at which significant effects on European sites are caused by water or air pollution have been taken into account during the screening of European sites. The EA has set recommended buffer zones for certain types of 'most damaging' operation (in particular, waste treatment operations) that are in part applicable to other types of operation. Outside of these buffer zones significant effects on European sites arising from water and air pollution are considered unlikely to arise. The largest (most cautious) buffer zone considered by the EA is 10km; that is, most operations with the potential of causing direct water and/or air pollution impacts located further than 10km from the boundary of a European site are considered very unlikely to have a significant effect on the special interest of that site.

3.6 Although this guidance has been taken into account when screening European protected sites, in the case of a Plan affecting the development of a very large entire metropolitan Region, the 10km buffer zone 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 or secondary impacts. In particular, applying the 10km buffer may not be appropriate where the most likely effect on a European site will be caused by **diffuse air or water pollution** that may arise from large scale development**,** or where there are

secondary **recreational** pressures on more distant protected sites arising from increased regional and sub-regional populations. On the other hand a 10km buffer may be excessive when considering smaller sites and areas where there are no identified pathways between the sites and European designated sites.

Since the GMSF is large-scale strategic plan where the main impacts on European sites are likely to be diffuse and cumulative it is considered that certain potential diffuse sources will be more likely to result from the Plan than more direct sources of harm. These sources are considered to include diffuse air pollution, diffuse water pollution, climate change (carbon emissions) and recreational pressures.

A brief discussion of the main likely identified sources follows to establish a context for the Assessment and a level of reasoned justification for why particular conclusions have been reached about impacts and available mitigation.

3.7 Diffuse Air Pollution

3.7.1 The main types of air pollutants likely to have an adverse effect on an ecological site are:

- Oxides of Nitrogen (NO_x)
- Ammonia (NH_3)
- Dust (including particulates)
- Sulphur Dioxide (SO_2)
- Low level Ozone (O_3)

(Scott Wilson Ltd 2007)

3.7.2 Of these NO_x and SO_3 are the most likely to arise as a result of development controlled by the Plan under consideration here. The greatest damage caused by these pollutants occurs close to where they are emitted (within 250 m) but an individual source of pollution may add to the general background levels, as pollutants are dispersed by prevailing winds. The main sources of these pollutants are road traffic and industrial processes. Where proposed developments within Greater Manchester are likely to result in these pollutants arising, these have been screened into this Assessment.

3.7.3 Other forms of strategic development less directly in the control of this Plan process also produce diffuse air pollution: for example the construction of major strategic road routes and air traffic infrastructure are managed through the National Infrastructure Planning process. Although it is recognised that the decisions regarding these strategic elements are sometimes taken at a wider regional or national level, it is useful to identify them within this document in order to demonstrate completeness. Other Strategic Plans (*eg* Southampton City and Newcastle-upon-Tyne City) have considered the impacts of airports and used a very wide 15km and 20km buffer, respectively, when identifying impacts on air pollution levels arising from airport expansion.

3.7.4 The issue of diffuse air pollution is complicated by the fact that three of the European sites of concern to this Assessment (the South Pennine Moors, the Manchester Mosses and Rixton Clay Pits) are already exceeding nitrate levels which would be considered harmful to sensitive habitats on these sites (*source* Natural England and APIS), so *any* level of increased nitrate pollution no matter how small could be considered to be harmful.

The Environment Agency has advised that levels of nitrate deposition arising from particular operations which are below 1% of the expected 'background' nitrate deposition levels can be regarded as insignificant when carrying out Appropriate Assessments no matter what levels of nitrate are currently present on sites. But for this Assessment at Strategic Plan level empirical approximations of expected increased nitrate deposition

arising from Plan implementation are not able to be arrived at because detailed plans and project proposals are not yet available and in any case levels are likely to be cumulative.

In these circumstances overall Policies, Strategies and Plans aimed at managing and reducing air pollution must be relied upon to provide mitigation for the potential effects of diffuse air pollution. At the least, Policies must be aimed at achieving no net increase in air pollution levels.

3.7.5 It is also important to note that many industrial processes have emissions that would require permitting by the Environment Agency and the submission of a bespoke Air Quality Assessment with any detailed planning proposal.

3.8 Diffuse Water Pollution

3.8.1 Effects on distant European sites can occur through increases in water pollution caused by nutrient enrichment and/or industrial processes. Where proposed developments within Greater Manchester are considered to have the potential to result in this type of diffuse pollution arising and affecting a European site, these have been screened into this Assessment. This is of particular relevance to proposed developments close to the Rochdale Canal SAC.

3.8.2 Diffuse water pollution arising from sources in Greater Manchester could potentially have an effect on the Mersey Estuary SPA/Ramsar Site, since most of the major rivers in Greater Manchester (eg Irwell, Medlock & Irk) are all effectively tributaries of the River Mersey (via the Manchester Ship Canal) and this eventually discharges into the Estuary; water flows in Greater Manchester are primarily from the east and north towards the south and west.

But prior to discharging into the Estuary these watercourses pass through other Metropolitan areas (Warrington and Merseyside), and the Estuary itself is adjacent to the very large Merseyside conurbation and receives inputs from many disparate sources. It will therefore be very difficult to establish whether any water pollution arising from development in Greater Manchester was responsible for a significant effect on pollution in the Estuary. However, given the scale of development under consideration in this Plan, and the need to take a precautionary approach when preparing an HRA, the Mersey Estuary has been 'Screened In' to this assessment. Individual Policies and Sites have not been specifically identified as being sources of water pollution but it assumed that the Plan in total may contribute to diffuse water pollution in the Estuary. Mitigation of any effects on the Mersey SPA relies on the application of general policies, plans and strategies.

3.8.3 Some Strategic sites are very close to the Rochdale Canal SAC which is sensitive to pollution. The Canal is a somewhat unusual SAC because it is a man-made artefact running through heavily industrialised and built-up areas of Greater Manchester. Tried and tested mechanisms exist that have allowed development adjacent to and within the Canal without causing the special nature conservation interest of the site any undue harm from pollution. This Assessment has taken this into account and has therefore considered it to be unreasonable to recommend that sites be removed from consideration for future development simply because of their proximity to the SAC; the nature, scale and design of the development planned are considered to be more important factors to consider than proximity.

3.9 Recreational Pressures

3.9.1 The effects of significantly increased regional and sub-regional populations on recreational pressures on the north west's European protected sites has been considered in this Assessment because it is recognised that this could be an important harmful impact 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
- Prevent appropriate management or exacerbate existing management difficulties.

Different types of internationally designated sites are subject to different types of recreational pressures and have different vulnerabilities. The best studied effects of disturbance are concerned with birds, although even with birds studies across a wide range of species have shown that the effects from recreation can be complex. The outcomes of many of these studies therefore need to be treated with care. For instance, the effect of disturbance is not necessarily correlated with the impact of disturbance, i.e. the most easily disturbed species are not necessarily those that will suffer the greatest impacts. It has been shown that, in some cases, the most easily disturbed birds simply move to other feeding sites, whilst others may remain (possibly due to an absence of alternative sites) and thus suffer greater impacts on their population. These facts have to be taken into account when attempting to predict the impacts of future recreational pressure on internationally designated sites, something that is particularly difficult when trying to assess the effects of a large-scale Strategic Plan.

It should be borne in mind that recreational use of European sites is not inevitably a problem.

As with diffuse water pollution effects recreational pressures can also be (very) diffuse and it can therefore be difficult to accurately apportion any harmful impacts to a particular development; for example, increased recreational pressures on European sites within the Peak District National Park may be caused by increases in the population of Greater Manchester but such pressures may also be caused by increases in national and even international visitors.

Where increased recreational pressure is assessed as having significant potential to affect the integrity of European sites ways of avoiding the impact should be properly considered, for example by providing alternative recreation sites and opportunities. Overall, developing high quality places will reduce the need for people to travel for outdoor recreation and will also avoid the impact.

3.10 Climate Change

Climate change is probably the most important long-term threat to the integrity of European designated sites. But the sources of greenhouse gases are truly global. The European sites considered in this Assessment may therefore be significantly affected by emissions which are impossible to attribute to any particular source resulting from Plan implementation and which are not in the control of the Plan.

Nevertheless, any Plan with an aim of facilitating economic growth and planning for significant development must consider its potential to contribute to greenhouse gas emissions and climate change and should therefore take steps to avoid or mitigate any potential contribution to global warming. In this way the plan can avoid making any contribution to the harm that may be caused to European sites by climate change.

3.11 Summary Results of Screening of European designated Sites

From the ‘site screening’ process the following European designated sites have been identified as having the potential to be affected by the implementation of the Plan

- **Manchester Mosses SAC**

- **Rixton Clay Pits SAC**
- **Rochdale Canal SAC**
- **South Pennine Moors SAC**
- **South Pennine Moors Phase 1 & 2 SPAs**
- **The Mersey Estuary SPA/Ramsar**

In general, other European sites in the UK are essentially considered to be too distant from Greater Manchester for harmful effects to occur from the implementation of the Plan.

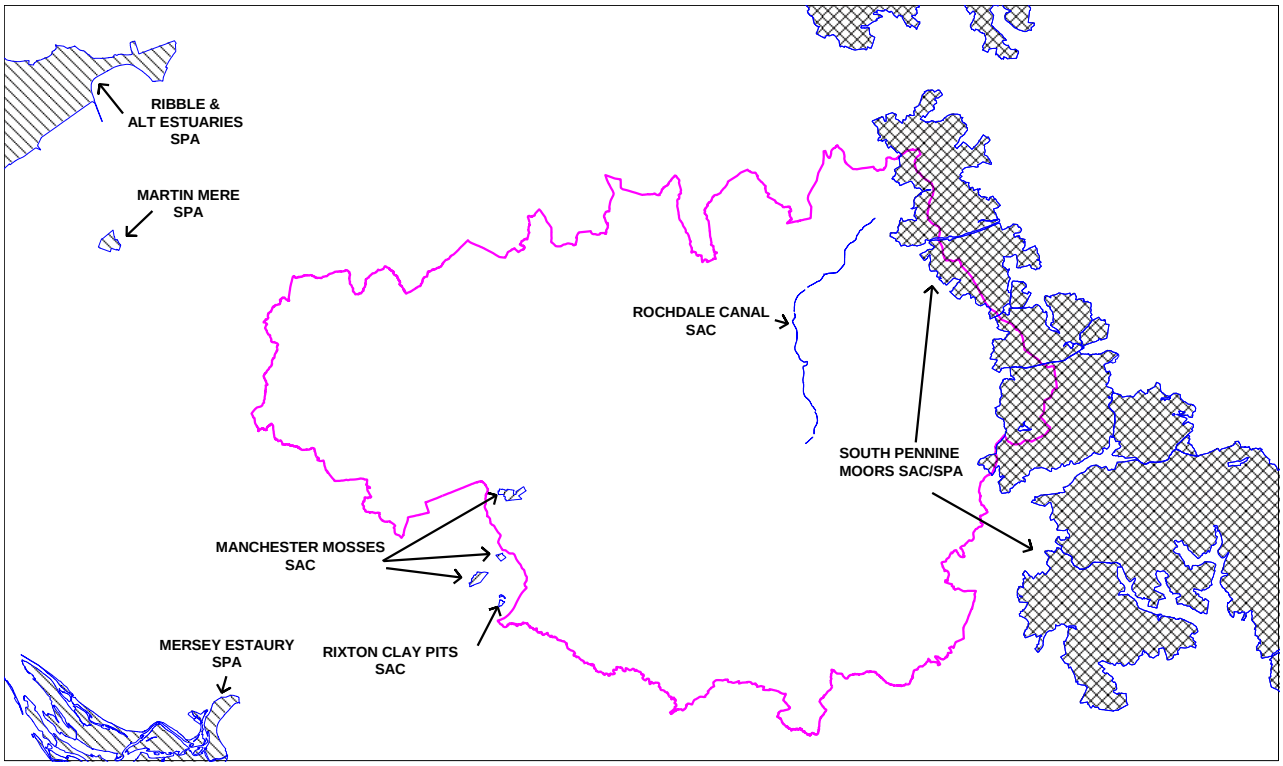

Fig 1 Locations of European designated sites in relation to the boundary of Greater Manchester

4 The Nature Conservation Interests of the "Screened In" European Sites

The following details are derived from information available from Natural England and the Joint Nature Conservation Committee and from information held by GMEU.

4.1 Manchester Mosses SAC

4.1.1 Description of the Manchester Mosses SAC

Mossland formerly covered a very large part of low-lying Greater Manchester, Merseyside and southern Lancashire, and provided a severe obstacle to industrial and agricultural expansion. While most has 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) on the Mersey floodplain. 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 past drainage has produced dominant purple moor grass (*Molinia caerulea)*, bracken (*Pteridium aquilinum)* and birch (*Betula)* spp. scrub or woodland, wetter pockets have enabled the peat-forming species to survive. Recent rehabilitation management on all three sites has caused these to spread.

4.1.2 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).

SAC sites have been selected on a site-by-site basis and according to the *Interpretation manual of European habitats* (European Commission DG Environment 1999); "where the hydrology can be repaired and where, with appropriate rehabilitation management, there is a reasonable expectation of re-establishing vegetation with peat-forming capability within 30 years".

4.1.3 Conservation Objective of the Manchester Mosses

The Conservation Objective for the Manchester Mosses SAC is to maintain the bog habitat, subject to natural change, in favourable condition (Natural England 2018).

On this site favourable condition requires the maintenance of the extent of each designated habitat type. Maintenance implies restoration if evidence from a condition assessment suggests a reduction in extent. A series of site-specific standards defining favourable condition has been produced by Natural England. However these relate to management of the habitats on the site and are not particularly applicable to assessing the effects of thematic policies in the Plan on the SAC. Therefore in order to consider these potential impacts the operations that may damage the special interest of the SAC have to be considered. These include:

- Cultivation
- Grazing
- Mowing or cutting
- Application of manure, fertilisers or lime
- Application of pesticides
- Burning
- Drainage, both within and outside the boundaries of the site
- Extraction of minerals including peat, topsoil and subsoil
- Construction or removal of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks or the laying or removal of pipelines and cables
- Erection of permanent structures
- Use of vehicles likely to damage the vegetation

- Pollution including atmospheric pollutants and NOxs
- Recreational activities
- Diffuse water pollution
- Climate change

(Adapted from information available from Natural England)

4.2 Rixton Clay Pits SAC

4.2.1 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 newt *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.

4.2.2 Primary Reason for Designation of Rixton Clay Pits

The primary reason for the designation of Rixton Clay Pits is its population of great crested newts (*Triturus cristatus)*. 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.

4.2.3 Conservation Objective for Rixton Clay Pits

The draft conservation objective for this site is to maintain the designated species, great crested newt, in favourable condition. On this site favourable condition requires the maintenance of the population of the newts and maintenance implies restoration if evidence from condition assessment suggests a reduction in size of the population (Natural England 2018).

The operations that may damage the special interest of the SAC which have to be considered include:

- Cultivation
- Grazing
- Mowing or cutting
- Application of manure, fertilisers or lime
- Application of pesticides
- Burning
- Drainage, both within and outside the boundaries of the site
- Extraction of minerals including peat, topsoil and subsoil
- Construction or removal of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks or the laying or removal of pipelines and cables
- Erection of permanent structures
- Use of vehicles likely to damage the vegetation
- Diffuse air pollution
- Diffuse water pollution
- Climate change

4.3 Rochdale Canal SAC

4.3.1 Description of the Rochdale Canal SAC

The Rochdale Canal SAC extends approximately 20 km from Littleborough at Ben Healey Bridge to Failsworth, passing through urban and industrialised parts of the Metropolitan Boroughs of Rochdale and Oldham and the intervening areas of agricultural land (mostly pasture). Water supplied to the Rochdale Canal in part arises from the Pennines. This water is acidic and relatively low in nutrients, while water from other sources is mostly high in nutrients. The aquatic flora of the canal is thus indicative of a mesotrophic waterbody (i.e. is moderately nutrient-rich) although there is evidence of some local enrichment. The canal continues through Failsworth and terminates at Castlefield in Manchester City, although this section of the canal is not included within the SAC.

4.3.2 **Primary reason for designation of the Rochdale Canal as a European protected site**

The Rochdale Canal supports a significant population of **floating water-plantain (*Luronium natans)*** in a botanically diverse waterplant community which also holds a wide range of pondweeds *Potamogeton* spp. The canal has predominantly mesotrophic water. This population of *Luronium* is representative of the formerly more widespread canal populations of north-west England, although the Rochdale Canal supports unusually dense populations of the plant.

The Site Conservation Objectives for the Rochdale Canal 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 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 the qualifying species, and
- The distribution of the qualifying species within the site.

The main qualifying feature for the site is the presence of Floating water-plantain.

4.3.3 **Floating water-plantain; description and ecological characteristics**

Floating water-plantain (*Luronium natans*) occurs in a range of freshwater situations, including nutrient-poor lakes in the uplands (mainly referable to 3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*) and slowly-flowing lowland rivers, pools, ditches and canals that are moderately nutrient-rich.

Luronium natans occurs as two forms: in shallow water with floating oval leaves, and in deep water with submerged rosettes of narrow leaves. The plant thrives best in open situations with a moderate degree of disturbance, where the growth of emergent vegetation is held in check. Populations fluctuate greatly in size, often increasing when water levels drop to expose the bottom of the water body. Populations fluctuate from year to year, and at many sites records of *L. natans* have been infrequent, suggesting that only small populations occur, in some cases possibly as transitory colonists of the habitat. Populations tend to be more stable at natural sites than artificial ones, but approximately half of recent (post-1980) records are from canals and similar artificial habitats. Its habitat in rivers has been greatly reduced by channel-straightening, dredging and pollution, especially in lowland situations.

4.3.4 The operations that may damage the special interest of the SAC which have to be considered include:

- Application of pesticides

- Dredging
- Drainage, both within and outside the boundaries of the site
- Construction or removal of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks or the laying or removal of pipelines and cables
- Erection of permanent structures next to the Canal (shading)
- Diffuse air pollution
- Diffuse water pollution
- Increased boat movements (recreation)
- Climate change

4.4 South Pennine Moors SAC/SPA

4.4.1 Description of the South Pennine Moors SAC

This very large site forms part of the Southern Pennines lying between Ilkley in the north and the Peak District National Park boundary in the south. The majority of the site is within West Yorkshire but it also covers areas of Lancashire, Greater Manchester and North Yorkshire. The largest moorland blocks are Ilkley Moor, the Haworth Moors, Rishworth Moor and Moss Moor. The underlying rock is Millstone Grit which outcrops at Boulsworth Hill and on the northern boundary of Ilkley Moor. The moorlands are on a rolling dissected plateau between 300m and 450m AOD with a high point of 517m at Boulsworth Hill. The greater part of the gritstone is overlain by blanket peat with the coarse gravely mineral soils occurring only on the lower slopes. The site is the largest area of unenclosed moorland within West Yorkshire and contains the most diverse and extensive examples of upland plant communities in the county. Extensive areas of blanket bog occur on the upland plateaux and are punctuated by species rich acidic flushes and mires. There are also wet and dry heaths and acid grasslands. Three habitat types which occur on the site are rare enough within Europe to be listed on Annex 1 of the EC habitats and Species Directive (92/43) EEC. These communities are typical of and represent the full range of upland vegetation classes found in the South Pennines.

This mosaic of habitats supports a moorland breeding bird assemblage which, because of the range of species and number of breeding birds it contains, is of regional and national importance. The large numbers of breeding merlin (*Falco columbarius*), golden plover (*Pluvialis apricaria*) and twite (*Carduelis flavirostris*) are of international importance.

4.4.2 Description of the South Pennine Moors SPAs

Special Protection Areas (SPAs) are strictly protected sites classified in accordance with Article 4 of the EC Directive on the conservation of wild birds, also known as the Birds Directive, which came into force in April 1979. They are classified for rare and vulnerable birds, listed in Annex I to the Birds Directive, and for regularly occurring migratory species. The South Pennine Moors SPA includes the major moorland blocks of the South Pennines from Ilkley in the north to Leek and Matlock in the south. It covers extensive tracts of semi-natural moorland habitats including upland heath and blanket mire. The site is of European importance for several upland breeding bird species including birds of prey and waders.

4.4.3 Primary reason for designation of the South Pennine Moors SAC

The site supports the following important habitats

European Dry Heath
The site is representative of upland dry heath at the southern end of the Pennine range, the habitat's most south-easterly upland location in the UK. Dry heath 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 heather *Calluna vulgaris*. Its main NVC types are H9 *Calluna vulgaris – Deschampsia flexuosa* heath and H12 *Calluna vulgaris – Vaccinium myrtillus* heath. More rarely H8 *Calluna vulgaris – Ulex gallii* heath and H10 *Calluna vulgaris – Erica cinerea* heath are found. On the higher, more exposed ground H18 *Vaccinium myrtillus – Deschampsia flexuosa* heath becomes more prominent. 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.

Blanket Bog
This site represents blanket bog in the south Pennines, the most south-easterly occurrence of the habitat in Europe. The bog vegetation communities are generally botanically poor. Hare's-tail cotton-grass *Eriophorum vaginatum* is often overwhelmingly dominant, although bog-building *Sphagnum* mosses are present. Where the blanket peats are slightly drier, heather *Calluna vulgaris*, crowberry *Empetrum nigrum* and bilberry *Vaccinium myrtillus* become more prominent. 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 (9000 years) of the south Pennine peats.

Old Sessile Oak Woods
Around the fringes of the upland heath and bog of the south Pennines 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.

4.4.4 Primary reason for the designation of the South Pennine Moors SPAs

The site qualifies for the designation by supporting populations of European importance of the following species listed on Annex I of the Directive:

For Phase 1 during the breeding season:

- Golden plover (*Pluvialis apricaria*), at least 3.3% of the breeding population in Great Britain
- Merlin (*Falco columbarius*), at least 5.9% of the breeding population in Great Britain
- Peregrine (*Falco peregrinus*), at least 1.4% of the breeding population in Great Britain
- Short-eared owl (*Asio flammeus*), at least 2.5% of the breeding population in Great Britain

The SPA supports an internationally important assemblage of birds. During the breeding season the area regularly supports:

Common sandpiper (*Actitis hypoleucos*), Dunlin (*Calidris alpina schinzii*), Twite (*Carduelis flavirostris*), Snipe (*Gallinago gallinago*), Curlew (*Numenius arquata*), Wheatear (*Oenanthe oenanthe*), Redshank (*Tringa totanus*), Ring ouzel (*Turdus torquatus*), Lapwing (*Vanellus vanellus*)

For Phase 2 during the breeding season:

- Golden plover (*Pluvialis apricaria*), at least 1.9% of the breeding population in Great Britain

- Merlin (*Falco columbarius*), at least 2.3% of the breeding population in Great Britain
- Breeding Bird Assemblage

4.4.5 **Conservation Objectives of the South Pennine Moors**

Natural England lists the conservation objectives for the South Pennine Moors as follows:

To maintain*, in favourable condition, the habitats for the populations of Annex 1 species[+] of European importance, with particular reference to:

- blanket mire
- dwarf shrub heath
- acid grassland
- gritstone edges

[+] *golden plover, merlin, short-eared owl*

To maintain*, in favourable condition, the:

- blanket bog (active only)
- dry heaths
- Northern Atlantic wet heaths with *Erica tetralix*
- transition mires and quaking bogs
- old oak woods with *Ilex* and *Blechnum* in the British Isles

*maintenance implies restoration if the feature is not currently in favourable condition.

4.4.6 The operations that may damage the special interest of the SPA which have to be considered include:

- Cultivation
- Grazing
- Mowing or cutting
- Application of manure, fertilisers or lime
- Application of pesticides
- Burning
- Drainage, both within and outside the boundaries of the site
- Extraction of minerals including peat, topsoil and subsoil
- Construction or removal of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks or the laying or removal of pipelines and cables
- Erection of permanent structures
- Use of vehicles likely to damage the vegetation
- Diffuse air pollution
- Diffuse water pollution
- Climate change

4.5 The Mersey Estuary SPA/Ramsar

4.5.1 Description

The Mersey Estuary is located on the Irish Sea coast of north-west England. It is a large, sheltered estuary which 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 water birds. 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.

4.5.2 Conservation Objectives for the Mersey Estuary SPA/Ramsar

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.

4.5.3 Primary reasons for designation of the Mersey Estuary SPA

Qualifying species

This site qualifies under **Article 4.1** of the Habitats 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 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 Northwestern 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 tadorna*, 5,039 individuals representing at least 1.7% of the wintering Northwestern Europe population (5 year peak mean 1991/2 - 1995/6)

Teal *Anas crecca*, 11,667 individuals representing at least 2.9% of the wintering Northwestern 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 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*.

4.5.4 Operations which may damage the special interest of the SPA include **-**

- Diffuse air pollution
- Diffuse water pollution
- Climate change
- Recreational disturbance

5 INITIAL SCREENING OPINION – POLICIES

5.1 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. Where -

- 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 and strategic sites on European sites are considered to be:

- Land take
- Diffuse and Localised air pollution including dust and odour
- Noise
- Light spill
- Human presence/disturbance
- Emissions to water (surface or ground water) containing pollutants
- Ground water depression or flow interception
- Decrease in surface water run-off e.g. through interception in a void
- Shading (Rochdale Canal SAC only)
- Climate Change

It should be noted for the Sites that it is the *broad principle of development within the site boundary* that is being assessed, rather than the detail of any proposed development, since these details are not yet available at this early Plan stage. Full details of possible sources, pathways and receptors for impacts are not therefore available for Assessment at this stage of Plan production.

5.2 The results of the screening are shown in the 'Screening Summary' tables below.

5.3 Each of the Thematic Policies and Strategic Sites have been assessed to determine whether they are:

- No likely significant effect on a European Site – **Screened Out**
- Could have a potential positive effect on a European Site – **Screened Out**
- Could have a likely negative effect on a European Site – **Screened In**
- Would be *likely* to have a significant negative effect on a European Site – **Screened In**

Only Policies and Strategic Sites with potential negative effects or significant effects have been "**Screened In**" for further Assessment.

5.4 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.

SCREENING SUMMARY TABLES

TABLE 5.1 - POLICIES

Screened out Screened In for further Assessment

Policy	Brief Summary	Screening Outcome
Spatial Strategy		
GM-Strat 1	**Core Growth Areas** The economic role of the Central Economic Area will be protected and enhanced, with development supporting major growth in the number of jobs provided across the area.	No Likely Significant Effect.
GM-Strat 2	**City Centre** The role of the City Centre as the most significant economic location in the country outside London will be strengthened considerably. The City Centre will continue to provide the primary focus for business, retail, leisure, culture and tourism activity in Greater Manchester.	No Likely Significant Effect.
GM3-Strat 3	**The Quays** The [Salford] Quays will continue to develop as an economic location of national significance, characterised by a wide mix of uses. Its business, housing, leisure and tourism roles will all be significantly expanded.	No Likely Significant Effect.
GM-Strat 4	**Port Salford** will be developed as an integrated tri-modal facility, with on-site canal berths, rail spur and container terminal as essential elements of the scheme. The overall facility will provide around 500,000m2 of employment floor space. This will include an extension of the permitted scheme onto land to the north and west of Barton Aerodrome.	Potential harmful effect from increase in travel to/from Port Salford resulting in potential increases in diffuse air pollution (on the Manchester Mosses)
GM-Strat 5	**Inner Areas** Aims to promote the continued regeneration of the inner areas. High levels of new development will be accommodated, enabling new people to move into these highly accessible areas whilst retaining existing communities. A high priority will be given to enhancing the quality of places, including through enhanced green infrastructure and improvements in air quality.	No Likely Significant Effect.
GM-Strat 6	**Northern Areas** Aims to achieve a significant increase in the competitiveness of the northern areas will be	Potential harmful effects on the Rochdale Canal SAC and South Pennine Moors SAC/SPA by

	sought. Although There will be a strong focus on urban regeneration and enhancing the role of the town centres, this will be complemented by the selective release of Green Belt in key locations	large-scale developments
GM-Strat 7	**M62 North-East Corridor** The M62 North-East Corridor will deliver a nationally-significant area of economic activity and growth, extending along the motorway from junction 18 to junction 21.	Potential harmful effects from diffuse air pollution increasing along the M62 corridor through the South Pennines
GM-Strat 8	**Wigan-Bolton Growth Corridor** Aims to deliver a regionally significant area of economic and residential development	No likely significant effect because the growth corridor is considered to be too distant and separated from any European sites.
GM-Strat 9	**Southern Areas** The economic competitiveness, neighbourhood quality and environmental attractiveness of the southern areas will be protected and enhanced. There will be a strong emphasis on maximising the economic potential of, and benefits of investment in, Manchester Airport and associated transport infrastructure which will be complemented by the selective release of Green Belt for new employment and housing.	Potential harmful effect from increase in travel to/from the airport resulting in potential increases in diffuse air pollution (all European sites)
GM-Strat 10	**Manchester Airport** will continue to be developed as a world class airport with high quality services and facilities, providing the UK's principal international gateway outside London. The introduction of services to a wide range of new destinations will enable a doubling of passenger numbers to around 55 million per annum.	Potential harmful effect from increase in travel to/from the airport resulting in potential increases in diffuse air pollution (all European sites)
GM-Strat 11	**New Carrington** Aims to develop a new settlement with housing, employment, a new centre and transport links	Potential harmful effect from increase road traffic resulting in potential increases in diffuse air pollution (particularly Manchester Mosses SAC)
GM-Strat 13	**Strategic green Infrastructure** Aims to protect and enhance strategic green infrastructure	Potential positive effect
GM-Strat 12	**Main Town Centres** Aims to continue the development of main town centres across GM	No Likely significant effect
GM-Strat 13	**Strategic Green Infrastructure** Aims to protect and enhance strategic green infrastructure	Potential positive effect
GM-Strat 14	**A sustainable and integrated transport network**	Potential positive effect by reducing air pollution

	Aims to ensure that half of all daily trips will be made by walking, cycling and public transport	
A Sustainable and Resilient Greater Manchester		
GM-S 1	**Sustainable development** Development should aim to maximise its economic, social and environmental benefits simultaneously, minimise its adverse impacts and actively seek opportunities to secure net gains across each of the different objectives	Positive effect if environmental benefits are achieved
GM-S 2	**Carbon and Energy** Aims to deliver a carbon neutral Greater Manchester no later than 2038, with a dramatic reduction in greenhouse gas emissions, will be supported through a range of measures.	Positive effect by reducing air pollution and climate change
GM-S 3	**Heat and Energy Networks** The provision of decentralised energy infrastructure is critical to the delivery of Greater Manchester's objectives for low carbon growth, carbon reductions and an increase in local energy generation.	Positive effect by reducing air pollution and mitigating climate change effects
GM-S 4	**Resilience** The development of Greater Manchester will be managed so as to increase considerably the capacity of its citizens, communities, businesses and infrastructure to survive, adapt and grow in the face of physical, social, economic and environmental challenges.	Positive effect by reducing air pollution and mitigating climate change effects
GM-S 5	**Flood risk and the water environment** An integrated catchment based approach will be taken to protect the quantity and quality of water bodies and managing flood risk.	No likely significant effect
GM-S 6	**Clean Air** A comprehensive range of measures will be taken to support improvements in air quality, focusing particularly on locations where people live, where children learn and play, and where air quality targets are not being met.	Positive effect by improving air quality
GM-S 7	**Resource Efficiency** Aims to achieve a circular economy and a zero-waste economy	No likely significant effect
A Prosperous Greater Manchester		
GM-P 1	**Supporting long-term economic growth**	Potential diffuse harm from unsustainable growth

	A thriving and productive economy will be sought in all parts of Greater Manchester. There will be an emphasis on maintaining a very high level of economic diversity across Greater Manchester.	(e.g. population growth, increases in diffuse air and water pollution)
GM-P 2	**Employment sites and premises** A diverse range of employment sites and premises, both new and second-hand, will be made available across Greater Manchester in terms of location, scale, type and cost. This will offer opportunities for all kinds and sizes of businesses, including start-ups, firms seeking to expand, and large-scale inward investment.	No development areas are planned within or adjacent to any European sites but potentially harmful effects could arise from increased travel leading to increases in diffuse air pollution
GM-P 3	**Office development** Significant new office floor space will be provided in Greater Manchester over the Plan period	No development areas are planned within or adjacent to any European sites but potentially harmful effects could arise from increased travel leading to increases in diffuse air pollution
GM-P 4	**Industry and Warehousing Development** Significant areas of new industrial and warehousing floor space will be provided in Greater Manchester over the Plan period.	No development areas are planned within or adjacent to any European sites but potentially harmful effects could arise from increased travel leading to increases in diffuse air pollution
Homes for Greater Manchester		
GM-H 1	**Scale of new Housing development** Aims to deliver a minimum of 201,000 net additional dwellings in the period 2018-37, an annual average of around 10,580	Potential harmful effects from increased recreational pressures and possible increased diffuse air pollution (all European sites)
GM-H 2	**Affordability of New Housing** Aims to ensure a substantial improvement in the affordability of new homes	No likely significant effect
GM-H 3	**Type, Size and design of New Housing**	No likely significant effect
GM-H 4	**Density of New Housing**	No likely significant effect
A Greater Manchester for Everyone		
GM-E 1	**Sustainable Places** Greater Manchester will aim to become one of the most liveable city-regions in the world, consisting of a series of beautiful, healthy and varied places.	No likely significant effect
GM-E 2	**Heritage** Aims to positively protect and enhance the character, archaeological and historic value of	No likely significant effect

	Greater Manchester's designated and non-designated heritage assets and their settings.	
GM-E 3	**New retail and leisure uses in town centres** The existing hierarchy of centres for retail and leisure uses will be maintained and enhanced.	No likely significant effect
GM-E 4	**Education, skills and knowledge** Significant enhancements in education, skills and knowledge will be promoted throughout Greater Manchester	No likely significant effect
GM-E 5	**Health** New development and Local Plans will be required, as far as practicable, to: A. Maximise its positive contribution to health and wellbeing; B. Support healthy lifestyles, including through the use of active design principles making physical activity an easy, practical and attractive choice; and C. Minimise potential negative impacts of new development on health	No likely significant effect
GM-E 6	**Sport and Recreation** A network of high quality and accessible sports and recreation facilities will be protected and enhanced, supporting greater levels of activity for all ages.	No likely significant effect
A Green Greater Manchester		
GM-G 1	**A Net Enhancement of Biodiversity and Geodiversity** Seeks a significant net enhancement of biodiversity and geodiversity resources	Positive effect
GM-G 2	**Green Infrastructure Network** Protects network of Green Infrastructure that stretches throughout Greater Manchester will be protected and enhanced,	Positive effect
GM-G 3	**Green Infrastructure Opportunity Areas** Aims to enhance green Infrastructure in strategic opportunity areas	Positive effect
GM-G 4	**River Valleys and Waterways** Seeks to protect river valleys and waterways	Positive effect
GM-G 5	**Lowland Wetlands and Mosslands** Seeks to protect important lowland wetland areas	Positive effect

GM-G 6	**Trees and Woodland** Seeks to protect existing trees and woodland and plant significant numbers of new trees	Positive effect
GM-G 7	**Uplands** Seeks to protect important upland areas	Positive effect
GM-G 8	**Access to Natural Greenspace** Seeks to maintain and improve access to semi-natural greenspace for people	Positive effect
GM-G 9	**Valuing Important Landscapes** Seeks to protect and improve important landscapes	Positive effect
GM-G 10	**The Greater Manchester Green Belt** Affords strong protection to the green belt to inappropriate development	Positive effect
A Connected Greater Manchester		
GM-C 1	**World class connectivity** Delivering a pattern of development that minimises the need to travel and the distances travelled to access jobs and other key services/opportunities'	Positive effect by reducing the need for travel (reduction in air pollution)
GM-C 2	**Digital connectivity** Greater Manchester's ten district councils and Combined Authority will support the provision of affordable, high quality, digital infrastructure.	Positive effect by reducing the need for travel (reduction in air pollution)
GM-C 3	**Walking and Cycling Network** A higher proportion of journeys made by walking and cycling will be achieved by creating a safe, attractive and integrated walking and cycling network connecting every neighbourhood and community across Greater Manchester.	Positive effect by reducing the need for unsustainable travel (reduction in air pollution) *providing* that the network construction avoids European sites
GM-C 4	**Public Transport Network** Major improvements to the public transport network will be delivered (includes support for HS2)	Positive effect by reducing the need for unsustainable travel (reduction in air pollution) but potential harm to Manchester Mosses depending on final route chosen and extent of construction works for HS2

GM-C 5	**Transport requirements of new developments** In making planning decisions Greater Manchester's authorities will require development to support a significant increase in the proportion of journeys made by walking, cycling and public transport, and a reduction in the adverse environmental impacts of transport.	Positive effect by reducing the need for travel (reduction in air pollution)
GM-C 6	**Highway Infrastructure improvements** Targeted improvements to the highway network will be sought where they complement the aim of securing a significant increase in the proportion of trips made by walking, cycling and public transport	Positive effect by reducing the need for travel (reduction in air pollution)
GM-C 7	**Freight and logistics** More efficient and sustainable movement of freight will be supported.	Positive effect by reducing the need for travel (reduction in air pollution)
GM-C 8	**Streets for All** Greater Manchester's streets will be designed and managed to make a significant positive contribution to the quality of place and support high levels of walking, cycling and public transport,	No likely significant effect
Allocations		
SDD 1	**Refers to individual strategic site allocations.** **Site allocations are Screened in Table 5.2 below**	
Delivering the Plan		
GM-D 1	**Infrastructure Implementation**	No likely significant effect
GM-D 2	**Developer Contributions** Will require developments to provide, or contribute towards, the provision of mitigation measures to make the development acceptable in planning terms.	No likely significant effect
IDM 4	**Monitoring** Requires monitoring of progress annually towards the achievement of Strategic Objectives and reported on the Greater Manchester Combined Authority Website on an annual basis.	No likely significant effect

Assessment of Strategic Sites

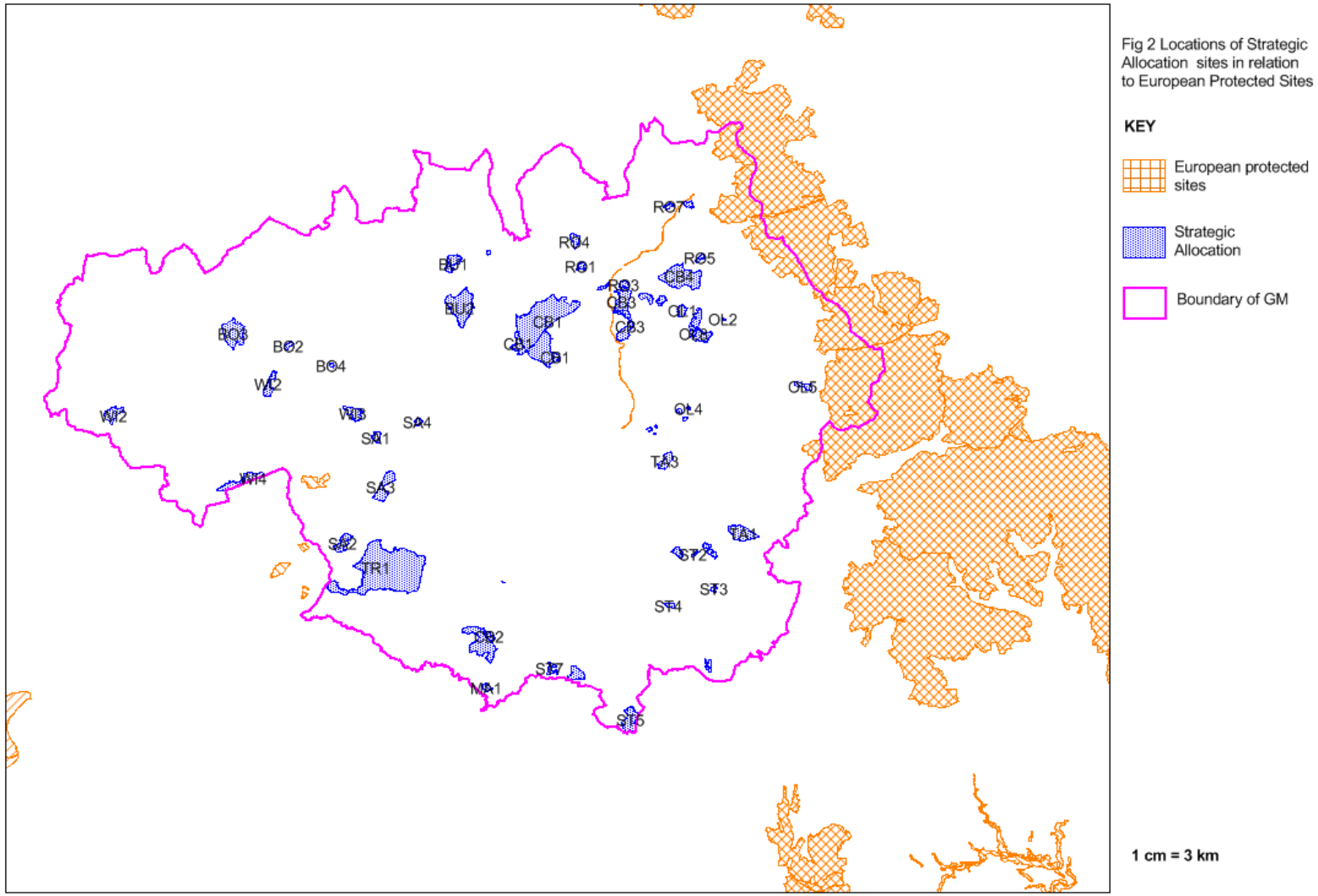

TABLE 5.2 - STRATEGIC SITES (ALLOCATIONS)

 Screened out  Screened In for further Assessment

Site	Type of development proposed	Screening Outcome
Wigan		
W12 M6 Jnct 25	Mixed use	No likely significant effect – the site is too distant from any European sites for discernible effects to occur (more than 10km away)
Pocket Nook	Housing	Within 3km of the Manchester Mosses SAC, potential diffuse air pollution effects and recreational impacts
W14 Land south of Pennington	Industry / Warehousing	Within 3km of the Manchester Mosses SAC, potential diffuse air pollution effects
W12 West of Gibfield	Mixed use	Within 5km of the Manchester Mosses SAC, potential diffuse air pollution effects and recreational impacts
W13 North of Mosley Common	Housing	Within 5km of the Manchester Mosses SAC, potential diffuse air pollution effects and recreational impacts
Salford		
SA2 North of Irlam Station	Housing	Within 3km of the Manchester Mosses SAC and Rixton Clay Pits SAC, potential diffuse air pollution effects and recreational impacts
SA3 Port Salford Extension	Industry / warehousing	Within 5km of the Manchester Mosses SAC, potential diffuse air pollution effects
SA1 Land East of Boothstown	Housing	Within 5km of the Manchester Mosses SAC, potential diffuse air pollution effects and recreational impacts
SA4 Land at Hazelhurst Farm	Housing	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
Trafford		

TR1 Carrington	**Mixed – exceptionally large allocation**	Within 5km of the Manchester Mosses SAC, potential diffuse air pollution effects and recreational impacts
CB2 Timperley Wedge	**Mixed**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
Manchester		
CB2 Roundthorn Medipark Extension	**Mixed**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
MA1 Airport City South	**Industry / warehousing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
Southwick Park	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
Stockport		
ST7 Heald Green	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
ST6 Stanley Green	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
ST5Woodford Aerodrome	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
ST4 Former Offerton High School	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
High Lane	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
ST3 Hyde Bank Meadows / Oak Wood Hall	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
ST1 Bredbury Park	**Industry / warehousing**	No likely significant effect – the site is too distant and too separated from

Industrial Estate Expansion		any European sites for discernible effects to occur
ST2 Gravel Bank Road / Unity Mill	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
Tameside		
TA12A & TA 12B South of Hyde	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
TA 1 Godley Green Garden Village	**Housing**	Large allocation within 10km of the South Pennine Moors SPA/SAC; potential effects from increased recreational pressure and diffuse air pollution from increased traffic
TA3 Ashton Moss West	**Industry / warehousing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
Oldham		
OL5 Robert Fletchers	**Housing**	Within 1km of the South Pennine Moors SPA/SAC; potential effects from increased recreational pressure and diffuse air pollution from increased traffic
OL4 South of Rosary Road	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
OL4 Ashton Road Corridor	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
Woodhouses Cluster	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
OL2 Spinners Way Alderney Farm	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
OL8 Broadbent Moss	**Mixed**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur

OL6 Beal Valley	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
OL1 Cowlishaw	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
OL7 Hanging Chadder	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
CB3 Thornham Old Road	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
CB4 Junction 21 of the M62	**Mixed**	Large allocation on the M62 – potential impacts on the South Pennine Moors from diffuse air pollution caused by increased traffic generation
CB3 Land west of A627(M)	**Mixed**	Large allocation close to (within 150m) the Rochdale Canal SAC; proximity to the motorway network may lead to potential impacts from diffuse air pollution caused by increased traffic generation and water pollution
Rochdale		
CB3 Land west of A627(M)	**Mixed**	Large allocation close to (within 150m) the Rochdale Canal SAC; proximity to the motorway network may lead to potential impacts from diffuse air pollution caused by increased traffic generation and water pollution
RO3 Trows Farm	**Housing**	Allocation close to (within 150m) the Rochdale Canal SAC; proximity to the motorway network may lead to potential impacts from diffuse air pollution caused by increased traffic generation and water pollution
RO2 Castleton Sidings	**Housing**	Allocation close to (within 150m) the Rochdale Canal SAC, potential water pollution effects
CB4 Juntion 21 of M62	**Mixed**	Large allocation on the M62 – potential impacts from diffuse air pollution caused by increased traffic generation

RO5 Newhey Quarry	**Housing**	Within 3km of the South Pennine Moors; possible recreational impacts
RO6 Land north of Smithy Bridge	**Housing**	Immediately adjacent to the Rochdale Canal SAC and within 3km of the South Pennine Moors, potential water pollution and recreation effects
RO7 Roch Valley	**Housing**	Within 300m of the Rochdale Canal SAC and within 3km of the South Pennine Moors, potential water pollution impacts on the Canal and recreational impacts on the Moors
RO4 Bamford / Norden	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
RO1 Crimble Mill	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
CB1 Northern Gateway	**Mixed**	Very large mixed allocation close to motorway network; potential for diffuse effects from air pollution and recreational impacts from population uplift on the South Pennine Moors
Bury		
CB1 Northern Gateway	**Mixed**	Very large mixed allocation close to motorway network; potential for diffuse effects from air pollution and recreational impacts from population uplift on the South Pennine Moors
BU2 Elton Reservoir Area	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
BU1 Walshaw	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
Seedfield	**Housing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
Bolton		
BO3 West of Wingates	**Industry / warehousing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur

BO4 Bewshill Farm	**Industry / warehousing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur
Bo2 Chequerbent North	**Industry / warehousing**	No likely significant effect – the site is too distant and too separated from any European sites for discernible effects to occur

6 Policies Screened In – further discussion and consideration of available Mitigation for identified effects

6.1 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 –

Policy	Potential harmful effects on European site(s)
GM-Strat 4 Port Salford	The development of Port Salford could cause increased traffic generation which could cause increased diffuse air pollution effects, which could in particular affect the Manchester Mosses SAC. The Port is located on the Manchester Ship Canal with direct connectivity with the Mersey estuary, albeit that the Estuary is distant from the Port. This raises the possibility of increased diffuse water pollution impacts on the Estuary
GM-Strat 6 Northern Areas	Development in this area has the potential to cause increased traffic generation which could increase diffuse air pollution and increased recreational pressures on the South Pennine Moors SAC/SPA
GM-Strat 7 M62 North-east Corridor	Potentially harmful effects from diffuse air pollution increasing along the M62 corridor through the M62 corridor
GM-Strat 9 Southern areas	Potential harmful effects from increases in travel to/from the airport causing more diffuse air pollution
GM-Strat 10 Manchester Airport	The expansion of the Airport has the potential to cause increases in diffuse air pollution and contribute to greenhouse gas emissions. These effects could cause harm to all relevant European sites
GM-Strat 11 New Carrington	Potential harmful effects from increased road traffic causing increases in diffuse air pollution (on the Manchester Mosses SAC)
GM-P 1 Supports long-term economic growth	Has the potential to cause increases in diffuse air pollution, diffuse water pollution and increases in recreational pressures (all European sites)
GM-P 2 Supports the development of a range of employment sites and premises	Has the potential to cause increases in diffuse air pollution, diffuse water pollution, direct water pollution (with reference to the Rochdale Canal SAC) and increases in recreational pressures (all European sites)
GM-P 3 Office Development	Has the potential to cause increases in diffuse air pollution, diffuse water pollution and increases in recreational pressures (all European sites)
GM-P 4 Industry and Warehousing Development	Has the potential to cause increases in diffuse air pollution, diffuse water pollution, direct water pollution (with reference to the Rochdale Canal SAC) and increases in recreational pressures (all European sites)
GM –H 1 Scale of new Housing Development	Has the potential to cause increases in diffuse air pollution, diffuse water pollution, direct water pollution (with reference to the Rochdale Canal SAC) and increases in recreational pressures (all European sites)
GM-C 4 Public Transport network	HS2 may cause potential harm to the Manchester Mosses SAC

6.2 The following impacts **will not** occur from the implementation of the Plan –

- Direct habitat loss
- Spread of invasive species
- Increased cultivation

6.2 The major sources of potential harm to European sites arising from the implementation of Policies in the Plan are, as predicted,

- Diffuse Air Pollution
- Disturbance effects arising from increased recreational use of European sites, particularly ON the South Pennine Moors
- Water pollution (direct pathway), particularly in relation to the Rochdale Canal SAC
-

6.3 Avoidance and Mitigation of identified effects

6.3.1 At this stage of Plan production accurate details of the type of development likely to come forward in accord with the Plan Policies, and the detailed form and scale of development that may result on particular sites, remain unknown. The quantum and details of potential increases in air and water pollution, and in recreational use, and consequent effects on European sites, are therefore very difficult (impossible?) to empirically determine at this time. Rather, to reiterate, it is the *broad principles* of whether the scale and type of development planned for Greater Manchester can be implemented without harming the special interest of any European Protected Sites that is being tested in this screening Report. Similarly it is the broad applicability of available mitigation measures that is discussed here.

There are very significant safeguards in Policies in the Plan such that the special interest of the European sites concerned should be able to be protected, enhanced and mitigated if necessary. This is a Plan with strong 'green' credentials and with sustainability at its heart.

Policies which would serve to protect European sites include –

- Policy to protect and enhance Green Infrastructure
- Policies for Nature Conservation, which include specific mention of the need to protect statutorily designated sites including international (European) sites and specific mention of the need to protect and enhance the Uplands, the Lowland Wetlands and the Waterways of Greater Manchester
- Policy to improve Air Quality
- Policy to improve Water Quality
- Policy to reduce Carbon Emissions
- Policy to improve Resilience

6.3.2 Mitigation of diffuse Air Pollution effects

Available mitigating Plans, Policies and Strategies at an International and National level –

- EU Ambient Air Quality Directives
- EU publication 'Clean Air for All', 2018
- Defra Clean Air Strategy 2018
- UK Industrial Strategy
- UK 25 year Environment Plan
- Best Practice Guidelines for avoidance of pollution on construction sites
- Environment Agency permit regime

Available mitigating Plans, Policies and Strategies at a Regional level

- Greater Manchester Low Emission and Air Quality Action Plan (2016)
- Action Plans prepared for Air Quality Management Areas (AQMA)
- Greater Manchester Clean Air Plan (in development, TfGM 2018)
- Clean Air Greater Manchester (website)

Available mitigating Policies within the GMSF –

- **Policy GM-S 6 Clean Air** provides for a comprehensive range of measures to be taken to support improvements in air quality

- **Policy GM-G 1** provides for the protection and enhancement of biodiversity resources, with '*the highest level of protection given to international designations'*

- **Policy GM-G 2** which serves to protect and improve priority green infrastructure which includes canals, uplands and lowland wetlands

When taken together it is concluded that the above plans, policies and strategies are likely to provide sufficient safeguards (mitigation) such that harm to European sites caused by air pollution can be avoided.

However, it is recognised that air pollution levels are dependent on a range of complex, interacting factors and that tolerance levels within European sites can be small. Notwithstanding the above conclusion and in the interests of taking a precautionary approach it is recommended that all detailed development proposals which come forward during the lifetime of the Plan and which are considered to have the potential to affect European sites are subject to separate Assessments under the terms of the Habitats Directive.

6.3.3 Mitigation of Water Pollution effects (direct and indirect)

Available mitigating Plans, Policies and Strategies at an International and National level –

- EU Water Framework Directive
- UK 25 Year Environment Plan
- River Catchment Management Plans
- Environment Agency Permit Regime
- Environmental Damage Regulations 2015 (England)
- United Utilities 25 year Strategy (2014)

Available mitigating Plans, Policies and Strategies at a Regional / Greater Manchester Level –

- United Utilities 25 year strategy

Available mitigating Policies within the GMSF –

- **Policy GM-S 5** Flood risk and the water environment; this Policy aims to reduce water pollution and flood risk

- **Policy GM-G 1** provides for the protection and enhancement of biodiversity resources, with '*the highest level of protection given to international designations'*

- **Policy GM-G 2** which serves to protect and improve priority green infrastructure which includes canals, uplands and lowland wetlands

When taken together it is concluded that the above plans, policies and strategies will provide sufficient safeguards (mitigation) such that harm to European sites caused by water pollution can be avoided.

Notwithstanding the above conclusion and in the interests of taking a precautionary approach it is recommended that all detailed development proposals which come forward during the lifetime of the Plan and which are considered to have the potential to affect European sites are subject to separate Assessments under the terms of the Habitats Directive.

6.3.4 **Mitigation of Recreational Pressures**

The Housing Policies within the GMSF assumes (anticipates?) significant population growth in Greater Manchester during the lifetime of the Plan. There are also Policies for facilitating increased accessibility and recreation. These Policies could have a 'diffuse' impact of increased recreational use of European sites, particularly of the South Pennines and the Rochdale Canal, which could potentially cause harm to the special interest of these sites by causing increased disturbance.

Management of 'diffuse' recreational use arising from development distant from European site boundaries can be difficult to achieve through the *pathway*. Attribution of the effect is also very difficult.

There are essentially two ways of mitigating this impact –

1 Mitigating at Source, essentially discouraging people from travelling from new housing sites to more distant European sites

2 Mitigating at the Receptor by planning and managing access at, and to, the Receptor. In practice this would involve the preparation of visitor management policies and proposals for the European sites concerned. For the Rochdale Canal this could include, for example, proposals to limit boat traffic and to limit proposals for new moorings and marinas on the canal. For the South Pennines this may involve the preparation of advisory information describing the nature conservation importance of the site and the need for people to take account of this importance.

Since attribution of any recreational disturbance effect to a particular source would be very difficult it would likely be impossible (or at least unreasonable) to require any particular development to prepare visitor management plans for European sites as a way of mitigating disturbance effects **except** where the development site had a direct, unambiguous pathway to the Receptor.

It is within the control of the Plan to mitigate the effect at Source by discouraging people from travelling to visit European sites. The GMSF does this through –

- **Policy GM-E 1** states that Greater Manchester will aim to become one of the most liveable city-regions in the world consisting of a series of beautiful, healthy and varied places,

- **Policies GM-C 8, GM-Strat 5** requires a positive contribution to the quality of place

- **Policy GM-C 3** requires new developments to support a significant increase in journeys made by walking, cycling and public transport

- **Policy GM-G 8** seeks to maximise the proportion of people who have an accessible natural greenspace close to where they live

- **Policy GM-G 1** provides for the protection and enhancement of biodiversity resources, with '*the highest level of protection given to international designations'*

- **Policy GM-G 2** which serves to protect and improve priority green infrastructure which includes canals, uplands and lowland wetlands

When taken together it is concluded that the above policies will provide sufficient safeguards (mitigation) such that harm to European sites caused by increases in disturbance caused by recreation can be avoided.

Notwithstanding the above conclusion and in the interests of taking a precautionary approach it is recommended that all detailed development proposals which come forward during the lifetime of the Plan and which are considered to have the potential to affect European sites are subject to separate Assessments under the terms of the Habitats Directive.

6.3.5 **Climate Change**

Available mitigating Plans, Policies and Strategies at an International and National level –

- The Paris Agreement
- Climate Change Act 2008
- National Adaptation Programme 2018 to 2023
- UK 25 Year Environment Plan

Available mitigating Plans, Policies and Strategies at a regional and Greater Manchester level –

- Greater Manchester Climate Change and Low Emissions Implementation Plan

Available mitigating Policies within the GMSF –

- **Policy GM-S 2** Aims to deliver a carbon neutral Greater Manchester no later than 2038

- **Policy GM-G 1** provides for the protection and enhancement of biodiversity resources, with '*the highest level of protection given to international designations'*

- **Policy GM-G 2** which serves to protect and improve priority green infrastructure which includes canals, uplands and lowland wetlands

When taken together it is concluded that the above policies will provide sufficient safeguards (mitigation) such that harm to European sites caused by greenhouse gas emissions resulting from the operation of the GMSF can be avoided.

6.3.6 **Direct Water Pollution and Shading Impacts on the Rochdale Canal**

In addition to the above mitigating plans, policies and strategies it is recognised that significant development has taken place adjacent to and close to the Rochdale Canal SAC, including regeneration of the Canal itself, without causing harm to the integrity of the European site. Additional safeguards for protecting the Canal include –

- Tried and tested application of Best Construction Practice to avoid water pollution from construction sites (e.g. *CIRIA Best Practice Guidance Note C532*).

Informed design of development proposals can avoid potential shading impacts on the Canal.

It is concluded that no changes to existing Policies need to be made to provide special protection for the Rochdale Canal and that it would be unreasonable to remove any sites and areas from consideration as allocations for development because of potential impacts on the Canal.

6.3.7 **Impacts on the Mersey Estuary SPA**

It is concluded that sufficient safeguards exist such that harmful impacts on the Mersey estuary can be avoided. These safeguards are listed in *para.* 6.3.3

7 Assessment of Strategic Sites (Allocations) Screened In further discussion and consideration of available Mitigation for identified effects

Table 7.1 Assessment of Strategic Sites (Allocations) Screened In as having potentially damaging effects on European sites and assessment of available mitigation measures

Site	Potential Harmful effects on European sites	Assessment of available mitigation	Summary / Recommendation
Pocket Nook	Within 4km of the Manchester Mosses SAC. Although there is no direct pathway to the SAC potential effects could occur through increased recreational pressure on the SAC and through diffuse air pollution.	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment Specifically for this site it is noted that the part of the Mosses closest to the allocation is not developed for recreational use and is separated from the site by a busy major trunk road. Increased recreational use arising as a result of the development is therefore considered unlikely	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward.
Land South of Pennington	Within 4km of the Manchester Mosses SAC. Although there is no direct pathway to the SAC potential effects could occur through diffuse air pollution resulting from increased traffic flows.	For a general discussion of available mitigation for air pollution effects see section 6 of the Assessment	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward.
West of Gibfield	Within 5km of the Manchester Mosses SAC. Although there is no direct pathway to the SAC potential effects could occur through increased recreational pressure on the SAC and through diffuse air pollution.	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment Specifically for this site it is noted that the part of the Mosses closest to the allocation is not developed for recreational use and that there is a significant degree of separation between the allocation and the European site.	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward.
North of Mosley Common	Within 5km of the Manchester Mosses SAC. Although there is no direct pathway to the SAC potential effects could occur through increased recreational pressure on the SAC and through diffuse air pollution.	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment Specifically for this site it is noted that the part of the Mosses closest to the allocation is not developed for recreational use and that there is a significant degree	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward.

		of separation between the allocation and the European site.	
North of Irlam Station	Within 4km of the Manchester Mosses SAC and Rixton Clay Pits SAC. Although there is no direct pathway to the SAC potential effects could occur through increased recreational pressure on the SAC and through diffuse air pollution.	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment Specifically for this site it is noted that the part of the Mosses closest to the allocation is not developed for recreational use and that there is a significant degree of separation between the allocation and the other European site.	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward. Specifically, potential recreational impacts will need to be Assessed
Port Salford Extension	Within 5km of the Manchester Mosses SAC. Although there is no direct pathway to the SAC potential effects could occur through increased diffuse air pollution arising from increased traffic generation.	For a general discussion of available mitigation for air pollution effects see section 6 of the Assessment	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward.
Land East of Boothstown	Within 5km of the Manchester Mosses SAC and Rixton Clay Pits SAC. Although there is no direct pathway to the SAC potential effects could occur through increased recreational pressure on the SAC and through diffuse air pollution.	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment Specifically for this site it is noted that the part of the Mosses closest to the allocation is not developed for recreational use and that there is a significant degree of separation between the allocation and the other European site.	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward.
Carrington	A very large area within 3km of the Manchester Mosses SAC and Rixton Clay Pits SAC. Although there is no direct pathway to the SACs potential effects could occur through increased recreational pressure on the SAC sand through diffuse air pollution.	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward. It is assumed that this very large site will come forward for development in Phases. Each Phase must be individually Assessed once detailed plans are available, particularly in relation to recreational impacts.
Godley Green Garden Village	Although the site is some distance (6km) from the South Pennine Moors there is some potential for increased recreational pressure on the SPA	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment.	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed

		This is a proposed Garden Village, so will be developed with high quality greenspace and recreational facilitates which will discourage recreation further afield.	Assessment may be required if detailed development plans come forward, particularly in relation to recreational impacts
Robert Fletchers	The site is very close (within 1km) of the South Pennine Moors and it is very likely that new residents will use the European site for recreation. Development is likely to be low density, so air pollution from new traffic generation is not considered likely to be significant. Given the proximity of the site to the SPA it has some potential to be functionally linked to the SPA; that is, birds using the SPA may also make use of this site.	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment. Specifically for this site plans and proposals will very likely be needed for managing recreational disturbance impacts on the Moors	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward, particularly in relation to recreational impacts. In addition an Assessment of the site for its potential to act as Functionally linked to the SPA must be considered. This will need to be established prior to final allocation
Junction 21 of the M62	The development of this very large site close to the motorway has the potential to generate increased air pollution from traffic generation.	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment. Specifically the development of this site may need a Travel Plan and information about traffic generation.	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward, particularly in relation to air pollution impacts
Land West of M627 (M)	Part of this site is very close to the Rochdale Canal SAC. There is potential for development here to cause water pollution	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment. Specifically the development of (part of) this site may need details pf drainage proposals	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward, particularly in relation to water pollution impacts
Trows Farm	Potential impacts on the Rochdale Canal SAC through drainage (water pollution)	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment. Specifically the development of (part of) this site will need details pf drainage proposals	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward, particularly in relation to water pollution impacts on the Rochdale Canal.
Castleton Sidings	Potential impacts on the Rochdale Canal SAC through drainage (water pollution)	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment. Specifically the development of (part of) this site will need details pf drainage proposals	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward, particularly in relation to water pollution impacts on the Rochdale Canal.

Newhey Quarry	Within 3km of the South Pennines, some potential for increased recreational disturbance	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment.	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site
Land North of Smithy Bridge	The site is very close to the Rochdale Canal and within 3km of the South Pennine Moors and it is very likely that new residents will use the European site for recreation. Development is likely to be low density, so air pollution from new traffic generation is not considered likely to be significant. Given the proximity of the site to the SPA it has some potential to be functionally linked to the SPA; that is, birds using the SPA may also make use of this site.	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment. Specifically the development of (part of) this site will need details pf drainage proposals	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward, particularly in relation to recreational impacts on the South Pennines and water pollution impacts on the Rochdale Canal. In addition an Assessment of the site for its potential to act as Functionally Linked to the SPA must be considered. This will need to be established prior to final allocation
Roch Valley	The site is very close to the Rochdale Canal and within 3km of the South Pennine Moors and it is very likely that new residents will use the European site for recreation. Development is likely to be low density, so air pollution from new traffic generation is not considered likely to be significant. Given the proximity of the site to the SPA it has some potential to be functionally linked to the SPA; that is, birds using the SPA may also make use of this site.	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment. Specifically the development of (part of) this site will need details pf drainage proposals	Sufficient safeguards exist such that there is no justification for removing the site from consideration as a potential development site, although more detailed Assessment may be required if detailed development plans come forward, particularly in relation to recreational impacts on the South Pennines and water pollution impacts on the Rochdale Canal. In addition an Assessment of the site for its potential to act as Functionally Linked to the SPA must be considered. This will need to be established prior to final allocation
Northern Gateway	A very large area which although more than 10 km from the South Pennine Moors and separated from it by significant built development nevertheless has the potential to cause increases in diffuse air pollution because of traffic generation along the M62.	For a general discussion of available mitigation for air pollution and recreation disturbance see section 6 of the Assessment.	It is assumed that this very large site will come forward for development in Phases. Each Phase must be individually Assessed once detailed plans are available, particularly in relation to air pollution impacts, with cumulative (in-combination) effects taken into account

7.1 Functionally Linked Land

Three Strategic Sites have been identified as potentially being Functionally Linked to European sites. Functionally linked land is land that, although not directly connected to European sites, may be used by species associated with European Sites to the extent that the loss of these areas would affect the conservation status of the species concerned.

The Strategic Sites identified as potentially being Functionally Linked include –

- Land North of Smithy Bridge
- The Roch Valley
- Robert Fletchers

All of these sites may have some functional linkage to the South Pennine Moors SPA because birds associated with the SPA may use the sites as feeding or resting areas.

It is recommended that further appraisal of the potential of these sites be functionally linked to the SPA should be undertaken before their allocation is confirmed.

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8 Consideration of 'In Combination' Effects with Other Plans and Proposals

8.1 The Habitats Regulation Assessment must consider the likely significant effect of the Plan in relation to other comparable proposals and plans current or planned within the relevant administrative area, other administrative authorities or prepared by other statutory organisations (e.g. Environment Agency, United Utilities) and in combination with the identified effects of those Plans.

8.2 Available Local Plans for the individual Greater Manchester district Authorities have been taken into account in the 'in-combination' assessment.

8.3 Available Local Plans in the neighbouring sub-regions to Greater Manchester have also been considered.

8.4 The available Local Plans assessed are listed in Appendix 1.

8.5 No potential "in combination" effects have been identified because none of these Plans has been Assessed as having a harmful effect on the special interests of European sites.

8.6 This Assessment will be updated and amended as necessary as further Plans come forward for Assessment to take into account possible 'in-combination' effects arising.

9 OVERALL CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER SCREENING / APPROPRIATE ASSESSMENT

9.1 The GMSF proposes a significant scale of new development across Greater Manchester from 2018 to 2038. This scale of development could cause potential harm to the special interest of European Sites.

9.2 Screening of European sites established that six European Sites could potentially be impacted by this Plan. These are –

1 Manchester Mosses SAC
2 South Pennine Moors SAC
3 South Pennine Moors SPA
4 Rochdale Canal SAC
5 Rixton Clay Pits SAC
6 Mersey Estuary SPA/ Ramsar

9.3 Certain Thematic Policies within the GMSF concerned with facilitating economic development and the provision of new housing have been identified as potentially having a damaging effect on European Sites. Harmful impacts could arise from potential increases in air pollution, water pollution, shading, climate change and recreational use of European Sites.

9.4 Currently it is considered that there are likely to be sufficient safeguards within the Plan to mitigate identified harmful impacts and protect European sites such that omission or significant amendments of the above 'Screened In' Policies are not required at this stage.

9.5 Particular safeguarding Policies in the Plan that would avoid or mitigate any harmful effects of the above policies include –

` 1 Green Infrastructure Policies
2 Nature Conservation Policies
3 Carbon Emissions Reduction Policies
4 Clean Air Policies
5 Flood Risk and Water Quality Policy
6 Policies promoting high quality places and sustainable transport

9.6 A number of the strategic sites proposed for accommodating new built development in Greater Manchester have been identified as potentially having a damaging effect on European Sites. Harmful impacts could arise from potential increases in air pollution, water pollution, shading, climate change and recreational use of European Sites.

9.7 In general for most of the sites and areas Assessed it is considered that there are likely to be sufficient safeguards within the Plan to mitigate identified harmful impacts and protect European sites such that the majority of sites can go forward for allocation at this time

9.8 Three Strategic Sites have been identified as having potential to be Functionally Linked to the South Pennine Moors SPA because birds using the SPA may use these sites for feeding or resting.

These sites are -

- Land North of Smithy Bridge
- Roch Valley
- Robert Fletchers

It is recommended that these sites are subject to further more detailed Assessment to determine whether they are in fact Functionally Linked to the South Pennine Moors SPA before they are confirmed as strategic allocations.

9.9 Because some inevitable uncertainties remain about the management of air and water pollution effects and the management of access and use of European sites, and taking the required precautionary approach to Assessment, it is **recommended** that more detailed development proposals for some strategic sites (those identified as potentially having effects on European sites) should be subject to further, detailed HRA appraisal when more detailed development proposals become available.

9.10 It is **recommended** that if any changes are made to the Plan as a result of either the public consultation, at publication stage or during the Examination in Publication, the HRA will need to be revisited and revised to ensure that these changes would not result in a significant effect on any European Site.

In-combination effects will also need to be reconsidered at this time, as discussed above in Section 8.

REFERENCES

DCLG (2006) Department for Communities and Local Government. *Planning for the protection of European Sites: Appropriate Assessment.* Available on-line from DCLG

EC (1992) European Council. Council Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna Available on-line from EU

ENTEC (2007) Habitats Regulations Assessment of the North West Regional Spatial Strategy. NWRA web-site.

Institute of Air Quality Management (IAQM – 2016) Use of criterion for the Determination of an Insignificant Effect of Air Quality Impacts on Sensitive Habitats

JN Cape et al Concentrations of ammonia and nitrogen dioxide at roadside verges, and their contribution to nitrogen deposition Environmental Pollution 132 (2004) p 469-478

JNCC (2005) Report No 365 '*Characterisation of Hydrological Protection Zones at the margins of Designated lowland raised bogs sites'*, Morgan-Jones, W, Poole J.S. and Goodall R.

JNCC (2006) Joint Nature Conservation Committee *Rochdale Canal standard Natura 2000 data form* Available on-line from JNCC

JNCC (2006) Joint Nature Conservation Committee *South Pennine Moors standard Natura 2000 data form* Available on-line from JNCC

https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmentalpermit#screening-for-protected-conservation-areas

Liley et al. 'Morecambe Bay Bird Disturbance and Access Management' (Footprint Ecology)

Natural England (2018) European Conservation Objectives: Advice on Conserving & Restoring Site Features – Manchester Mosses SAC

Natural England (2018) European Conservation Objectives: Advice on Conserving & Restoring Site Features – Rixton Clay Pits SAC

Natural England (2018) Conservation Objectives for Manchester Mosses SAC

Natural England (2018) Conservation Objectives for Rochdale Canal SAC

Natural England (2018) Conservation Objectives for South Pennine Moors SAC

Natural England (2018) Conservation Objectives for South Pennine Moors SPA/Ramsar

Natural England (2018) Conservation Objectives for Mersey Estuary SPA

North West Regional Assembly (2008) Adopted North West Regional Spatial Strategy

Peak District National Park (2014) Visitor Survey 2014 & Non-visitor Survey 2014 (Research & Programme Management Team)

Peak District National Park (2005) Visitor Survey 2005 (Performance Review & Research Service)

Scott Wilson (2007). AA of St. Helens Core Strategy Preferred Options DPD (Draft)

Scott Wilson 2008, HRA Screening Assessment of the Greater Manchester Joint Waste Development Plan Document (draft report)

Tyldesley D., and Chapman C., (2013) *The Habitats Regulations Assessment Handbook*, (October 2013): DTA Publications Ltd

Conservation (Natural Habitats &c) (Amendment) Regulations 1997

Natural England (2007) Conservation Objectives: Astley & Bedford Moss – Consultation Draft. Available from Natural England

https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmentalpermit#screening-for-protected-conservation-areas

The Morecambe Bay Wildlife Network 2013 'Visitor attitudes and aspirations around Morecambe Bay'

APPENDIX 1 – LIST OF OTHER RELEVANT PLANS AND PROJECTS CONSIDERED WITHIN THE ASSESSMENT

Plans Assessed under the Terms of the Habitats Regulations and found to be sound

District	Plan	Outcome of Assessment
Bolton MBC	Site allocations	Sound – no harmful impacts on European sites
Bolton MBC	Local Plan	Sound – no harmful impacts on European sites
Manchester City Council	Local Plan	Sound – no harmful impacts on European sites
Oldham MBC	Local Plan	Sound – no harmful impacts on European sites
Rochdale MBC	Local Plan	Sound – no harmful impacts on European sites
Stockport MBC	Local Plan	Sound – no harmful impacts on European sites
Trafford MBC	Local Plan	Sound – no harmful impacts on European sites
Wigan MBC	Local Plan	Sound – no harmful impacts on European sites
Combined GM Districts	Combined Waste Plan	Sound – no harmful impacts on European sites
Combined GM Districts	Combined Minerals Plan	Sound – no harmful impacts on European sites
Warrington MBC	Local Plan	Sound – no harmful impacts on European sites
Chorley MBC	Site allocations and development management	Sound – no harmful impacts on European sites
Local Plans are currently in preparation for Bury Council, Salford Council and Tameside Council in parallel with the GMSF. Since this Plans are being informed by, and ought to be complementary to, the GMSF it is anticipated that all of these Plans will have no impacts on European Sites		

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