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mediation of space · making of place

**Warburton
Neighbourhood Development Plan
2023-2037**

**Habitats
Regulations Assessment
Screening Report**

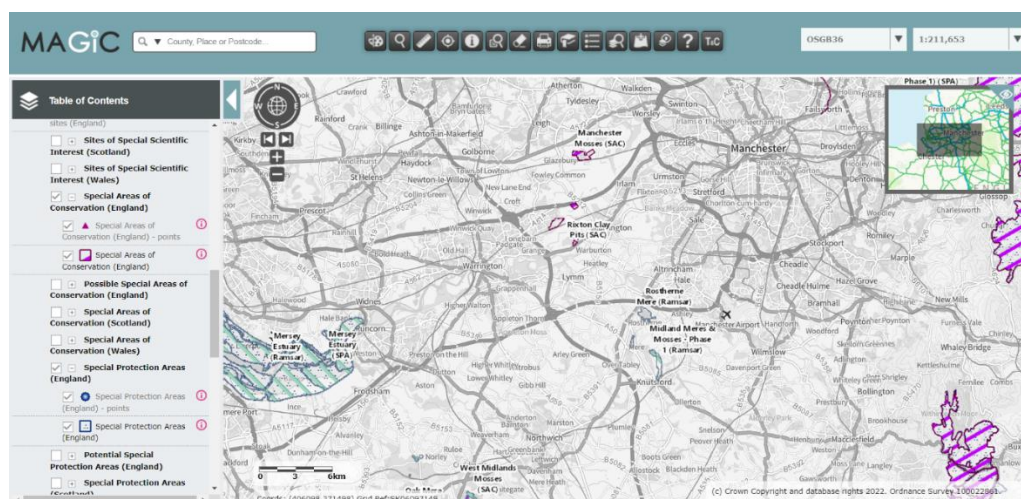
Kirkwells

The Planning People

1. Introduction

- 1.1 Kirkwells Planning Consultants has prepared this screening report on behalf of Warburton Parish Council to support the Parish Council in determining whether or not the contents of emerging Warburton Neighbourhood Development Plan (NDP) are likely to require a Habitats Regulation Assessment (HRA).
- 1.2 Habitats and species of European nature conservation importance are protected by the European Directive (92/43/EEC) on the Conservation of Natural Habitats and Wild Flora and Fauna (The Habitats Directive)¹. The Habitats Directive establishes a network of internationally important sites designated for their ecological value. These sites are often referred to as Natura 2000 sites or European sites and comprise Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites. This is translated into UK law via the Conservation of Habitats and Species Regulations 2010.
- 1.3 Under Article 6 of the Habitats Directive (and Regulation 61 of the Habitats Regulations), an assessment is required where a plan or project may give rise to significant effects upon a European site.
- 1.4 The overarching aim of HRA is to determine, in view of a site's conservation objectives and qualifying interests, whether a plan or project, either in isolation and/or in combination with other plans would have a significant adverse effect on a European site. If the screening concludes that a significant adverse effect is likely, then Appropriate Assessment must be undertaken to determine whether there will be adverse effects on site integrity.
- 1.5 There are several European sites in the vicinity of the neighbourhood area as shown on the screenshot from Natural England's MAGIC website. Further information about these is provided later in this report.

Figure 1: Screenshot from MAGIC European Sites around Warburton²



¹ The UK has left the European Union and equivalent legislative provisions have been written into UK law.

² Source: <https://magic.defra.gov.uk/MagicMap.aspx>

2. HRA process

2.1 The requirements of the Habitats Directive comprise four distinct stages:

Stage 1: Screening.

This is the stage which initially identifies the likely impacts upon a European site of a project or plan, either alone or in-combination with other projects or plans and considers whether these impacts may have a significant effect on the integrity of the site's qualifying habitats and/or species. Where a significant effect is identified the assessment moves onto stage 2.

Stage 2: Appropriate Assessment.

This provides the detailed consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's conservation objectives and its structure and function. This is to determine whether or not there will be adverse effects on the integrity of the site. This stage also includes the development of mitigation measures to avoid or reduce any potential impacts.

Stage 3: Assessment of alternative solutions.

This examines alternative ways of achieving the objectives of the plan or project that would avoid adverse impacts on the integrity of the European site, should avoidance or mitigation measures be unable to cancel out adverse effects.

Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain.

In such circumstances it must be demonstrated that the development is necessary for imperative reasons of overriding public interest.

3. Background

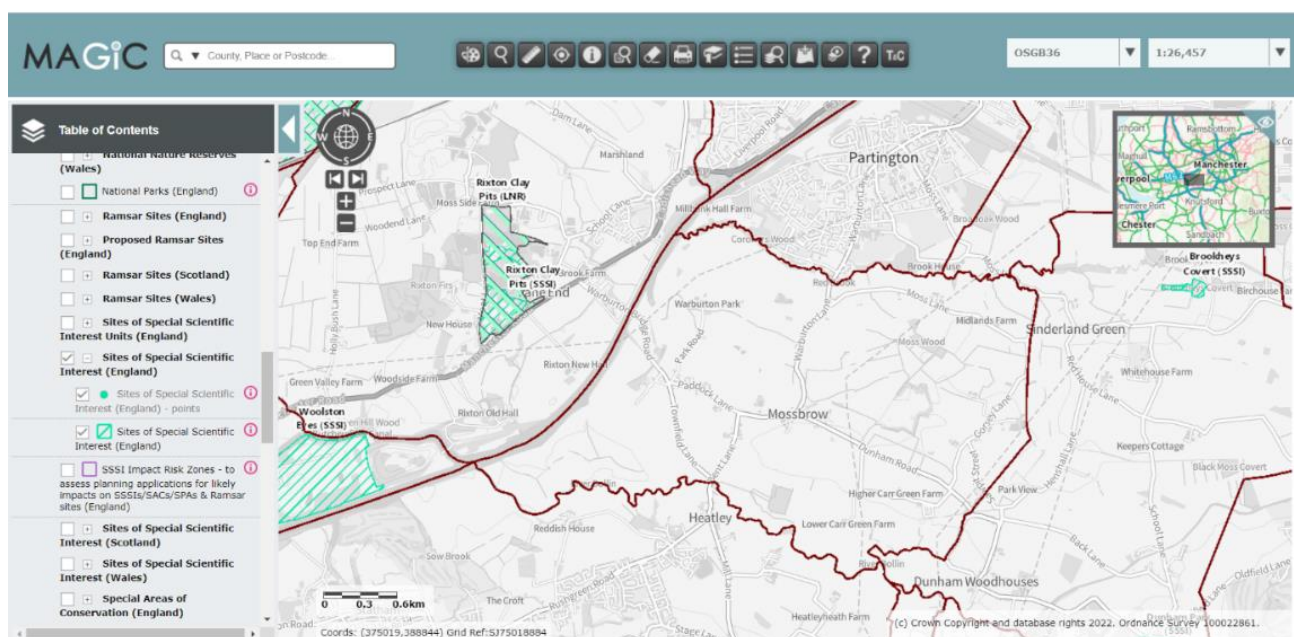
- 3.1 Neighbourhood planning gives local communities the opportunity to prepare planning documents for their area, enabling them to shape the future of where they live and giving them greater ownership of the plans and policies that affect them. Introduced under the Localism Act in 2011, Neighbourhood Development Plans provide a relatively new tier of planning policy.
- 3.2 Warburton Neighbourhood Area is in the local authority area of Trafford Council. Warburton was designated as a neighbourhood area by Trafford Council on 4th March 2019. This confirmed the Parish Council's commitment to preparing a Neighbourhood Plan and identified the proposed Neighbourhood Plan area, which is the same as the Parish boundary.
- 3.3 The emerging Draft Warburton Neighbourhood Plan is at an advanced stage of preparation but has not yet been finalised for Regulation 14 public consultation. It is published for informal consultation until the end of June 2023. Kirkwells used earlier versions of the emerging Draft Plan to undertake an initial screening assessment in consultation with Trafford Council and have updated the HRA and SEA Screening Reports based on the most up to date version of the Draft Plan (v6A), and the Draft Warburton Masterplan and Design Guide (including 3 options for the part of the strategic site within the parish) prior to undertaking the Regulation 14 formal public consultation.
- 3.4 Adopted Trafford Local Plan policies are contained in the following documents:
- Trafford Local Plan: Core Strategy which sets out an overarching strategy and development principles for Trafford to guide development until at least 2026. It was adopted on 26th January 2012.
 - Revised Unitary Development Plan which has mostly been superseded by the Core Strategy. The rest of the UDP policies will be replaced by the Trafford Local Plan. It was adopted in June 2006.
 - Greater Manchester Joint Waste Plan (Adopted April 2012);
 - Greater Manchester Joint Minerals Plan (Adopted April 2013); and
 - Altrincham Town Centre Neighbourhood Business Plan (Adopted November 2017).
- 3.5 Preparation of a new Trafford Local Plan is underway. Trafford Council published a public consultation on the Regulation 18 Draft Trafford Local Plan from 4th February 2021 until 18th March 2021. The Habitats Regulations Assessment of the Impact on European Protected Sites of Trafford Local Plan: First Draft Consultation December 2020³ has informed this report. This considered likely effects on three of the European designated sites close to Warburton: Manchester Mosses SAC; Rixton Clay Pits SAC; and Mersey Estuary SPA/Ramsar; as 'other European sites in the UK are essentially considered too distant from Trafford for harmful effects to occur from the implementation of the Plan.'
- 3.6 The strategic Joint Development Plan Document for most of Greater Manchester (excluding Stockport) is being prepared ahead of the new Trafford Local Plan.

³ <https://www.trafford.gov.uk/planning/strategic-planning/docs/Draft-Local-Plan-Habitats-Regulations-Assessment.pdf>

Places for Everyone (PfE) is being prepared for the nine local Councils of Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan. The Publication Stage Plan was submitted to the Secretary of State on 14th February 2022 along with all the supporting documents, background evidence, and representations received during the final stage of public consultation, which took place from 9th August to 3rd October 2021. The Plan is at examination stage.

- 3.7 PfE includes a proposed strategic allocation JP Allocation 33 New Carrington. Part of the strategic allocation lies in the northern portion of the Warburton Neighbourhood Plan Area and this area is identified for approximately 400 housing units ('Warburton Lane area').
- 3.8 The Habitats Regulations Assessment of the Places for Everyone Joint Development Plan Submission February 2022⁴ also has been used to inform the Warburton NDP HRA Screening Report.
- 3.9 The Neighbourhood Plan area does not include, but is in close proximity to, several UK designated sites: Rixton Clay Pits to the west of the Parish Boundary is a Site of Special Scientific Interest (SSSI) and Local Nature Reserve (LNR), Woolston Eyes SSSI lies to the southwest and Brookheys Covert SSSI lies to the east – see Figure 2 Screenshot from MAGIC.

**Figure 2: Screenshot from MAGIC⁵
UK Designated Sites within NDP Area Boundary**



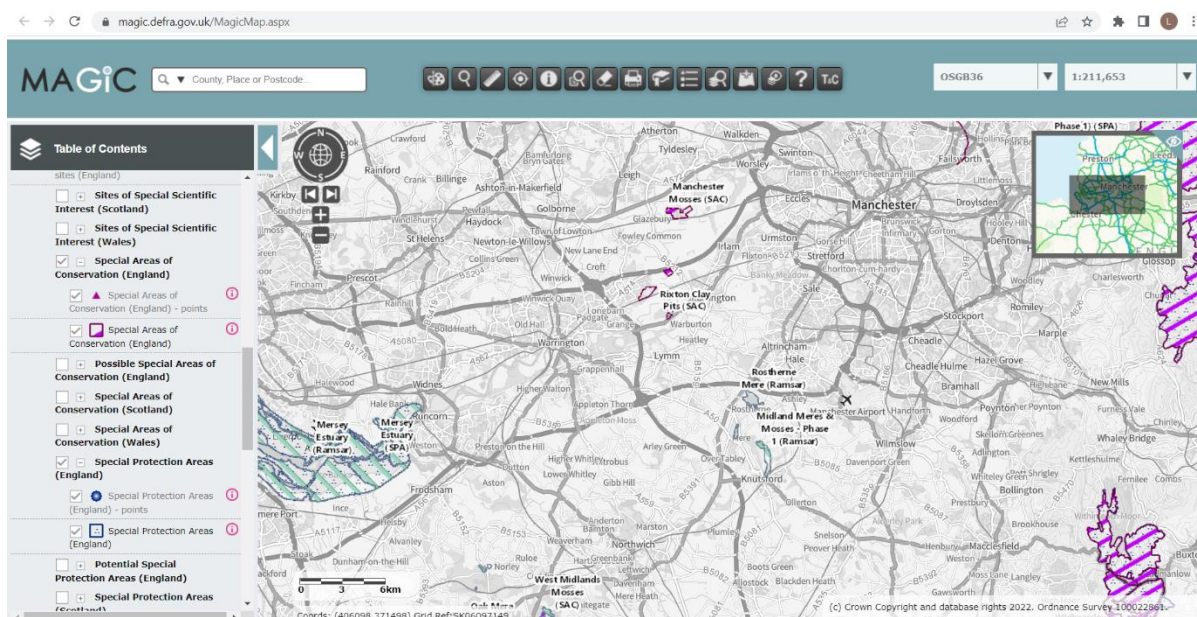
⁴ <https://www.greatermanchester-ca.gov.uk/what-we-do/planning-and-housing/places-for-everyone/submission-documents>

⁵ Source: <https://magic.defra.gov.uk/MagicMap.aspx>

4. Relevant European Sites (and SSSIs)

- 4.1 There are no European Sites within the boundary of the plan area.
- 4.2 Government guidance states that significant effects may be incurred even in cases where the area of the plan is some distance away. As a precautionary measure, this screening report has assessed to see if there are any European sites 15km (straight line) of the neighbourhood area boundary and the proposed strategic site allocation in the north of the Parish. There are 4 European designated sites within 15km of Warburton that could potentially be affected by the Warburton Neighbourhood Plan. In addition, the Mersey Estuary (Ramsar Site and SPA) is just over 20km away to the west. Although the physical distance is over 15 km, as a precautionary measure this has also been included in the HRA Screening as the Mersey Estuary's significance is linked to wading and migratory birds which may visit or fly over the Warburton area. Red Listed birds which have been observed at Carrington Moss (almost contiguous with Warburton Moss) is provided in Appendix 2. Species such as Lapwing are common in the winter on Warburton Moss, as are a number of wader species including Little Egrets. Waterfowl and waders fly along the river courses between the European sites.
- 4.3 Rixton Clay Pits SAC lies approximately 0.8 km from the western boundary of the Parish and the strategic site allocation. Manchester Mosses SAC includes several sites, the nearest of which is 2.8km from the northwestern boundary of the Parish. Rostherne Mere Ramsar Site is 3.7km and Midland Meres and Mosses is 7.5km from the southeast boundary of Warburton. These are shown on Figure 3 screenshot of MAGIC map below.

**Figure 3: Screenshots from MAGIC
European Designated Sites within approximately 15km of NDP Area Boundary**



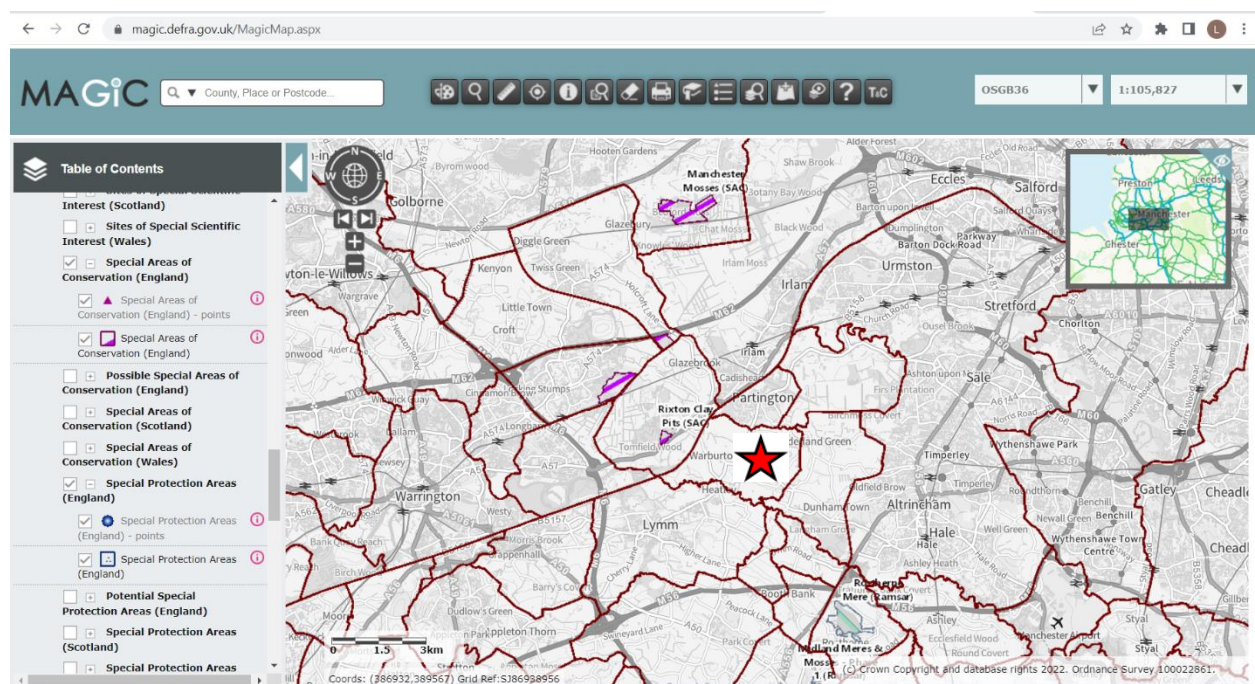


Table 1: Summary of European Sites

Site Name	Designation	Natural England's Code	Distance from the Neighbourhood Plan Boundary	Distance from Proposed PfE Site allocation 33 New Carrington
Rixton Clay Pits	SAC	UK0030265	0.8 km	1.8km
Manchester Mosses	SAC	UK0030200	2.8km	2.8km
Rostherne Mere	Ramsar Site		3.7km	7.1km
Midland Meres and Mosses	Ramsar Site	UK0013595	7.5km	10.5km
Mersey Estuary	Ramsar Site and SPA	UK9005131	20km	20.8km

The Characteristics of the European Sites identified

4.4 The following provides a summary of the European sites that have been identified outside of the Neighbourhood Area but within a 15km approx. distance of the Neighbourhood Area:

- Rixton Clay Pits SAC:** the SAC is situated to the east of Warrington within disused brickworks. The site comprises a mosaic of habitats including open water, fen, swamp, wet woodland and meadow that have all developed within the flooded workings since quarrying ceased in the 1960s. Great crested newt *Triturus cristatus* are known to occur in at least 20 ponds across the site, indeed the site supports the largest population of great crested newts in

Cheshire. The reserve is now managed for wildlife and amenity purposes by the local authority ranger service.

- **Manchester Mosses SAC:** The Mersey floodplain was once covered by complex of large lowland raised bogs covering over 3500 ha. While most of this bog has been converted to agriculture or lost to development, several examples have survived as degraded raised bog; the largest and best preserved examples Risley Moss, Astley & Bedford Mosses and Holcroft Moss make up the component SSSI of the Manchester Mosses SAC. All of the Manchester mosses with the exception of Holcroft Moss have been cut over and all were drained resulting in the dominance of purple moor grass *Molinia caerulea*, bracken *Pteridium aquilinum* and birch *Betula* spp. However all of the mosses have now been re-wet and a more typical wet bog community of common cotton grass *Eriophorum angustifolia*, hare's tail cotton grass *Eriophorum vaginatum* and bog mosses *Sphagnum* sp. has now established over large areas of the mosses with sundew *Drosera rotundifolia*, cross leaved heath *Erica tetralix*, bog myrtle *Myrica gale*, cranberry *Vaccinium oxycoccus* and bog rosemary *Andromeda polifolia* all starting to spread.
- **Rostherne Mere Ramsar Site:** the site is the deepest, one of the largest and the most northerly of the meres of the Cheshire Plain. It lies in a hollow surrounded by thick deposits of glacial drift overlying Triassic marls and saltbeds. It is a natural lake of high fertility that, over the years, has been increased by the accumulation of nutrients received from inflow streams and drainage from surrounding farmland. The long-term study and analysis of the mere's water chemistry and limnology, together with comparisons with other meres, are important aspects of the site's nature conservation value. The mere has little submerged vegetation but is fringed by a narrow band of *Phragmites* reedswamp for over half its circumference. Around the mere, the catchment slopes are primarily large blocks of woodland and moderately intensively-farmed grassland. Remains of a former peat-bog in the north and actively managed willow-beds to the south are other notable habitats. The mere is nationally important for its birds, as a winter roost for ducks, especially Pochard and Pintail, and as a regular roost for gulls and cormorants. It is an important bird refuge in cold weather because its depth makes it slow to freeze. The geomorphology of the basin is also of national importance.
- **Midland Meres and Mosses Phase 1 Ramsar Site:** The West Midlands Mosses comprises four sites: Clarepool Moss, Abbots Moss, Chartley Moss and Wybunbury Moss. These support large basin mires which have developed as quaking bogs, known as Schwingmoors, together with a variety of associated hollows and pools showing various types and stages of mire development. This complexity of habitats gives rise to a diverse assemblage of associated plants and invertebrates of national significance.

4.5 **Mersey Estuary Ramsar Site and SPA** is outside of the Neighbourhood Area but within a 20km approx. distance of the Neighbourhood Area: The Mersey Estuary is a large, sheltered estuary and comprises an unusual configuration with a narrow mouth and wide shallow basin. It is composed of extensive intertidal mud and sandflats on

the northern and southern shores of the estuary, distinct areas of rocky shore and areas of saltmarsh which are constantly eroding and accreting. The saltmarsh areas are either firm sandy areas or are riddled with muddy creeks. The large areas of intertidal sand and mudflats are submerged at high tide and exposed in the estuary at low tide providing an important feeding habitat for birds. The estuary also provides extensive roosting sites for large populations of waterbirds and is of major importance during the winter for duck and wader species and for supporting wader populations moving along the west coast of Britain during the spring and autumn migration periods.

4.6 Conservation Objectives and Evidence Packs

4.6.1 Rixton Clay Pits

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

- Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:
 - The extent and distribution of the habitats of qualifying species;
 - The structure and function of the habitats of qualifying species;
 - The supporting processes on which the habitats of qualifying species rely;
 - The populations of qualifying species, and;
 - The distribution of qualifying species within the site.

The list of operations that could potentially damage the special interests of the European Site include:

- Human intrusions and disturbances.

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

4.6.2 Manchester Mosses

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

- Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:
 - The extent and distribution of qualifying natural habitats;
 - The structure and function (including typical species) of qualifying natural habitats, and;
 - The supporting processes on which qualifying natural habitats rely.

Supplementary Advice on Conserving and Restoring

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

- Pollution including atmospheric pollutants and NOx;

- Hydrological impacts and;
- Recreational activities.

4.6.3 **Rostherne Mere Ramsar Site**

Rostherne Mere Ramsar Evidence Pack (August 2022) Natural England Technical Information Note TIN203 sets out that the Ramsar is designated for the following feature:

- Open water transition fen ('mere')

Nutrient pressure(s) for which the site is unfavourable:

- Nitrogen
- Phosphorus

Water Quality data is reported against the relevant Site of Special Scientific Interest (SSSI) Units within the Ramsar.

The condition of the waterbody and the habitats which support the designated features is in part dependent on the water quality within them. The occurrence of excessive nutrients in the waterbody can impact on the competitive interactions between high plant species and between higher plant species and algae, which can result in a dominance in attached forms of algae, and a loss of characteristic plant species. Changes in plant growth and community composition can have implications for the wider food web, and the species present. Increased nutrients and the occurrence of eutrophication can also impact on the dissolved oxygen levels in the waterbody, also impacting on biota within the mere.

Recent water quality measurements show Rostherne Mere to be exceeding the targets for Total Phosphorus and Total Nitrogen. Any nutrients entering the catchment upstream of the locations which are exceeding their nutrient targets, will make their way downstream and have the potential to further add to the current exceedance. Therefore, the whole upstream catchment of Rostherne mere is included within the catchment map.

4.6.4 **Midland Meres and Mosses Phase 1 Ramsar Site**

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

- Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;
 - The extent and distribution of qualifying natural habitats
 - The structure and function (including typical species) of qualifying natural habitats, and
 - The supporting processes on which qualifying natural habitats rely

Threats that could potentially damage this site include changes to:

- Invasive, non-native and/or introduced species
- Water quality – phosphates, pollutants, nitrates
- Air quality

4.6.5 Mersey Estuary SPA/Ramsar

Conservation Objectives

- To ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Conservation of Wild Birds Directive, by maintaining or restoring:
 - The extent and distribution of the habitats of the qualifying features;
 - The structure and function of the habitats of the qualifying features;
 - The supporting processes on which the habitats of the qualifying features rely;
 - The population of each of the qualifying features and;
 - The distribution of the qualifying features within the site.

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

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

4.7 The emerging Draft Warburton Neighbourhood Plan document has been screened for likely significant effects on the 5 European sites. The new Trafford Local Plan HRA and the HRA of the Places for Everyone Joint Development Plan (see Table 5.1 – Screening of thematic policies) have been used to inform this process.

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

- Water Pollution via River Mersey;
- Air pollution resulting from vehicular emissions and industry;
- Increased recreational pressure;
- Loss of functionally linked land and;
- Increased levels of shipping utilising the Manchester Ship Canal.

4.9 Table 2 below provides an assessment of the likely significant effects the NDP and Warburton Masterplan Options could have on the identified European sites.

Table 2: Screening of NDP Policies and Masterplan Options

	Screened Out
	Screened In

Warburton NDP Policy (TBC)	Brief Summary	Screening Outcome
Policy W1 Conserving and Enhancing Local Landscape Character	Identifies different local landscape character types and explains how landscaping schemes should be sympathetic and appropriate to the relevant Landscape Character Type.	No likely significant effect.
Policy W2 Warburton Deer Park	Identifies historic landscape features within and on the park boundary which should be protected.	No likely significant effect. NDP Policy and Masterplan seek to mitigate adverse environmental impacts of proposed development of strategic site.
Policy W3 Protecting and Enhancing Wildlife	Requires development proposals to avoid areas of high distinctiveness habitats, wildlife corridors or core areas for wildlife. Any development adjacent to these areas should incorporate substantial mitigation to lessen impacts on wildlife while seeking to enhance their overall condition to achieve a net-gain for biodiversity	No likely significant effect. Potentially positive effect if off-site net gains are implemented within European sites
Policy W4 Warburton Moss	Supports proposals which contribute to the restoration of areas of mosslands to lowland raised bog habitat in Warburton Moss Landscape Area as part of biodiversity net gain (BNG), carbon capture and flood mitigation measures.	No likely significant effect. Policy may offer opportunities to extend the Manchester Mosses SAC. If so positive effect by supporting carbon capture and mitigating climate change.
Policy W5 Protecting Heritage Assets and Responding to Local Character	Sets out design principles to ensure development is sensitive to local character.	No likely significant effect.
Policy W6 Warburton Conservation Area	Requires development and conversions to conserve and enhance the special historical and architectural character of the Conservation Area.	No likely significant effect.
Policy W7 Archaeology	Requires development proposals to protect, conserve and enhance assets of potential archaeological interest.	No likely significant effect.

Warburton NDP Policy (TBC)	Brief Summary	Screening Outcome
Policy W8 Non designated Heritage Assets	Requires developers to have regard to conserving the significance of the NdHA and the components which positively contribute to its character or appreciation as a heritage asset.	No likely significant effect.
Policy W9 Warburton Masterplan	Masterplan supports appropriate residential development in neighbourhood area and requires consideration and protection of natural and built heritage assets. Sets out design principles for development within the neighbourhood area part of the strategic site.	<p>Refer to PfE:</p> <p>JP-Strat 11 New Carrington</p> <p>Likely significant effect. Potential harmful effect from increase road traffic resulting in potential increases in diffuse air pollution (particularly Manchester Mosses SAC and Rostherne Mere) and potential recreational disturbance impacts on Manchester Mosses.</p> <p>However the NDP policy does not propose more development than that PfE and other NDP Policies on landscape, wildlife and Warburton Moss could help to offset adverse environmental effects arising from the development.</p>
Option 1	<p>Option 1 Masterplan considers maximising the potential developable areas and applying higher density to some areas close to Warburton Lane. This option may require careful consideration of mitigations to reduce impacts on local identity and rural characters. The consideration points which are different from the other two options include:</p> <ul style="list-style-type: none"> • Longer new roads are provided to reach development parcels which are far away from the site access from Warburton Lane. • The site has an average density of 30 units per hectare. This density reflects Trafford’s current policy of achieving 40% affordable housing in Warburton, but it is significantly higher than elsewhere in Warburton, which may not be appropriate for its rural setting. 	<p>Refer to PfE:</p> <p>JP-Strat 11 New Carrington</p> <p>Likely significant effect. Potential harmful effect from increase road traffic resulting in potential increases in diffuse air pollution (particularly Manchester Mosses SAC and Rostherne Mere) and potential recreational disturbance impacts on Manchester Mosses.</p> <p>Option 1 proposes significantly more development than that in the PfE Plan (822 units). PfE proposes approx. 400 units for Warburton Lane and a density of 25 dph is considered appropriate (see Proposed Main Modification Schedule).</p> <p>However other NDP Policies on landscape, wildlife and Warburton Moss could help to offset some adverse environmental effects arising from the development.</p>

Warburton NDP Policy (TBC)	Brief Summary	Screening Outcome
	<p>Option 1 Land uses: Total Residential Areas: 27.4 ha Total units at 30dph: 822</p>	<p>This Option is not proposed to be carried forward into the NDP.</p>
<p>Option 2</p>	<p>Option 2 masterplan considers a balance between maximising the potential developable areas and reducing the impact on the local environment. The consideration points which are different from the other two options include:</p> <ul style="list-style-type: none"> • Fewer development parcels which are far away from the site access from Warburton Lane. • An average density of 25 units per hectare is applied to the site. <p>Option 2 Land uses: Total residential areas: 19.9 ha Total units at 25 dph: 498</p>	<p>Refer to PfE: JP-Strat 11 New Carrington</p> <p>Likely significant effect. Potential harmful effect from increase road traffic resulting in potential increases in diffuse air pollution (particularly Manchester Mosses SAC and Rostherne Mere) and potential recreational disturbance impacts on Manchester Mosses.</p> <p>Option 2 proposes significantly more development than that in the PfE Plan (498 units). PfE proposes approx. 400 units for Warburton Lane and a density of 25 dph is considered appropriate (see Proposed Main Modification Schedule).</p> <p>However other NDP Policies on landscape, wildlife and Warburton Moss could help to offset some adverse environmental effects arising from the development.</p> <p>This Option is not proposed to be carried forward into the NDP.</p>
<p>Option 3 Preferred Masterplan</p>	<p>Option 3 Masterplan considers minimising the potential developable areas and reducing the impact on the local environment. The consideration points which are different from the other two options include:</p> <ul style="list-style-type: none"> • No development parcels which are far away from the site access from Warburton Lane; • An average density of 14 units per hectare is applied to the site, as would be found in a country village; and • A large number of small pocket green spaces. 	<p>Refer to PfE: JP-Strat 11 New Carrington</p> <p>Likely significant effect. Potential harmful effect from increase road traffic resulting in potential increases in diffuse air pollution (particularly Manchester Mosses SAC and Rostherne Mere) and potential recreational disturbance impacts on Manchester Mosses.</p>

Warburton NDP Policy (TBC)	Brief Summary	Screening Outcome
	<p>Option 3 Land uses Total residential areas:19.9 ha Total units at 14 DPH: 279.</p>	<p>Option 3 proposes significantly less development than that in the PfE Plan (279 dwellings). PfE proposes approx. 400 units for Warburton Lane and a density of 25 dph is considered appropriate (see Proposed Main Modification Schedule).</p> <p>In addition, other NDP Policies on landscape, wildlife and Warburton Moss could help to offset some adverse environmental effects arising from the development.</p> <p>This is the Preferred Option for the NDP.</p>
Policy W10 Sustainable Design and Climate Change	Sets out principles to support sustainable design.	No likely significant effect. Positive effect if environmental benefits are achieved. May benefit European sites by reducing air and water pollution.
Policy W12 Walking and Cycling	Supports development which promotes active lifestyles and more sustainable travel.	No likely significant effect. Positive effect by reducing the need for unsustainable travel (reduction in air pollution)
Policy W12 Local Green Space	Identifies local green spaces.	No likely significant effect.
Policy W13 Rural Diversification	Supports growth and expansion of rural businesses through conversions and through well-designed new buildings that respect the rural character.	No likely significant effect.
Policy W14 Energy Proposals	Supports small scale renewable energy or low carbon energy proposals in the rural area that demonstrably benefit the community, and respect local character.	No likely significant effect. Positive effect by reducing air pollution and mitigating climate change
Policy W15 Community Facilities	Identifies important local community facilities in Warburton.	No likely significant effect

Table 3: Assessment of Likely Significant Effects

Site	Environmental conditions to support site integrity	Possible impacts arising from NDP	Is there a risk of a significant effect?	Possible impacts from other, trends plans, etc.	Is there a risk of significant 'in combination'
Rixton Clay Pits SAC	<p>The primary reason for the designation of Rixton Clay Pits is its population of great crested newts (<i>Triturus cristatus</i>). 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.</p>	<p>Although Rixton Claypits has been designated for its populations of great crested newts, and great crested newts may rely on land outside of the designated site, they rarely move more than 250m from breeding ponds.</p> <p>New Carrington located around 3.5km from Rixton Clay Pits but it is reasonable to conclude no likely significant effect will occur to Rixton Clay Pits SAC from any reduction in air quality resulting from the plan.</p> <p>Whilst a small increase in visitor numbers cannot be ruled out because of the new housing at New Carrington, this is unlikely to be significant and when combined with the existing visitor management and management of fishing rights unlikely to have a likely significant effect.</p>	No effects envisaged.	None known.	No
Manchester Mosses SAC	<p>This raised bog vegetation corresponds to the UK NVC types; M2 Sphagnum cuspidatum/recurvum (fallax) bog pool community, M3 Eriophorum angustifolium bog pool community, M20 Eriophorum vaginatum blanket and raised mire and M25 - Molinia caerulea - Potentilla erecta mire (Rodwell, 1991).</p> <p>Floristically the re-wet mosses are developing a community typical of</p>	<p>Species associated with the Manchester Mosses SAC are not mobile in their habits and will not rely on other land to complete their life cycles.</p> <p>The NDP is unlikely to lead to increases in traffic which could impact on air quality.</p> <p>There will be no impact on the Manchester Mosses SAC as a result of recreational pressure from New Carrington.</p>	No effects envisaged.	None known.	No

Site	Environmental conditions to support site integrity	Possible impacts arising from NDP	Is there a risk of a significant effect?	Possible impacts from other, trends plans, etc.	Is there a risk of significant 'in combination'
	<p>lowland raised bog with an abundance of common cotton grass <i>Eriophorum angustifolium</i>, hare's-tail cotton grass <i>Eriophorum vaginatum</i> and bog mosses such <i>Sphagnum fallax</i>, <i>Sphagnum cuspidatum</i> and <i>Sphagnum palustre</i> now established over large areas. The lawns of <i>Sphagnum</i> are providing habitat for sundew <i>Drosera rotundifolia</i>, cross leaved heath <i>Erica tetralix</i>, bog myrtle <i>Myrica gale</i>, cranberry <i>Vaccinium oxycoccus</i> and bog rosemary <i>Andromeda polifolia</i>. Also present at currently low levels within the areas of well-established bog are <i>Sphagnum palustre</i>, <i>Sphagnum magellanicum</i> and <i>Sphagnum capillifolium</i>.</p>				
Rostherne Mere Ramsar	<p>The Rostherne Mere Ramsar qualifies for its Annex II species. This includes:</p> <ul style="list-style-type: none"> • Great cormorant <i>Phalacrocorax carbo carbo</i> - 273 individuals, representing an average of 1.1% of the GB population; • Great bittern <i>Botaurus stellaris stellaris</i> - 1 individuals, representing an average of 1% of the GB population; and • Water rail <i>Rallus aquaticus</i> - 6 individuals, representing an average of 1.3% of the GB population. 	<p>The site is vulnerable to air pollution and water quality issues via eutrophication and the introduction of non-native plant species.</p> <p>Reason for considered but screened out from Trafford Local Plan HRA: no clear pathways from Trafford for hydrological or air quality impacts.</p> <p>The neighbourhood area is likely to be too far away to have a negative effect.</p>	No effects envisaged.	None	No

Site	Environmental conditions to support site integrity	Possible impacts arising from NDP	Is there a risk of a significant effect?	Possible impacts from other, trends plans, etc.	Is there a risk of significant 'in combination'
Midland Meres and Mosses Phase 1 Ramsar	Ramsar Criterion 1: The site comprises a diverse range of habitats from open water to raised bog. Ramsar Criterion 2: Supports a number of rare species of plants associated with wetlands including five nationally scarce species together with an assemblage of rare wetland invertebrates (three endangered insects and five other British Red Data Book species of invertebrates).	The site may be vulnerable to water and air pollution, but the neighbourhood area is likely to be too far away to have a negative effect.	No effects envisaged.	None	No
Mersey Estuary SPA and Ramsar	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: Golden Plover <i>Pluvialis apricaria</i> , 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 <i>Tringa totanus</i> , 3,516 individuals representing at least 2.0% of the Eastern Atlantic - wintering population (5 year peak mean, 1987-1991)	The site may be vulnerable to water and air pollution, but the neighbourhood area is likely to be too far away to have a negative effect on breeding birds. The qualifying species of the Mersey Estuary SPA a range of waders and wildfowl are regarded as sensitive to recreational pressure. Guidance from Natural England is that coastal sites within 10km should be screened in. The Mersey Estuary is around 20km from Trafford. Therefore, there are no likely significant effects. The Mersey Estuary SPA and Ramsar site at around 20km downstream and the NDP should not have an effect on water quality.	No effects envisaged.	None	No

Site	Environmental conditions to support site integrity	Possible impacts arising from NDP	Is there a risk of a significant effect?	Possible impacts from other, trends plans, etc.	Is there a risk of significant 'in combination'
	<p>Ringed Plover <i>Charadrius hiaticula</i>, 1,453 individuals representing at least 2.9% of the Europe/Northern Africa - wintering population (Count, as at 1989) Over winter; Dunlin <i>Calidris alpina</i>, 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 <i>Anas acuta</i>, 2,744 individuals representing at least 4.6% of the wintering Northwestern Europe population (5 year peak mean 1991/2 - 1995/6) Redshank <i>Tringa totanus</i>, 4,689 individuals representing at least 3.1% of the wintering Eastern Atlantic - wintering population (5 year peak mean 1991/2 - 1995/6) Shelduck <i>Tadorna tadorna</i>, 5,039 individuals representing at least 1.7% of the wintering Northwestern Europe population (5 year peak mean 1991/2 - 1995/6) Teal <i>Anas crecca</i>, 11,667 individuals representing at least 2.9% of the wintering Northwestern Europe population (5 year peak mean 1991/2 - 1995/6)</p>				

Site	Environmental conditions to support site integrity	Possible impacts arising from NDP	Is there a risk of a significant effect?	Possible impacts from other, trends plans, etc.	Is there a risk of significant 'in combination'
	<p>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 <i>Numenius arquata</i>, Black-tailed Godwit <i>Limosa limosa islandica</i>, Lapwing <i>Vanellus</i>, Grey Plover <i>Pluvialis squatarola</i>, Wigeon <i>Anas penelope</i>, Great Crested Grebe <i>Podiceps cristatus</i>, Redshank <i>Tringa totanus</i>, Dunlin <i>Calidris alpina alpina</i>, Pintail <i>Anas acuta</i>, Teal <i>Anas crecca</i>, Shelduck <i>Tadorna tadorna</i>, Golden Plover <i>Pluvialis apricaria</i>. Operations which may damage the special interest of the SPA include -</p> <ul style="list-style-type: none"> ▪ Diffuse air pollution ▪ Diffuse water pollution ▪ Climate change ▪ Recreational disturbance 				

5. In Combination Effects

Places for Everyone Assessment

- 5.1 The NDP is being prepared taking account of the reasoning and evidence of the merging Places for Everyone strategic plan, in accordance with advice in National Planning Practice Guidance.
- 5.2 The NDP does not propose any site allocations in addition to the strategic site identified in PfE and the plan's policies overall should have positive impacts on the natural environment and no effects on European sites within 15-20km of the boundary.
- 5.3 The PfE HRA report includes an In-Combination Assessment. It sets out:

'1.5 In Combination Assessment

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

The implication of 'in combination' considerations for a plan with the scale of Places for Everyone may be profound, since a very wide range of other plans and proposals may be influenced by the operation of the Plan, and vice versa. It would be practically impossible for a detailed analysis to be undertaken of every possible plan or proposal which may be influenced by the Places for Everyone in isolation. Instead, in some cases this Assessment has taken a high-level precautionary approach and assumed that the impacts arising from the operation of the Places for Everyone Plan are likely to result in in-combination effects. This precautionary principle particularly relates to impacts which may arise from air pollution and recreational impact effects.'

- 5.4 The Report goes on to advise under Section 6 In-Combination Assessment:

'As previously stated in the case of a high-level, very large scale Plan such as the Places for Everyone a very large number of other plans, strategies and projects could act in combination with the Places for Everyone and result in a likely significant effect on European sites where the plan operating in isolation would not.

At all stages of this Assessment potential cumulative impacts have been considered for the PfE.

In particular a precautionary approach which assumes that in-combination effects will occur has been taken in relation to the Assessment of –

- *Air Pollution Effects*
- *Recreational Impacts*

- *Water Pollution effects*

And mitigation has been recommended which would address in-combination effects in addition to the effects of the plan alone.'

5.5 The relevant sections from the Conclusion are set out below:

'9 Conclusions

9.1 Summary of HRA results

9.1.1 Initial screening assessment

All policies in the PfE, including thematic and development allocation policies, were subject to an initial screening assessment to determine if they would have a 'likely significant effect' on European protected habitat sites and as a consequence require further assessment to determine effects in more detail. The initial screening assessment indicated that harmful effects on European protected sites could potential arise from air and water pollution, recreational disturbances and interference with functionally linked land as a result the scale of housing and economic growth in the plan. Consequently, the HRA includes a more detailed assessment of these impacts including mitigation options where required.

9.1.3 Water quality

The HRA considered the impact on the Mersey Estuary SPA from diffuse water pollution across Greater Manchester, as most rivers in Greater Manchester drain into the River Mersey and discharge into the estuary. The most important source of potential water pollution would be the discharge of untreated or partially treated sewage into the watercourses resulting from population increases across Greater Manchester, as a result of the scale of development proposed across the plan. United Utilities who operate the drainage network in Greater Manchester have confirmed their commitment to deliver water quality improvements in collaboration with partners and deliver investment in their drainage infrastructure in line with their investment programme. Furthermore, PfE Policy JP-S5 Flood Risk and the Water Environment expects developers to incorporate sustainable drainage systems into development proposals and the PfE allocations have policy requirements prioritising sustainable drainage systems on the sites.

9.1.6 Recreational disturbance – Rixton Clay Pits SAC and Manchester Mosses SAC

The HRA assessed if the PfE would cause recreational disturbances to Rixton Clay Pits SAC and Manchester Mosses SAC from visitors. However, the HRA found that the level of visitors to Rixton Clay Pits SAC was very low and visitors were typically from the local area, the site is also managed. Manchester Mosses SAC is not accessible to the public. Therefore, the HRA found that the PfE would not have a detrimental impact on these sites from increased visitor pressure.

9.2 Conclusions from the Air Quality Habitats Regulations Assessment

The Air Quality Habitats Regulations Assessment has evaluated the potential effects of changes in air quality for three cases:

- *2025 contribution from allocations: the air quality impacts associated with the PfE Plan allocations in 2025.*

- *2040 contribution from allocations: the air quality impacts associated with the PfE Plan allocations in 2040.*
- *2040 contribution from allocations with link road: the air quality impacts associated with the PfE Plan allocations in 2040 combined with the air quality impacts associated with a new link road between the A57 and M62.*
- *The study has evaluated the increases in airborne concentrations of oxides of nitrogen; in airborne concentrations of ammonia; in deposition of nitrogen from the atmosphere; and in deposition of acid from the atmosphere to the designated habitat sites within 10 km of the PfE plan boundary.*

9.2.1 HRA Screening

The HRA Stage 1 Screening results indicated that there are no Likely Significant Effects related to air quality for the following European sites, for all three of the cases considered in this assessment. These sites were screened out of requiring further analysis:

- *Midland Meres & Mosses – Phase 1 (Ramsar site)*
- *Rostherne Mere (Ramsar Site)*
- *Rixton Clay Pits (SAC)*

The HRA Stage 1 Screening results indicated that further analysis, in the form of an HRA Stage 2 Appropriate Assessment, was required for each of the following European sites for at least one of the three cases described above, and at least one of the four potential impacts:

- *Manchester Mosses (SAC).*

Detailed reports are included in Appendix 2 Air Quality Habitats Regulations Assessment, Appendix 3 Recreation study and Appendix 4 Statement on behalf of United Utilities Water Limited in response to infrastructure capacity query.'

New Emerging Trafford Local Plan Assessment

- 5.6 Cumulative effects for air quality, recreational pressure, water quality and shipping are considered in the Local Plan HRA Screening Report. This sets out that potential in-combination effects on the Manchester Mosses SAC resulting from air quality issues can be removed through appropriate amendments to the policies and conditions at the development stage and potential in-combination effects on the Mersey Estuary SPA resulting from water quality issues can be removed through appropriate amendments to the policies and conditions at the development stage.

6.0 Conclusions

- 6.1 There are four European sites (Natura 2000) within approximately 15km of the Warburton Neighbourhood Area boundary and one 20km away.
- 6.2 It is considered unlikely that the emerging Draft NDP policies and the Preferred Masterplan (Option 3) would have a significant effect on any of the European sites either alone or in combination. The NDP does not include any site allocations in addition to the strategic site proposed in the PfE strategic development plan and new emerging Trafford Local Plan.
- 6.3 The scale of additional growth envisaged within the Draft NDP is very limited and the European sites identified are located some distance away, and therefore it is considered that no further appropriate assessment work is required for the Draft NDP.
- 6.5 It is therefore recommended that Warburton Draft NDP should not be subject to a detailed Habitats Regulations Assessment process. Should the NDP document be changed or updated from that which is assessed in this document, then the HRA will be revisited.
- 6.8 Under its 'duty to support', Trafford Council was invited to review the first draft HRA Screening Assessment (September 2022) which was based on the August 2022 emerging Draft Version of the NDP.

7.0 Consultation

- 7.1 Trafford Borough Council confirmed that it agreed with the initial screening conclusion based on that the Plan aims to protect and does not propose development beyond the area within the New Carrington site, which was subject to PfE screening. There are heritage assets and a conservation area, but no additional sites are proposed for development in the NDP. However, there was a caveat that the scope of the proposed masterplan was not yet known at that time.
- 7.2 The HRA and SEA screening assessments have been reviewed and updated to take into account the policies and proposals in the latest version of the Draft Plan together with the options in the draft Warburton Masterplan.
- 7.3 The most up to date version of the emerging Draft Plan is V6A and this is currently published for informal consultation alongside the draft Warburton Masterplan and Design Guide until the end of June 2023. Three options for the Masterplan have been prepared including a Preferred Option. The Draft Warburton Neighbourhood Development Plan (v6A), Warburton Masterplan & Design Guide 2023 and other supporting documents are published on the neighbourhood plan pages of the Parish Council's website <https://www.warburtonparishcouncil.org/neighbourhood-plan> .
- 7.3 The Preferred Masterplan (Option 3) minimises the potential developable areas and reduces the impact on the local environment. A lower level of development is proposed than in PfE and layouts of development would be sensitive to the rural context. The consideration points which are different from the other two options include:

- No development parcels which are far away from the site access from Warburton Lane;
- An average density of 14 units per hectare is applied to the site, as would be found in a country village; and
- A large number of small pocket green spaces.

7.4 The screening report is subject to a five-week consultation with Natural England and other consultation bodies Historic England and Environment Agency. Please respond by the end of Friday 28th July 2023.

7.5 Any responses from Natural England and the other bodies will be taken into account and this report will be reviewed and amended once the Draft NDP is finalised for Regulation 14 public consultation.

Appendix 1 Site Improvement Plans and Evidence Packs

Rixton Clay Pits SAC

Improvement Programme for England's Natura 2000 Sites (IPENS)

Planning for the Future

Site Improvement Plan

Rixton Clay Pits

Site Improvement Plans (SIPs) have been developed for each Natura 2000 site in England as part of the Improvement Programme for England's Natura 2000 sites (IPENS). Natura 2000 sites is the combined term for sites designated as Special Areas of Conservation (SAC) and Special Protected Areas (SPA). This work has been financially supported by LIFE, a financial instrument of the European Community.

The plan provides a high level overview of the issues (both current and predicted) affecting the condition of the Natura 2000 features on the site(s) and outlines the priority measures required to improve the condition of the features. It does not cover issues where remedial actions are already in place or ongoing management activities which are required for maintenance.

The SIP consists of three parts: a Summary table, which sets out the priority Issues and Measures; a detailed Actions table, which sets out who needs to do what, when and how much it is estimated to cost; and a set of tables containing contextual information and links.

Once this current programme ends, it is anticipated that Natural England and others, working with landowners and managers, will all play a role in delivering the priority measures to improve the condition of the features on these sites.

The SIPs are based on Natural England's current evidence and knowledge. The SIPs are not legal documents, they are live documents that will be updated to reflect changes in our evidence/knowledge and as actions get underway. The information in the SIPs will be used to update England's contribution to the UK's Prioritised Action Framework (PAF).

The SIPs are not formal consultation documents, but if you have any comments about the SIP or would like more information please email us at IPENSLIFEProject@naturalengland.org.uk, or contact Natural England's Responsible Officer for the site via our enquiry service 0300 060 3900, or enquiries@naturalengland.org.uk

This Site Improvement Plan covers the following Natura 2000 site(s)

UK0030265 Rixton Clay Pits SAC

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Site description

Rixton Clay Pits is situated to the east of Warrington within disused brickworks. The site comprises a mosaic of habitats including open water, fen, swamp, wet woodland and meadow that have all developed within the flooded workings since quarrying ceased in the 1960s.

Great crested newt *Triturus cristatus* are known to occur in at least 20 ponds across the site, indeed the site supports the largest population of great crested newts in Cheshire. The reserve is now managed for wildlife and amenity purposes by the local authority ranger service.

Plan Summary

This table shows the prioritised issues for the site(s), the features they affect, the proposed measures to address the issues and the delivery bodies whose involvement is required to deliver the measures. The list of delivery bodies will include those who have agreed to the actions as well as those where discussions over their role in delivering the actions is on-going.

Priority & Issue	Pressure or Threat	Feature(s) affected	Measure	Delivery Bodies
1 Direct impact from 3rd party	Pressure/Threat	S1166 Great crested newt	Remove existing fly-tipping waste and use enforcement to prevent further tipping	Natural England, Warrington Borough Council

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Issues and Actions

This table outlines the prioritised issues that are currently impacting or threatening the condition of the features, and the outstanding actions required to address them. It also shows, where possible, the estimated cost of the action and the delivery bodies whose involvement will be required to implement the action. Lead delivery bodies will be responsible for coordinating the implementation of the action, but not necessarily funding it. Delivery partners will need to support the lead delivery body in implementing the action. In the process of developing the SIPs Natural England has approached the delivery bodies to seek agreement on the actions and their roles in delivering them, although in some cases these discussions have not yet been concluded. Other interested parties, including landowners and managers, will be involved as the detailed actions are agreed and delivered. Funding options are indicated as potential (but not necessarily agreed or secured) sources to fund the actions.

1 Direct impact from 3rd party

There have been issues with tipping into the reserve from adjacent properties, resulting in damage.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Remove fly-tipping waste.	£10,000	2014-15	Waste removal operations: Fly-tipping waste removal	Local Authority	Warrington Borough Council	Natural England

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1B	Take enforcement action to address fly-tipping.	Not yet determined	2014-15	Enforcement: Other	Local Authority	Warrington Borough Council	Natural England

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Site details

The tables in this section contain site-relevant contextual information and links

Qualifying features

#UK Special responsibility

Rixton Clay Pits SAC S1166 *Triturus cristatus*: Great crested newt

Site location and links

Rixton Clay Pits SAC

Area (ha) 13.99 Grid reference SJ684901 [Map link](#)

Local Authorities Warrington

Site Conservation Objectives [European Site Conservation Objectives for Rixton Clay Pits SAC](#)

European Marine Site conservation advice [n/a](#)

Regulation 33/35 Package [n/a](#)

Marine Management Organisation site plan [n/a](#)

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Water Framework Directive (WFD)

The Water Framework Directive (WFD) provides the main framework for managing the water environment throughout Europe. Under the WFD a management plan must be developed for each river basin district. The River Basin Management Plans (RBMP) include a summary of the measures needed for water dependent Natura 2000 sites to meet their conservation objectives. For the second round of RBMPs, SIPs are being used to capture the priorities and new measures required for water dependent habitats on Natura 2000 sites. SIP actions for non-water dependent sites/habitats do not form part of the RBMPs and associated consultation.

Rixton Clay Pits SAC

River basin	North West	North West RBMP
WFD Management catchment	Weaver/Gowy	
WFD Waterbody ID (Cycle 2 draft)	n/a	

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Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)

Rixton Clay Pits SAC	Rixton Clay Pits SSSI
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National Nature Reserve (NNR)

Rixton Clay Pits SAC	n/a
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Ramsar

Rixton Clay Pits SAC	n/a
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Special Areas of Conservation (SAC) and Special Protection Areas (SPA)

Rixton Clay Pits SAC	n/a
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Version	Date	Comment
1.0	09/10/2014	

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Manchester Mosses SAC

Improvement Programme for England's Natura 2000 Sites (IPENS)

Planning for the Future

Site Improvement Plan

Manchester Mosses

Site Improvement Plans (SIPs) have been developed for each Natura 2000 site in England as part of the Improvement Programme for England's Natura 2000 sites (IPENS). Natura 2000 sites is the combined term for sites designated as Special Areas of Conservation (SAC) and Special Protected Areas (SPA). This work has been financially supported by LIFE, a financial instrument of the European Community.

The plan provides a high level overview of the issues (both current and predicted) affecting the condition of the Natura 2000 features on the site(s) and outlines the priority measures required to improve the condition of the features. It does not cover issues where remedial actions are already in place or ongoing management activities which are required for maintenance.

The SIP consists of three parts: a Summary table, which sets out the priority Issues and Measures; a detailed Actions table, which sets out who needs to do what, when and how much it is estimated to cost; and a set of tables containing contextual information and links.

Once this current programme ends, it is anticipated that Natural England and others, working with landowners and managers, will all play a role in delivering the priority measures to improve the condition of the features on these sites.

The SIPs are based on Natural England's current evidence and knowledge. The SIPs are not legal documents, they are live documents that will be updated to reflect changes in our evidence/knowledge and as actions get underway. The information in the SIPs will be used to update England's contribution to the UK's Prioritised Action Framework (PAF).

The SIPs are not formal consultation documents, but if you have any comments about the SIP or would like more information please email us at IPENSLIFEProject@naturalengland.org.uk, or contact Natural England's Responsible Officer for the site via our enquiry service 0300 060 3900, or enquiries@naturalengland.org.uk

This Site Improvement Plan covers the following Natura 2000 site(s)

UK0030200 Manchester Mosses SAC

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Site description

The Mersey floodplain was once covered by complex of large lowland raised bogs covering over 3500 ha. While most of this bog has been converted to agriculture or lost to development, several examples have survived as degraded raised bog; the largest and best preserved examples Risley Moss, Astley & Bedford Mosses and Holcroft Moss make up the component SSSI of the Manchester Mosses SAC.

All of the Manchester mosses with the exception of Holcroft Moss have been cut over and all were drained resulting in the dominance of purple moor grass *Molinia caerulea*, bracken *Pteridium aquilinum* and birch *Betula spp.* However all of the mosses have now been re-wet and a more typical wet bog community of common cotton grass *Eriophorum angustifolia*, hare's tail cotton grass *Eriophorum vaginatum* and bog mosses *Sphagnum sp.* has now established over large areas of the mosses with sundew *Drosera rotundifolia*, cross leaved heath *Erica tetralix*, bog myrtle *Myrica gale*, cranberry *Vaccinium oxycoccus* and bog rosemary *Andromeda polifolia* all starting to spread.

Plan Summary

This table shows the prioritised issues for the site(s), the features they affect, the proposed measures to address the issues and the delivery bodies whose involvement is required to deliver the measures. The list of delivery bodies will include those who have agreed to the actions as well as those where discussions over their role in delivering the actions is on-going.

Priority & Issue	Pressure or Threat	Feature(s) affected	Measure	Delivery Bodies
1 Hydrological changes	Pressure	H7120 Degraded raised bog	Combination of re-wetting within site and creation of wetland buffers	Cheshire Wildlife Trust, Forestry Commission, Lancs, Manchester and Nth Merseyside Wildlife Trust, Natural England, The Wildlife Trust for Lancs, Manchester and Nth Merseyside, Warrington Borough Council, Great Manchester Mossland Project
2 Air Pollution: impact of atmospheric nitrogen deposition	Pressure	H7120 Degraded raised bog	Development and implementation of a Site Nitrogen Action Plan	Not yet determined

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Issues and Actions

This table outlines the prioritised issues that are currently impacting or threatening the condition of the features, and the outstanding actions required to address them. It also shows, where possible, the estimated cost of the action and the delivery bodies whose involvement will be required to implement the action. Lead delivery bodies will be responsible for coordinating the implementation of the action, but not necessarily funding it. Delivery partners will need to support the lead delivery body in implementing the action. In the process of developing the SIPs Natural England has approached the delivery bodies to seek agreement on the actions and their roles in delivering them, although in some cases these discussions have not yet been concluded. Other interested parties, including landowners and managers, will be involved as the detailed actions are agreed and delivered. Funding options are indicated as potential (but not necessarily agreed or secured) sources to fund the actions.

1 Hydrological changes

The combination of historic peat cutting, fragmentation, drainage and peat wastage and some of the early restoration work has significantly modified the hydrological function of all the component mosses. Considerable work has been done and is ongoing within the sites to manage the hydrology and restore the conditions for bog development. Working with partners and stakeholder we have been able to establish hydrological buffer zones around parts of the moss. However there are still areas where agricultural and transport infrastructure requires deep drainage on adjacent land that still dry out or impact on parts of the mosses.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Re-wetting project at Risley Moss to create wet woodland and lagg to buffer the moss and to allow more natural hydrological function.	£21,000	2014-15	Existing Local Project	SITA funding	Warrington Borough Council	Great Manchester Mossland Project
1B	A small area of the bund at the south end of Holcroft Moss has a leak and needs small scale piling to fix the problem.	£3,000	2014-15	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Great Manchester Mossland Project, New Environmental Land Management Scheme (NELMS)	Cheshire Wildlife Trust	Great Manchester Mossland Project

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1C	Consider notification of Lancashire Wildlife Trust and Forestry Commission land at Astley and Bedford Mosses as a hydrological buffer.	Not yet determined	2015-16	Designation strategy (SSSI)	Not yet determined	Natural England	Forestry Commission, The Wildlife Trust for Lancs, Manchester and Nth Merseyside
1D	Create new areas of wetland to buffer the mosses and develop linkages between the three components of the SAC, to address ongoing offsite drainage impacts.	Not yet determined	2014-34	Habitat creation / restoration strategy: Creation of new habitat	Heritage Lottery Fund (HLF), New Environmental Land Management Scheme (NELMS), Landfill Community Fund (LCF)	The Wildlife Trust for Lancs, Manchester and Nth Merseyside	Cheshire Wildlife Trust, Great Manchester Mossland Project

2 Air Pollution: impact of atmospheric nitrogen deposition

Nitrogen deposition exceeds site relevant critical loads.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2A	Control, reduce and ameliorate atmospheric nitrogen impacts	Not yet determined	2014-20	Site Nitrogen Action Plan	Not yet determined	Not yet determined	Not yet determined

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Site details

The tables in this section contain site-relevant contextual information and links

Qualifying features

#UK Special responsibility

Manchester Mosses SAC H7120 Degraded raised bogs still capable of natural regeneration

Site location and links

Manchester Mosses SAC

Area (ha)	172.81	Grid reference	SJ691973	Map link
Local Authorities	Warrington; Wigan			
Site Conservation Objectives	European Site Conservation Objectives for Manchester Mosses SAC			
European Marine Site conservation advice	n/a			
Regulation 33/35 Package	n/a			
Marine Management Organisation site plan	n/a			

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Water Framework Directive (WFD)

The Water Framework Directive (WFD) provides the main framework for managing the water environment throughout Europe. Under the WFD a management plan must be developed for each river basin district. The River Basin Management Plans (RBMP) include a summary of the measures needed for water dependent Natura 2000 sites to meet their conservation objectives. For the second round of RBMPs, SIPs are being used to capture the priorities and new measures required for water dependent habitats on Natura 2000 sites. SIP actions for non-water dependent sites/habitats do not form part of the RBMPs and associated consultation.

Manchester Mosses SAC

River basin	North West RBMP
WFD Management catchment	Mersey Estuary
WFD Waterbody ID (Cycle 2 draft)	GB112069061020

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Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Manchester Mosses SAC	Holcroft Moss SSSI Astley & Bedford Mosses SSSI Risley Moss SSSI
National Nature Reserve (NNR)	
Manchester Mosses SAC	n/a
Ramsar	
Manchester Mosses SAC	n/a
Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Manchester Mosses SAC	n/a

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1.0	10/11/14	

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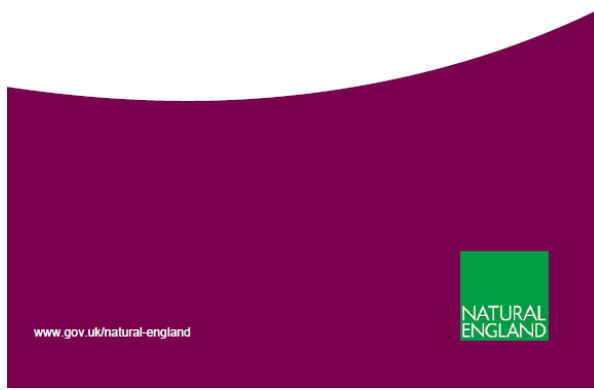
Rostherne Mere Ramsar

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Evidence Pack

First published August 2022

Natural England Technical Information Note TIN203



Natural England Technical Information Note TIN203

Rostherne Mere Ramsar – Evidence Pack

Anita Wood, Helen Wake and Kathryn McKendrick-Smith



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Further information

This report can be downloaded from the Natural England Access to Evidence Catalogue: <http://publications.naturalengland.org.uk/>. For information on Natural England publications contact the Natural England Enquiry Service on 0300 060 3900 or e-mail enquiries@naturalengland.org.uk.

1. Site Details

Rostherne Mere Ramsar

Rostherne Mere is the deepest, one of the largest and the most northerly of the meres of the Cheshire Plain. It lies in a hollow surrounded by thick deposits of glacial drift overlying Triassic marls and saltbeds. It is a natural lake of high fertility that, over the years, has been increased by the accumulation of nutrients received from inflow streams and drainage from surrounding farmland. The long-term study and analysis of the mere's water chemistry and limnology, together with comparisons with other meres, are important aspects of the site's nature conservation value.

The mere has little submerged vegetation but is fringed by a narrow band of Phragmites reedswamp for over half its circumference. Around the mere, the catchment slopes are primarily large blocks of woodland and moderately intensively-farmed grassland. Remains of a former peat-bog in the north and actively managed willow-beds to the south are other notable habitats. The mere is nationally important for its birds, as a winter roost for ducks, especially Pochard and Pintail, and as a regular roost for gulls and comorants. It is an important bird refuge in cold weather because its depth makes it slow to freeze. The geomorphology of the basin is also of national importance.

2. Reasons for European Designation

The Ramsar is designated for the following feature:

- Open water transition fen ('mere')

Links to Conservation Advice:

- [Information Sheet for Ramsar Wetlands](#)

3. Nutrient Pressure and Water Quality

Nutrient pressure(s) for which the site is unfavourable:

- Nitrogen
- Phosphorus

Water Quality data is reported against the relevant Site of Special Scientific Interest (SSSI) Units within the Ramsar.

Table 1 – Site attribute with water quality targets

Unit name	SSSI Unit	Monitoring point ID	WQ Target		WQ Monitoring Data ¹		Compliance with target – Pass/Fail and % reduction needed to achieve the WQ target	
			TP (µg/l)	TN (µg/l)	TP (µg/l)	TN (µg/l)	TP	TN
Mere, Gale bog, Shaw Green Willows & Fringe	5	Rostherne Mere – Bankside sample @ SJ7423983875 between boathouse & pond	33	0.4	159	1.6	FAIL 80% reduction needed	FAIL 75% reduction needed

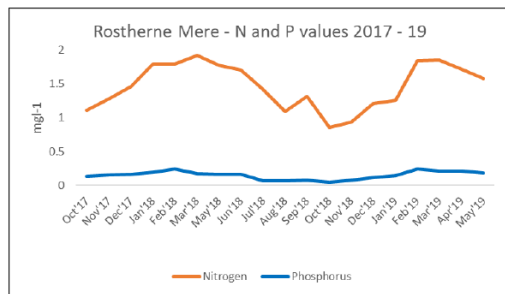
The condition of the waterbody and the habitats which support the designated features is in part dependent on the water quality within them. The occurrence of excessive nutrients in the waterbody can impact on the competitive interactions between high plant species and between higher plant species and algae, which can result in a dominance in attached forms of algae, and a loss of characteristic plant species. Changes in plant growth and community composition can have implications for the wider food web, and the species present. Increased nutrients and the occurrence of eutrophication can also impact on the dissolved oxygen levels in the waterbody, also impacting on biota within the mere.

¹ Water Quality Monitoring data from EA WIMS database. Nutrient concentrations reported as an annual mean (2019) for Total Phosphorus (TP) and Total Nitrogen (TN)

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Figure 1 – Rostherne Mere nutrient values 2017-2019



Recent water quality measurements show Rostherne Mere to be exceeding the targets for Total Phosphorus and Total Nitrogen. Any nutrients entering the catchment upstream of the locations which are exceeding their nutrient targets, will make their way downstream and have the potential to further add to the current exceedance. Therefore, the whole upstream catchment of Rostherne mere is included within the catchment map.

4. Additional Information

Habitat type impacted by nutrients – Standing Water.

Rostherne Mere Ramsar is legally underpinned by Rostherne Mere SSSI.

SSSI Interest features include:

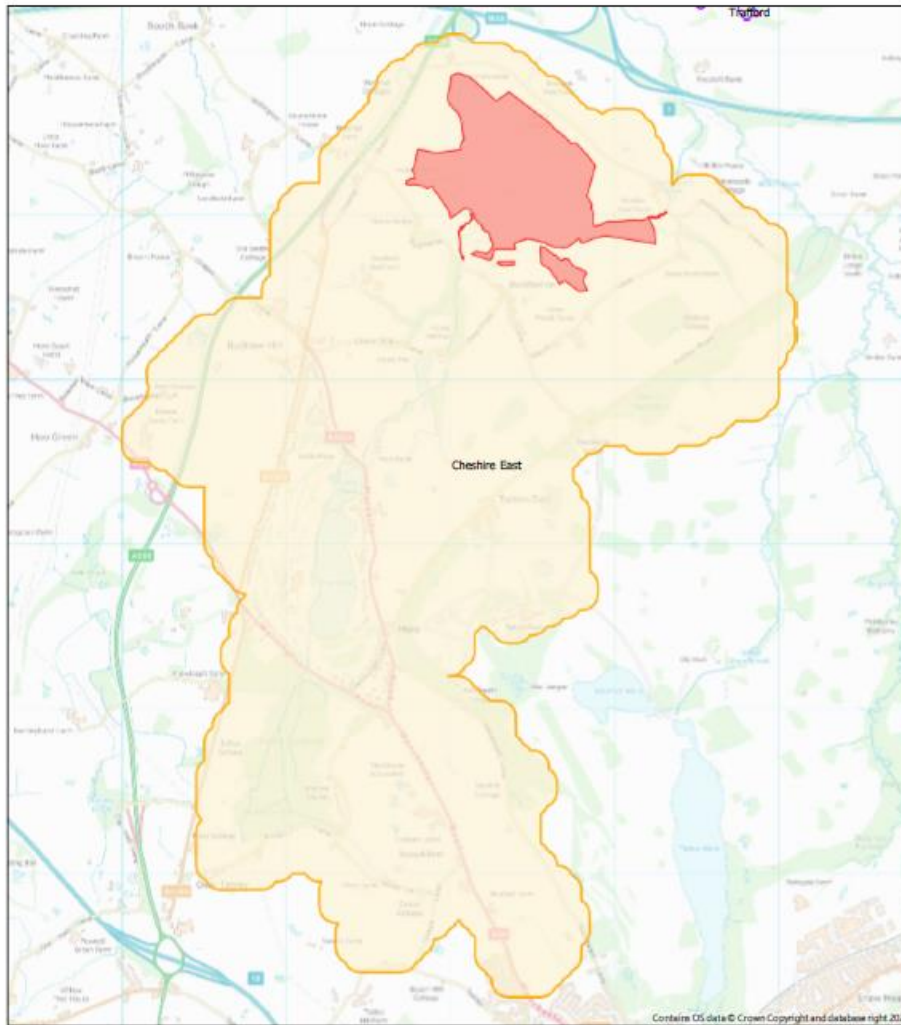
- Aggregations of non-breeding birds - Pintail, *Anas acuta*
- Aggregations of non-breeding birds - Pochard, *Aythya ferina*
- Eutrophic lakes
- IK - Karst

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Appendix

Component SSSIs of Rostherne Mere Ramsar


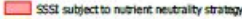

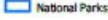
Map of component SSSIs of Rostherne Mere Ramsar



European protected sites requiring nutrient neutrality strategic solutions

Scale: 1:20,000

**Component SSSIs of
Rostherne Mere Ramsar**

-  Local Authorities
-  SSSI subject to nutrient neutrality strategy
-  Nutrient neutrality SSSI catchment
-  National Parks

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Rostherne Mere Ramsar – Evidence Pack

List of abbreviations

SSSI – Site of Special Scientific Interest

TN – Total Nitrogen

TP – Total Phosphorus

UNESCO – United Nations Educational, Scientific and Cultural Organisation

WQ – Water Quality

Glossary

Ramsar – A Ramsar site is a wetland site designated to be of international importance under the Ramsar Convention, also known as the 'The Convention on Wetlands', an intergovernmental environmental treaty established in 1971 by UNESCO.

Midland Meres and Mosses Phase 1 Ramsar

Improvement Programme for England's Natura 2000 Sites (IPENS)

Planning for the Future

Site Improvement Plan

West Midlands Mosses

Site Improvement Plans (SIPs) have been developed for each Natura 2000 site in England as part of the Improvement Programme for England's Natura 2000 sites (IPENS). Natura 2000 sites is the combined term for sites designated as Special Areas of Conservation (SAC) and Special Protected Areas (SPA). This work has been financially supported by LIFE, a financial instrument of the European Community.

The plan provides a high level overview of the issues (both current and predicted) affecting the condition of the Natura 2000 features on the site(s) and outlines the priority measures required to improve the condition of the features. It does not cover issues where remedial actions are already in place or ongoing management activities which are required for maintenance.

The SIP consists of three parts: a Summary table, which sets out the priority Issues and Measures; a detailed Actions table, which sets out who needs to do what, when and how much it is estimated to cost; and a set of tables containing contextual information and links.

Once this current programme ends, it is anticipated that Natural England and others, working with landowners and managers, will all play a role in delivering the priority measures to improve the condition of the features on these sites.

The SIPs are based on Natural England's current evidence and knowledge. The SIPs are not legal documents, they are live documents that will be updated to reflect changes in our evidence/knowledge and as actions get underway. The information in the SIPs will be used to update England's contribution to the UK's Prioritised Action Framework (PAF).

The SIPs are not formal consultation documents, but if you have any comments about the SIP or would like more information please email us at IPENSLIFEProject@naturalengland.org.uk, or contact Natural England's Responsible Officer for the site via our enquiry service 0300 060 3900, or enquiries@naturalengland.org.uk

This Site Improvement Plan covers the following Natura 2000 site(s)

UK0013595 West Midlands Mosses SAC

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Site description

The West Midlands Mosses comprises four sites: Clarepool Moss, Abbots Moss, Chartley Moss and Wyburnury Moss.

These support large basin mires which have developed as quaking bogs, known as Schwingmoors, together with a variety of associated hollows and pools showing various types and stages of mire development. This complexity of habitats gives rise to a diverse assemblage of associated plants and invertebrates of national significance.

Plan Summary

This table shows the prioritised issues for the site(s), the features they affect, the proposed measures to address the issues and the delivery bodies whose involvement is required to deliver the measures. The list of delivery bodies will include those who have agreed to the actions as well as those where discussions over their role in delivering the actions is on-going.

Priority & Issue	Pressure or Threat	Feature(s) affected	Measure	Delivery Bodies
1 Water Pollution	Pressure	H3160 Acid peat-stained lakes and ponds, H7140 Very wet mires often identified by an unstable 'quaking' surface	Establish effective buffer areas and increase the area of low input land use in the catchments	Environment Agency, Forest Enterprise, Natural England
2 Hydrological changes	Pressure	H3160 Acid peat-stained lakes and ponds, H7140 Very wet mires often identified by an unstable 'quaking' surface	Mitigate the impact of historic site drainage networks through improved water management structures allowing naturalised water levels	Environment Agency, Natural England
3 Air Pollution: impact of atmospheric nitrogen deposition	Pressure	H3160 Acid peat-stained lakes and ponds, H7140 Very wet mires often identified by an unstable 'quaking' surface	Reduce the impact of nitrogen deposition	Not yet determined
4 Inappropriate scrub control	Pressure	H3160 Acid peat-stained lakes and ponds, H7140 Very wet mires often identified by an unstable 'quaking' surface	Additional clearance of scrub and trees from peatland areas	Natural England
5 Game management: pheasant rearing	Threat	H3160 Acid peat-stained lakes and ponds, H7140 Very wet mires often identified by an unstable 'quaking' surface	Ensure pheasant rearing management is sustainable	Natural England
6 Forestry and woodland management	Threat	H3160 Acid peat-stained lakes and ponds, H7140 Very wet mires often identified by an unstable 'quaking' surface	Establish a suitable open buffer area around mire habitat at Abbots Moss	Forest Enterprise

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7	Habitat fragmentation	Threat	H3160 Acid peat-stained lakes and ponds, H7140 Very wet mires often identified by an unstable 'quaking' surface	Work in partnership to secure buffer and catchment improvements	Cheshire Wildlife Trust, Forest Enterprise, Meres and Mosses NIA, Natural England, Shropshire Wildlife Trust, Staffordshire Wildlife Trust
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Issues and Actions

This table outlines the prioritised issues that are currently impacting or threatening the condition of the features, and the outstanding actions required to address them. It also shows, where possible, the estimated cost of the action and the delivery bodies whose involvement will be required to implement the action. Lead delivery bodies will be responsible for coordinating the implementation of the action, but not necessarily funding it. Delivery partners will need to support the lead delivery body in implementing the action. In the process of developing the SIPs Natural England has approached the delivery bodies to seek agreement on the actions and their roles in delivering them, although in some cases these discussions have not yet been concluded. Other interested parties, including landowners and managers, will be involved as the detailed actions are agreed and delivered. Funding options are indicated as potential (but not necessarily agreed or secured) sources to fund the actions.

1 Water Pollution

On each of the component sites (i.e. Clarepool Moss, Wybunbury Moss, Abbots Moss, and Chartley Moss) the features have been historically impacted by, and remain vulnerable to, changes in water quality and nutrient enrichment from their surrounding catchment. Dystrophic pools at Abbots Moss currently fail to meet their water quality objectives whilst those at Clarepool Moss require testing. The evidence suggests that activities within the small catchments (agriculture, forest nursery, residential etc) are the sources of excess nutrients.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Implement the Diffuse Water Pollution plans for Wynbunbury Moss and Abbots Moss.	£15,000	2014-20	Diffuse Water Pollution Plan	Environment Agency, Natural England, Water Framework Directive (WFD), Catchment Sensitive Farming (CSF)	Natural England	Environment Agency
1B	Investigate amending the boundary of Clarepool Moss and Wybunbury Moss SSSI to ensure adequate hydrological protection for the SAC features.	£10,000	2015-16	Designation strategy: Notification Amendment	Natural England	Natural England	n/a

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Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1C	Reduce diffuse pollution through advice and available capital grants. A high proportion of each of the four catchments is under high nutrient input land use including adjoining buffer land e.g. maize/arable fields adjacent to Clarepool Moss and Wybunbury Moss.	£20,000	2015-20	England Catchment Sensitive Farming (CSF)	Rural Development Programme (RDPE)	Natural England	n/a
1D	Reduce the high proportion of each of the four catchments under high nutrient input land use including by targeting the promotion of agri-environment agreements at all adjoining buffer land e.g. maize /arable fields adjacent to Clarepool Moss and Wybunbury Moss.	£40,000	2015-20	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	n/a
1E	Identify existing septic tanks contributing excess nutrients to Clarepool Moss and Wybunbury Moss and seek to improve these discharges.	£7,000	2015-16	Diffuse Water Pollution Plan	Environment Agency, Natural England, Water Framework Directive (WFD)	Not yet determined	Environment Agency, Natural England

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Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1F	Reduce eutrophication affecting Abbots Moss SSSI (including Gull Pool) by reviewing and revising the land drainage system and fertiliser/nutrient management on the adjacent Delamere Nursery.	£15,000	2014-15	Non-Natural England funded site management plan	Natural England, Water Framework Directive (WFD), Forest Enterprise	Local partnership	Forest Enterprise, Natural England
1G	Improve the understanding of the eutrophication of shallow groundwater, at and around, Abbots Moss by continuing to monitor and analyse borehole data.	£5,000	2014-15	Investigation / Research / Monitoring	Environment Agency, Natural England, Water Framework Directive (WFD)	Environment Agency	Natural England
2 Hydrological changes							
All of the component areas of transition mire are impacted by historic drainage. At Clarepool, Chartley and Wybunbury Mosses some of this damage has been partially repaired but further measures to restore a naturalised hydrology are needed in all locations. As well as surface water, ground water is also an important water supply mechanism to the mosses. Hence the SAC is vulnerable to groundwater abstractions and artificial flooding as well as catchment drainage.							
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2A	Negotiate to secure required water levels by installing/enhancing existing long-term water control structures. Clarepool Moss may require an enhanced and more robust water control structure.	Not yet determined	2016-18	Advice: Negotiation	Natural England	Natural England	Environment Agency

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Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2B	Install new and enhance existing long-term water control structures to secure required water levels. At Chartley Moss a review of the existing water control network to consider the potential for enhancement is proposed.	£20,000	2016-18	National Nature Reserve (NNR) management plan	Natural England	Natural England	n/a
3 Air Pollution: impact of atmospheric nitrogen deposition							
Nitrogen deposition exceeds site relevant critical loads.							
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
3A	Control, reduce and ameliorate atmospheric nitrogen impacts.	Not yet determined	2014-20	Site Nitrogen Action Plan	Not yet determined	Not yet determined	Not yet determined
4 Inappropriate scrub control							
The transition mire habitat at each of the component sites experiences continual re-colonisation by scrub, typically birch and pine as a consequence of past hydrological change e.g. historical drainage and cumulative nutrient enrichment together with readily available seed sources. The presence of excessive amounts of scrub and trees affects the mire habitat by increasing the rate of drying out and by the addition of nutrients.							
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
4A	Manage regrowth on recently felled areas and further reduce the extent of mature tree cover on pre-drainage former transition mire habitat at Chartley Moss and Wynbunbury Moss.	£65,000	2015-17	National Nature Reserve (NNR) management plan	Natural England	Natural England	n/a

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Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
5 Game management: pheasant rearing							
Nutrient enrichment in the areas of pheasant pens and disturbance to ground flora from game birds are a local issue at Clarepool and Chartley Mosses. Erosion may be caused by shoot activities and access restrictions due to shooting can restrict rewetting and conservation management activities.							
5A	Review pheasant rearing practices and where they affect SAC features negotiate and agree improvements.	Not yet determined	2015	Advice: Other	Natural England	Natural England	n/a
6 Forestry and woodland management							
Inappropriate woodland management, for example the restocking of land in close proximity to Abbots Moss could cause shade, nutrient enrichment and enhanced evapotranspiration and serve as an undesirable seed source for scrub (e.g. Pine) encroachment.							
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
6A	Establish an improved open buffer zone around Abbots Moss free of tree planting necessary to improve the lagg zone, reduce evapotranspiration losses, minimise tree seeding risk, and reduce shading.	Not yet determined	2014	Advice	Forest Enterprise	Forest Enterprise	n/a
7 Habitat fragmentation							
The sites are small and geographically isolated from each other. The threat of localised species extinction is greater and so the chances of recolonisation by lost species is very low. An example of this is provided by the extinction from Abbots Moss and Wynbunbury Moss in recent decades of the white-faced darter dragonfly, a species dependent on dystrophic pools. The nearest donor population is more than 20 miles away.							
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
7A	Adopt a landscape partnership approach in seeking improvements to buffer and catchment land and species and habitat stepping stone peatland sites eg Delamere Lost Mosses Partnership for Abbots Moss and the Meres and Mosses NIA with respect to Clarepool Moss and Wybunbury Moss.	£150,000	2015-24	Partnership agreement: Other	Rural Development Programme (RDPE), Heritage Lottery Fund (HLF), Landfill tax	Meres and Mosses NIA	Cheshire Wildlife Trust, Forest Enterprise, Natural England, Shropshire Wildlife Trust, Staffordshire Wildlife Trust

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Site details	
<i>The tables in this section contain site-relevant contextual information and links</i>	
Qualifying features	
#UK Special responsibility	
West Midlands Mosses SAC	H3160 Natural dystrophic lakes and ponds H7140 Transition mires and quaking bogs
Site location and links	
West Midlands Mosses SAC	
Area (ha) 184.18	Grid reference SK026282 Map link
Local Authorities	Cheshire; Shropshire; Staffordshire
Site Conservation Objectives	European Site Conservation Objectives for West Midlands Mosses SAC
European Marine Site conservation advice	n/a
Regulation 33/35 Package	n/a
Marine Management Organisation site plan	n/a

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Water Framework Directive (WFD)	
<i>The Water Framework Directive (WFD) provides the main framework for managing the water environment throughout Europe. Under the WFD a management plan must be developed for each river basin district. The River Basin Management Plans (RBMP) include a summary of the measures needed for water dependent Natura 2000 sites to meet their conservation objectives. For the second round of RBMPs, SIPs are being used to capture the priorities and new measures required for water dependent habitats on Natura 2000 sites. SIP actions for non-water dependent sites/habitats do not form part of the RBMPs and associated consultation.</i>	
<i>Additional information is provided on targets for flow and some water quality parameters, in order to meet the conservation objectives for certain Natura 2000 sites. The relevant targets are identified in the revised conservation objectives document (see link to PDF below).</i>	
<i>These targets have been revised for a number of Natura 2000 rivers and lakes, following a review by the conservation agencies of Common Standards Monitoring Guidance. For rivers, this is done through local discussions between Natural England and Environment Agency staff. For lake sites, the only parameter where alignment of standards was reviewed was phosphorus and so this work was undertaken jointly at a national level.</i>	
<i>The linked PDF documents include the proposed target values, and also set out an 'interim progress goal', that will need to be achieved by 2021. Where sufficient information is available the document also identifies a timescale for achievement of the longer-term target. For any sites where it has not been possible to agree specific targets, usually because further technical work is required, these will be indicated in the documents by an asterisk. For further information please see Part 2 of the River Basin Plan</i>	
West Midlands Mosses SAC	
River basin	Humber RBMP
WFD Management catchment	Trent Valley Staffordshire
WFD Waterbody ID (Cycle 2 draft)	n/a
Locally revised Conservation Objectives	n/a
Additional information on locally revised Conservation Objectives	n/a
EA/ NE agreed RBMP lake SAC targets	Proposed total phosphorus targets for Lake Natura 2000 Protected Area Special Areas of Conservation for the updated river basin management plan consultation
River Restoration Plan	
<i>Source of information on river restoration plans for SAC rivers where these are in place or planned, with links to documentation where this is available.</i>	
Webpage link: Restoring Designated Rivers	n/a
River Restoration Plan document	n/a
River basin	North West RBMP
WFD Management catchment	Weaver/Goway

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WFD Waterbody ID (Cycle 2 draft)	n/a
Locally revised Conservation Objectives	n/a
Additional information on locally revised Conservation Objectives	n/a
EA/ NE agreed RBMP lake SAC targets	n/a
River Restoration Plan	
Source of information on river restoration plans for SAC rivers where these are in place or planned, with links to documentation where this is available.	
Webpage link: Restoring Designated Rivers	n/a
River Restoration Plan document	n/a
River basin	Severn RBMP
WFD Management catchment	Shropshire Middle Severn
WFD Waterbody ID (Cycle 2 draft)	n/a
Locally revised Conservation Objectives	n/a
Additional information on locally revised Conservation Objectives	n/a
EA/ NE agreed RBMP lake SAC targets	n/a
River Restoration Plan	
Source of information on river restoration plans for SAC rivers where these are in place or planned, with links to documentation where this is available.	
Webpage link: Restoring Designated Rivers	n/a
River Restoration Plan document	n/a

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Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
West Midlands Mosses SAC	Clarepool Moss SSSI
	Chartley Moss SSSI
	Abbots Moss SSSI
	Wybunbury Moss SSSI
National Nature Reserve (NNR)	
West Midlands Mosses SAC	Chartley Moss NNR
	Wybunbury Moss NNR
Ramsar	
West Midlands Mosses SAC	Midland Meres & Mosses Phase 1
	Midland Meres & Mosses Phase 2
Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
West Midlands Mosses SAC	n/a

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Version	Date	Comment
1.0	10/10/2014	

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Mersey Estuary SPA and Ramsar

Improvement Programme for England's Natura 2000 Sites (IPENS)
Planning for the Future

Site Improvement Plan

Mersey Estuary

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This Site Improvement Plan covers the following Natura 2000 site(s)

UK9005131 Mersey Estuary SPA

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Site description

The Mersey Estuary is a large sheltered estuary and comprises an unusual configuration with a narrow mouth and wide shallow basin. It is composed of extensive intertidal mud and sandflats on the northern and southern shores of the estuary, distinct areas of rocky shore and areas of saltmarsh which are constantly eroding and accreting.

The saltmarsh areas are either firm sandy areas or are riddled with muddy creeks. The large areas of intertidal sand and mudflats are submerged at high tide, and exposed in the estuary at low tide providing an important feeding habitat for birds. The estuary also provides extensive roosting sites for large populations of waterbirds and is of major importance during the winter for duck and wader species and for supporting wader populations moving along the west coast of Britain during the spring and autumn migration periods.

Plan Summary

This table shows the prioritised issues for the site(s), the features they affect, the proposed measures to address the issues and the delivery bodies whose involvement is required to deliver the measures. The list of delivery bodies will include those who have agreed to the actions as well as those where discussions over their role in delivering the actions is on-going.

Priority & Issue	Pressure or Threat	Feature(s) affected	Measure	Delivery Bodies
1 Changes in species distributions	Pressure	A048(NB) Common shelduck, A052(NB) Eurasian teal, A054(NB) Pintail, A140(NB) Golden Plover, A149(NB) Dunlin, A156(NB) Black-tailed Godwit, A162(NB) Common redshank, Waterbird assemblage	Site-specific analysis to ascertain reasons for bird declines	Natural England, RSPB, British Trust for Ornithology (BTO)
2 Invasive species	Pressure/Threat	A048(NB) Common shelduck, A052(NB) Eurasian teal, A054(NB) Pintail	Explore management options for Canada geese and monitor for other invasive non-native species	Liverpool City Council, Natural England, RSPB
3 Public Access/Disturbance	Pressure	A054(NB) Pintail, A140(NB) Golden Plover, A156(NB) Black-tailed Godwit, A162(NB) Common redshank	Engage with the public to minimise disturbance	Halton Borough Council, Liverpool City Council, Natural England

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Issues and Actions

This table outlines the prioritised issues that are currently impacting or threatening the condition of the features, and the outstanding actions required to address them. It also shows, where possible, the estimated cost of the action and the delivery bodies whose involvement will be required to implement the action. Lead delivery bodies will be responsible for coordinating the implementation of the action, but not necessarily funding it. Delivery partners will need to support the lead delivery body in implementing the action. In the process of developing the SIPs Natural England has approached the delivery bodies to seek agreement on the actions and their roles in delivering them, although in some cases these discussions have not yet been concluded. Other interested parties, including landowners and managers, will be involved as the detailed actions are agreed and delivered. Funding options are indicated as potential (but not necessarily agreed or secured) sources to fund the actions.

1 Changes in species distributions

Recently commissioned reports indicate there have been large decreases in bird numbers on this SPA compared to local SPAs and regional trends. There is a need to investigate and understand reasons for these changes.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Investigate bird declines.	£30,000	2015-17	Investigation / Research / Monitoring	Natural England	Natural England	RSPB, British Trust for Ornithology (BTO)

2 Invasive species

The population of Canada geese has significantly increased on the site introducing resource competition with some bird species e.g. via increased grazing and increased nutrient pressure. There is a threat from the spread and increase in density of invasive non-native species, such as Chinese mitten crab.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2A	Investigate management options for Canada geese.	£10,000	2015-18	Invasive Control Plan: Invasive Species Control Programme	Natural England	Natural England	Liverpool City Council, RSPB
2B	Monitor the estuary for evidence of mitten crab, and investigate its potential impact on the site's features.	£20,000	2015-18	Invasive Control Plan: Invasive Species Control Programme	Natural England	Natural England	North Western Inshore Fisheries Conservation Authority (IFCA)

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3 Public Access/Disturbance

Users of public footpaths immediately adjacent to the north shore of the site can cause disturbance to birds roosting and feeding at this location.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
3A	Minimise disturbance by recreational users via signage, awareness raising and education.	£10,000	2016	Advice: Education & awareness raising	Natural England	Natural England	Halton Borough Council, Liverpool City Council

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Site details	
<i>The tables in this section contain site-relevant contextual information and links</i>	
Qualifying features	
#UK Special responsibility	
Mersey Estuary SPA	A052(NB) <i>Anas crecca</i> : Eurasian teal
	A048(NB) <i>Tadorna tadorna</i> : Common shelduck
	A054(NB) <i>Anas acuta</i> : Northern pintail
	A140(NB) <i>Pluvialis apricaria</i> : European golden plover
	A156(NB) <i>Limosa limosa islandica</i> : Black-tailed godwit
	A162(NB) <i>Tringa totanus</i> : Common redshank
	A149(NB) <i>Calidris alpina alpina</i> : Dunlin
Site location and links	
Mersey Estuary SPA	
Area (ha) 5023.35	Grid reference SJ451800 Map link
Local Authorities	Cheshire; Halton; Liverpool; Wirral
Site Conservation Objectives	Mersey Estuary SPA
European Marine Site conservation advice	Mersey Estuary SPA
Regulation 33/35 Package	Regulation 33/35 package link
Marine Management Organisation site plan	n/a

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Water Framework Directive (WFD)	
<i>The Water Framework Directive (WFD) provides the main framework for managing the water environment throughout Europe. Under the WFD a management plan must be developed for each river basin district. The River Basin Management Plans (RBMP) include a summary of the measures needed for water dependent Natura 2000 sites to meet their conservation objectives. For the second round of RBMPs, SIPs are being used to capture the priorities and new measures required for water dependent habitats on Natura 2000 sites. SIP actions for non-water dependent sites/habitats do not form part of the RBMPs and associated consultation.</i>	
Mersey Estuary SPA	
River basin	North West North West RBMP
WFD Management catchment	Mersey Estuary, Weaver/Goway
WFD Waterbody ID (Cycle 2 draft)	GB112068060330, GB112068060350

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Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Mersey Estuary SPA	New Ferry SSSI Mersey Estuary SSSI
National Nature Reserve (NNR)	
Mersey Estuary SPA	n/a
Ramsar	
Mersey Estuary SPA	Mersey Estuary
Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Mersey Estuary SPA	n/a

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Version	Date	Comment
0.3	15/10/2014	

www.naturalengland.org.uk/ipens2000



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Appendix 2 Red List Bird Species Recorded at Carrington Moss

(Source: <https://friendsofcarringtonmoss.com/endangered-species/>)

- House sparrow
- Tree sparrow
- Willow Tit
- Starling
- Ring Ouzel
- Spotted Flycatcher
- Cuckoo
- Grey Wagtail
- Linnet
- Cornbunting
- Whinchat
- Grasshopper Warbler
- Fieldfare
- Skylark
- Grey Partridge
- Yellow Hammer
- Song Thrush
- Mistle Thrush
- Redwing
- Lapwing
- Yellow Wagtail
-

Kirkwells

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