

Habitats Regulations Assessment of the Wirral Local Plan 2021-2037

Regulation 19

Wirral Metropolitan Borough Council

Project number: 60610735

April 2022

Quality information

Prepared by	Checked by	Verified by	Approved by
Dr Damiano Weitowitz Senior HRA Specialist ACIEEM	Dr James Riley Technical Director CEnv MCIEEM	Max Wade Technical Director	Dr James Riley Technical Director

Revision History

Revision	Revision date	Details	Authorized	Name	Position
0	October 2021	Draft for MEAS JR and Council review		Dr James Riley	Technical Director
1	February 2022	Update in JR response to Plan changes and MEAS / client comments		Dr James Riley	Technical Director

Distribution List

# Hard Copies	PDF Required	Association / Company Name

Prepared for:

Wirral Metropolitan Borough Council

Prepared by:

Damiano Weitowitz
Senior Ecologist
M: 077-959-179-87
E: Damiano.Weitowitz@aecom.com

AECOM Limited
Midpoint, Alencon Link
Basingstoke
Hampshire RG21 7PP
United Kingdom

T: +44(0)1256 310200
aecom.com

© 2022 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

1. Background	8
Introduction.....	8
Legislation	9
Scope of the Project.....	10
Quality Assurance	12
2. Methodology	14
Introduction.....	14
Description of HRA Tasks.....	14
HRA Task 1 – Test of Likely Significant Effects (ToLSE).....	14
HRA Task 2 – Appropriate Assessment (AA)	15
HRA Task 3 – Avoidance and Mitigation	15
3. Background to Impact Pathways.....	17
Recreational Pressure	17
Non-breeding birds (September to March)	18
Breeding Birds (April to September)	20
Trampling damage, erosion and nutrient enrichment	21
Conclusion.....	22
Loss of Functionally Linked Habitat	23
Water Quality	24
Water Quantity, Level and Flow	26
Visual and Noise Disturbance from Construction Works (both in European sites and Functionally Linked Habitats).....	28
Coastal Squeeze.....	29
Atmospheric Pollution	30
4. Test of Likely Significant Effects (ToLSE)	34
Recreational Pressure in European Sites and Functionally Linked Habitat	34
Policy Screening	36
Loss of Functionally Linked Habitat	37
Policy Screening	38
Water Quality	39
Policy Screening	41
Water Quantity, Level and Flow	43
Policy Screening	45
Visual and Noise Disturbance from Construction Works	46
Policy Screening	48
Coastal Squeeze.....	49
Policy Screening	50
Atmospheric Pollution	51
Policy Screening	55
Plans / projects to be Considered In-Combination	56
5. Appropriate Assessment	59
Summary of growth allocated in the WLP	59
Recreational Pressure (in European Sites and Functionally Linked Habitats)	59
Mersey Narrows and North Wirral Foreshore SPA and Ramsar – Description and Background Evidence.....	59
Visitor Survey	60
Relating Visitor Data to Bird Responses	60
Review of current management practices.....	61
Dee Estuary SPA and Ramsar – Description and Background Evidence.....	62

Liverpool Bay SPA – Description and Background Evidence	63
Mersey Estuary SPA and Ramsar – Description and Background Evidence	63
Ribble and Alt Estuaries SPA and Ramsar – Description and Background Evidence	64
Dee Estuary SAC – Description and Background Evidence.....	65
Sefton Coast SAC – Description and Background Evidence.....	66
Implications of Wirral Local Plan Growth Alone	67
In-combination Assessment	70
Recreation Mitigation and Avoidance Strategy (RMAS)	71
Interim Mitigation Approach.....	72
Mitigation Contained in the Local Plan.....	75
Conclusions and Recommendations	75
Loss of Functionally Linked Habitat	75
Mersey Narrows and North Wirral Foreshore SPA and Ramsar, Dee Estuary SPA and Ramsar, Mersey Estuary SPA and Ramsar and Ribble and Alt Estuaries SPA and Ramsar	76
Dependence of Qualifying Species on Functionally Linked Habitats	76
Site Allocation Assessment	80
Mitigation Contained in the Local Plan.....	86
Conclusions and Recommendations	86
Water Quality	87
Sensitivity of the Dee Estuary SAC / Dee Estuary SPA and Ramsar	87
Sensitivity of the Mersey Estuary SPA and Ramsar	88
Sensitivity of the Mersey Narrows and North Wirral Foreshore SPA and Ramsar	88
Sensitivity of the Liverpool Bay SPA	89
Sensitivity of the Ribble and Alt Estuaries SPA and Ramsar	89
In-Combination Assessment	90
Mitigation Contained in the Local Plan.....	91
Conclusions and Recommendations	91
Water Quantity, Level and Flow	92
Mitigation Contained in the Local Plan.....	93
Visual and Noise Disturbance from Construction Works	93
Conclusions and Recommendations	96
Coastal Squeeze.....	97
Mitigation Contained in the Local Plan.....	98
Atmospheric Pollution	98
Dee Estuary SAC, SPA and Ramsar	98
Geographic Setting and Commuter Traffic.....	98
6. Summary of Conclusions & Recommendations	100
Recreational Pressure	100
Recreational Pressure in Functionally Linked Habitat	101
Loss of Functionally Linked Habitat	102
Water Quality	102
Water Quantity, Level and Flow	102
Visual and Noise Disturbance from Construction (both in European sites and in functionally linked habitat).....	103
Coastal Squeeze.....	104
Atmospheric Pollution	104
Appendix A Maps.....	105
Appendix B Relevant European sites.....	106
Mersey Narrows & North Wirral Foreshore SPA and Ramsar	106
Introduction.....	106
SPA Qualifying Features	106

Ramsar Qualifying Features	106
Conservation Objectives	107
Threats / Pressures to Site Integrity.....	107
Dee Estuary SPA and Ramsar.....	108
Introduction.....	108
SPA Qualifying Features	108
Ramsar Qualifying Features	109
SPA Conservation Objectives	110
Threats / Pressures to Site Integrity.....	111
Dee Estuary SAC	111
Introduction.....	111
Qualifying Features	112
Conservation Objectives	112
Threats / Pressures to Site Integrity.....	112
Mersey Estuary SPA and Ramsar	113
Introduction.....	113
SPA Qualifying Features	113
Ramsar Qualifying Features	114
SPA Conservation Objectives	115
Threats / Pressures to Site Integrity.....	115
Liverpool Bay SPA	115
Introduction.....	115
Qualifying Features	115
Conservation Objectives	116
Threats / Pressure to Site Integrity	116
Ribble & Alt Estuaries SPA and Ramsar	117
Introduction.....	117
SPA Qualifying Features	117
Ramsar Qualifying Features	119
SPA Conservation Objectives	120
Threats / Pressure to Site Integrity	120
Sefton Coast SAC	121
Introduction.....	121
Qualifying Features	121
Conservation Objectives	122
Threats / Pressures to Site Integrity.....	122
River Dee & Bala Lake SAC.....	122
Introduction.....	122
Qualifying Features	123
Conservation Objectives	123
Threats / Pressures to Site Integrity.....	123
Halkyn Mountain SAC.....	124
Introduction.....	124
Qualifying Features	124
Conservation Objectives	124
Threats / Pressure to Site Integrity	125
Deeside and Buckley Newt Sites SAC	125
Introduction.....	125
Qualifying Features	125
Conservation Objectives	125
Threats / Pressures to Site Integrity.....	126

River Eden SAC	126
Introduction.....	126
Qualifying Features	126
Conservation Objectives	127
Threats / Pressure to Site Integrity	127
Appendix C ToLSE of Wirral's Local Plan	128
Homes	128

Figures

Figure 1: The legislative basis for Appropriate Assessment	10
Figure 2: Four Stage Approach to Habitats Regulations Assessment. Source EC, 2001 ¹	14
Figure 3: Areas of water stress in England and Wales.	27
Figure 4: Traffic contribution to concentrations of pollutants at different distances from a road (Source: DfT).	33

Tables

Table 1: Tolerance distances in metres of 16 species of waterfowl to various forms of recreational disturbance, as found in recent disturbance fieldwork.	20
Table 2: Wastewater Treatment Works serving Wirral Borough, the potential growth accommodated and its HRA implications.	25
Table 3: Main sources and effects of air pollutants on habitats and species.	30
Table 4: Number of residential dwellings and employment space that are to be delivered in authorities adjacent to Wirral, according to their adopted Local Plans or Local Development Plans.	57
Table 5: Residential allocations within 1km distance of a SPA and Ramsar, detailing site capacities.	67
Table 6: Summary of qualifying waterfowl and wader species of the coastal and estuarine sites and their likelihood of using functionally linked habitat. Note that species marked with * are components of the overall qualifying waterbird assemblage for the respective European site.	76
Table 7: Housing and employment sites allocated in the emerging Wirral Local Plan, detailing parameters that are important in evaluating their potential significance as functionally linked habitats, such as habitat, size (ha), distance to the nearest SPA and Ramsar (m) and nature of the flightline to / from that site.	80
Table 8: Site allocations within 300m of a SPA and Ramsar, showing the most sensitive qualifying species in each site.	94
Table 9: Residential and employment allocations within 300m of the Birkenhead Docks (the West and East Float), a dock system identified as being functionally linked to Wirral's coastal / estuarine European sites.	96

Appendix A

Appendix 1: Map showing Regeneration Areas, employment and residential sites allocated in the Wirral Local Plan and the European sites within 10km of Wirral Borough.	105
--	-----

1. Background

Introduction

- 1.1 AECOM has been appointed by Wirral Metropolitan Borough Council (WBC) to undertake a Habitats Regulations Assessments (HRA) of the Reg.18 and Reg.19 Local Plans. In November 2019, AECOM undertook an HRA of the Wirral Local Plan 2020-2035: Issues and Options Consultation Document which was published for consultation in early 2020 under Regulation 18 of the Town and Country Planning (Local Planning) (England) Regulations 2012. A range of impact pathways were identified to be of concern to Wirral's coastal European sites, such as recreational pressure, loss of functionally linked habitat and water quality. However, at the Reg.18 stage, sites were not firmly allocated and detailed strategic policy wording was not available. Furthermore, some of the evidence underpinning the HRA process was yet to progress. This document undertakes HRA on the Reg.19 Wirral Local Plan, including all strategic policies and residential / employment site allocations.
- 1.2 The objective of an HRA is to identify any aspects of the Wirral Local Plan that would result in Likely Significant Effects (LSEs) and have the potential to cause an adverse effect on the integrity of European sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and, as a matter of Government policy, Ramsar sites), either in isolation or in combination with other plans and projects. Furthermore, it is to advise on appropriate policy mechanisms for delivering mitigation where such effects are identified. Under the terms of the Conservation of Habitats and Species Regulations 2017 (as amended), an Appropriate Assessment of impact pathways is required, where a plan or project is likely to have a Likely Significant Effect (LSE) upon a European Site, either individually or 'in combination' with other plans and projects.
- 1.3 The new Wirral Local Plan will cover the years 2021 to 2037, which on adoption will replace the previous Unitary Development Plan for Wirral adopted in February 2000. It will set out the policies and proposals to guide the future development of the Borough during this period. Particularly the Local Plan will allocate land for housing, employment, mixed-use and other purposes. At the same time, the Plan will also seek to protect the important natural assets of Wirral, including its coastal European sites that are designated for a wide range of overwintering bird species and habitats. The Reg.19 Local Plan identifies the housing and employment needs (and other strategic objectives) for Wirral. It is projected that a minimum of 13,360 net new residential dwellings and 65.60ha of employment land will be delivered across the Borough within the Plan period.
- 1.4 In response to an evolving evidence base, Wirral Borough Council has chosen to deliver the required growth within Wirral through urban intensification, which delivers most development in urban areas without a requirement for Green Belt release. The chosen growth option seeks to deliver the growth through higher density development and converting some existing employment land to housing.
- 1.5 An initial assessment of the designated sites within and surrounding Wirral, and the impact pathways linking to proposed site allocations was undertaken for the Reg.18 HRA. This highlighted that several European sites require consideration, most notably Wirral's adjoining estuarine and coastal sites, including the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, Dee Estuary SPA and Ramsar, Dee Estuary SAC and Mersey Estuary SPA and Ramsar. The Liverpool Bay SPA mainly encompasses marine areas that support significant aggregations of seabirds and divers, but partly extends into the Mersey Estuary immediately adjoining Wirral Borough. These sites enclose the Wirral Peninsula (i.e. virtually all of Wirral's coast is designated as European sites) and provide a unique geographic setting that requires detailed appraisal.
- 1.6 Wirral Borough Council has produced a range of supporting documents to accompany and supplement the Wirral Local Plan 2021-2037, which explain and justify the approach to the delivery of planned growth and infrastructure. These include:
 - **Housing Delivery Strategy** - provides further clarification and explanation on all matters relating to the future strategy for the delivery of housing planned as part of the Local Plan

up to 2037, and where possible beyond. The document seeks to demonstrate how the key expectations of national planning policy and guidance have been addressed through the production of the Local Plan, with reference to evidence which has been collated to support the production and delivery of the Plan.

- **Infrastructure Delivery Plan** – identifies infrastructure to support growth from planned development. It identifies the costs of necessary infrastructure for development, how these costs will be met and provides information on how infrastructure will be delivered.
- **Viability Assessment** – provides an evidence base to assist in identifying the viability impacts of planning policies in the Local Plan, helping to ensure that the policies will not render development unviable and undeliverable.
- **Site Selection Report** – outlines the approach that the Council has taken to assessing and identifying sites and broad locations for allocation within the Local Plan.
- **Birkenhead 2040 Framework** – provides a framework for the transformational regeneration of Birkenhead.
- **Birkenhead Housing Market Study** – provides supporting evidence to inform and ultimately demonstrate and justify the delivery of proposals in the Local Plan for the regeneration of Birkenhead.

- 1.7 These documents should be read in conjunction with one another and may be updated over time as new evidence and information becomes available.

Legislation

- 1.8 The UK left the European Union (EU) on 31 January 2020 under the terms set out in the European Union (Withdrawal Agreement) Act 2020 (“the Withdrawal Act”). While the UK is no longer a member of the EU, a requirement for Habitats Regulations Assessment will continue as set out in the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019¹. Figure 1 below sets out the legislative basis for Appropriate Assessments.
- 1.9 The HRA process applies the ‘Precautionary Principle’² to European sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the European site(s) in question. Plans and projects with predicted adverse impacts on European sites may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.
- 1.10 In order to ascertain whether or not site integrity will be affected, an Appropriate Assessment should be undertaken of the plan or project in question:

Conservation of Habitats and Species Regulations 2017 (as amended)

The Regulations state that:

“A competent authority, before deciding to ... give any consent for a plan or project which is likely to have a significant effect on a European site ... shall make an appropriate assessment of the implications for the site in view of that site's conservation objectives... The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site”.

¹ these don't replace the 2017 Regulations but are just another set of amendments

² The Precautionary Principle, which is referenced in Article 191 of the Treaty on the Functioning of the European Union, has been defined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2005) as: “When human activities may lead to morally unacceptable harm [to the environment] that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. The judgement of plausibility should be grounded in scientific analysis”.

Figure 1: The legislative basis for Appropriate Assessment

- 1.11 Over time the phrase 'Habitats Regulations Assessment' (HRA) has come into wide currency to describe the overall process set out in the Regulations from screening through to IROPI. This has arisen in order to distinguish the process from the individual stage described in the law as an 'Appropriate Assessment'.
- 1.12 In spring 2018 the 'Sweetman' European Court of Justice ruling³ clarified that 'mitigation' (i.e. measures that are specifically introduced to avoid or reduce a harmful effect on a European site that would otherwise arise) should **not** be taken into account when forming a view on likely significant effects. Mitigation should instead only be considered at the Appropriate Assessment stage. This HRA has been cognisant of that ruling.

Scope of the Project

- 1.13 There is no pre-defined guidance that dictates the physical scope of an HRA of a Plan document. Current guidance suggests that the following European sites should be included in the scope of an HRA assessment:
 - All European sites within the boundary of the Borough of Wirral; and,
 - Other European sites within 10km shown to be linked to development in Wirral through a known 'pathway' (discussed below).
- 1.14 Generally, it is uncommon for development plans to be deemed to have a significant effect on European sites situated more than 10km from areas of growth. For example, most core recreational catchments (except for some coastal sites) are under 10km in size, there are few wintering waterfowl and waders that make extensive use of functionally linked habitats located more than 10km from their core areas, and the average vehicle commuting distance of a UK resident is approx. 10km. It should be noted that the presence of a conceivable impact pathway linking the Wirral Local Plan to a European site does not mean that Likely Significant Effects (LSEs) will occur.
- 1.15 In some cases, development impacts can extend beyond 10km, particularly where hydrological pathways are involved, which is why the source-pathway-receptor concept is also used to help determine whether there are potential pathways connecting development to European sites. This takes site-specific sensitivities into account, including issues such as nutrient neutrality or water levels, quantity and flow. In this HRA, this was specifically taken into account regarding the water levels in River Eden SAC, which lies far beyond 10km from the Wirral boundary (see below).
- 1.16 Briefly defined, impact pathways are routes by which the implementation of a policy within a Local Plan document can lead to an effect upon a European designated site. An example of this would be new residential development resulting in an increased population and thus increased recreational pressure, which could then affect European sites by, for example, disturbance to non-breeding or breeding birds. Guidance from the Ministry of Housing, Communities and Local Government (MHCLG) states that the HRA should be '*proportionate to the geographical scope of the [plan policy]*' and that '*an AA need not be done in any more detail, or using more resources, than is useful for its purpose*' (MHCLG, 2006, p.6).
- 1.17 This basic principle has also been reflected in court rulings. The Court of Appeal⁴ has ruled that providing the Council (competent authority) was duly satisfied that proposed mitigation could be 'achieved in practice' to satisfy that the proposed development would have no adverse effect, then this would suffice. This ruling has since been applied to a planning permission (rather than a Core Strategy document)⁵. In this case the High Court ruled that for '*a multistage process, so long as there is sufficient information at any particular stage to enable the authority to be satisfied that the proposed mitigation can be achieved in practice it is not necessary for all matters*

³ People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

⁴No Adastral New Town Ltd (NANT) v Suffolk Coastal District Council Court of Appeal, 17th February 2015

⁵High Court case of R (Devon Wildlife Trust) v Teignbridge District Council, 28 July 2015

concerning mitigation to be fully resolved before a decision maker is able to conclude that a development will satisfy the requirements of Reg 61 of the Habitats Regulations’.

- 1.18 Given an initial assessment of the relevant European sites and the impact pathways present, and referring to the HRA work that was undertaken for the Reg.18 stage of the Local Plan, this HRA will discuss (at least as far as the ToLSE) the following European sites:
- Mersey Narrows and North Wirral Foreshore SPA and Ramsar (partly within Wirral, along its northern and eastern shoreline);
 - Dee Estuary SPA and Ramsar (partly within Wirral, along its western shoreline);
 - Mersey Estuary SPA and Ramsar (partly within Wirral, along its eastern shoreline);
 - Dee Estuary SAC (partly within Wirral, along its western and northern shoreline);
 - Liverpool Bay SPA (partly within Wirral, along its northern coastline);
 - Ribble and Alt Estuaries SPA and Ramsar (approx. 1.6km to the north-east of Wirral);
 - Sefton Coast SAC (approx. 1.6km to the north-east of Wirral);
 - Halkyn Mountain SAC (approx. 5.7km to the south-west of Wirral);
 - River Dee and Bala Lake SAC (approx. 7.3km to the south of Wirral);
 - Deeside and Buckley Newt Sites SAC (approx. 9.1km to the south of Wirral); and
 - River Eden SAC (beyond 10km of Wirral, but identified as a key source of potable water for the Liverpool City Region)
- 1.19 As part of the HRA process, the views of the statutory nature conservation advisors, namely Natural England and Natural Resources Wales, will be sought as part of the consultation process on the scope of the European sites assessed.
- 1.20 The distribution of the above European sites in relation to the Borough of Wirral is shown in Appendix A. An introduction to, the qualifying features (species and habitats), Conservation Objectives, and threats and pressures to the integrity of these European sites are set out in the Appendix B of this report.
- 1.21 In order to fully inform the ToLSE process, several studies and online information databases have been consulted to determine any Likely Significant Effects (LSEs) that could arise from the Wirral Local Plan. These include:
- Future development proposed (and, where available, HRAs) for the adjoining authorities of Flintshire, Cheshire West and Chester, Halton, Liverpool and Chester;
 - Road traffic statistics from the Department for Transport (<https://roadtraffic.dft.gov.uk>);
 - Journey-to-work data from the Population Census 2011 (<https://www.nomisweb.co.uk/census/2011/WU03UK>);
 - Visitor surveys and bird disturbance fieldwork carried out by Thomson Ecology⁶ and Footprint Ecology⁷, covering the North Wirral and Mersey Narrows Foreshore SPA and Ramsar, the Dee Estuary SPA and Ramsar, the Mersey Estuary SPA and Ramsar, and the Ribble and Alt Estuaries SPA and Ramsar;
 - Emerging Statements of Common Ground (SoCGs) between Merseyside authorities and Natural England regarding interim approaches to managing recreational pressure (e.g. Liverpool City)

⁶ Thomson Ecology. (2015). Mersey Narrows and North Wirral Foreshore Sites of Special Scientific Interest – Investigation into the Impacts of Recreational Disturbance on Bird Declines. 107pp.

⁷ Liley D., Panter C., Marsh P. & Roberts J. (2017). Recreational activity and interactions with birds within the SSSIs on the North-West coast of England. Unpublished report by Footprint Ecology for Natural England.

- Study into habitats that are functionally linked to coastal SPAs and Ramsars in north-west England undertaken by Natural England;
- Bird surveys assessing supporting habitats in the Liverpool City Region commissioned by the Merseyside Environmental Advisory Service⁸;
- The HRA produced for the Reg.18 Issues and Options Wirral Local Plan;
- Core Management Plans (for Welsh sites), Site Improvement Plans and Supplementary Conservation Advice Notes (for English sites) for relevant European sites;
- The UK Air Pollution Information System (www.apis.ac.uk); and
- Multi Agency Geographic Information for the Countryside (MAGIC) and its links to SSSI citations and the JNCC website (www.magic.gov.uk).

Quality Assurance

- 1.22 This report was undertaken in line with AECOM's Integrated Management System (IMS). Our IMS places great emphasis on professionalism, technical excellence, quality, environmental and Health and Safety management. All staff members are committed to establishing and maintaining our certification to the international standards BS EN ISO 9001:2008 and 14001:2004 and BS OHSAS 18001:2007. In addition, our IMS requires careful selection and monitoring of the performance of all sub-consultants and contractors.
- 1.23 All AECOM Ecologists working on this project are members (at the appropriate level) of the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow their code of professional conduct (CIEEM, 2019).

⁸ TEP. (2015). Assessment of Supporting Habitat (Docks) for Use by Qualifying Features of Natura 2000 Sites in the Liverpool City Region. Ornithology Report. 330pp. and available at: <http://www.meas.org.uk/1088> [Accessed on the 30/11/2020]

- 1.24 This report has also been reviewed by Merseyside Environmental Advisory Service (MEAS) staff who are technical advisors to Wirral on environmental planning matters. The MEAS staff undertaking the review are all full Members of CIEEM.

2. Methodology

Introduction

- 2.1 The HRA has been carried out with reference to the general EC guidance on HRA⁹, general guidance on HRA published by government in July 2019¹⁰ and the Welsh Government's guidance on HRA: Technical Advice Note 5 (Nature Conservation and Planning) 2009 and The Planning Series: 16 – Habitats Regulations Assessment (since some Welsh European sites are involved). AECOM has also been mindful of the implications of European case law in 2018, notably the Holohan ruling and the People over Wind ruling, both discussed below.
- 2.2 Figure 2 below outlines the stages of HRA according to current EC guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the plan until no significant adverse effects remain.

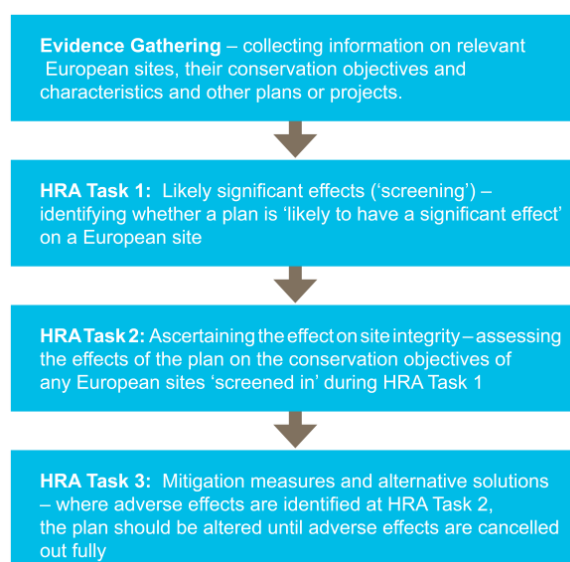


Figure 2: Four Stage Approach to Habitats Regulations Assessment. Source EC, 2001¹.

Description of HRA Tasks

HRA Task 1 – Test of Likely Significant Effects (ToLSE)

- 2.3 Following evidence gathering, the first stage of any Habitats Regulations Assessment is the Test of Likely Significant Effects (ToLSE) - essentially a high-level assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:
- "Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"*
- 2.4 The objective is to filter out those plans and projects that can, without any detailed appraisal, be concluded to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction with European sites. This stage is undertaken in Chapter 4 of this report and in Appendix A.

⁹ European Commission (2001): Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive.

¹⁰ <https://www.gov.uk/guidance/appropriate-assessment>

HRA Task 2 – Appropriate Assessment (AA)

- 2.5 Where it is determined that a conclusion of ‘no Likely Significant Effect (LSE)’ cannot be drawn, the analysis proceeds to the next stage of HRA known as Appropriate Assessment. Case law has clarified that ‘Appropriate Assessment’ is not a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to Appropriate Assessment in contrast to the ToLSE.
- 2.6 By virtue of the fact that it follows ToLSE, there is a clear implication that the analysis will be more detailed than undertaken at the previous stage. One of the key considerations during Appropriate Assessment is whether there is available mitigation that would entirely address the potential effect. In practice, the Appropriate Assessment would take any policies or allocations that could not be dismissed following the high-level ToLSE analysis and assess the potential for an effect in more detail, with a view to concluding whether there would be a potential for an adverse effect on site integrity (in other words, disruption of the coherent structure and function of the European site(s)). A decision by the European Court of Justice¹¹ concluded that measures intended to avoid or reduce the harmful effects of a proposed plan or project on a European site may no longer be considered by competent authorities at the ToLSE stage of HRA. That ruling has been taken into account in producing this HRA.
- 2.7 Also, in 2018 the Holohan ruling¹² was handed down by the European Court of Justice. Among other provisions paragraph 39 of the ruling states that ‘*As regards other habitat types or species, which are present on the site, but for which that site has not been listed, and with respect to habitat types and species located outside that site, ... typical habitats or species must be included in the appropriate assessment, if they are necessary to the conservation of the habitat types and species listed for the protected area*’ [emphasis added]. Due account of this decision has been given in this HRA, particularly in relation to the Birkenhead Docks, which are considered to be functionally linked habitats because they are used by qualifying birds of nearby SPA and Ramsar sites.

HRA Task 3 – Avoidance and Mitigation

- 2.8 Where necessary, measures are recommended for incorporation into the Plan in order to mitigate and / or avoid adverse effects on European sites. There is considerable precedent concerning the level of detail that a Local Plan document needs to contain regarding mitigation for impact pathways on European sites (e.g. regarding recreational pressure). The implication of this precedent is that it is not necessary for all measures to be fully developed prior to adoption of the Plan, but the Plan must provide an adequate policy framework within which these measures can be delivered.
- 2.9 When discussing ‘mitigation’ for a Local Plan, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the details of the mitigation measures themselves since a Local Plan document is a high-level policy document.
- 2.10 In any Local Plan, there are numerous policies for which there is a limit to the degree of assessment that is possible at the plan level. This is because either:
- The policy in question does not contain any specifics as to what will be delivered or where, and so cannot be assessed in detail at the plan level. In these cases, the Appropriate Assessment focusses on precautionary mitigation that can be included in the plan to ensure that whatever proposals come forward will not result in adverse effects on integrity; or
 - The nature of potential impacts (e.g. visual and noise disturbance arising from construction or loss of functionally linked habitat) are related to how the development will be designed and constructed, and therefore cannot be assessed in detail at the plan level. In these instances, the Appropriate Assessment focusses on the available mitigation measures, the extent to which such measures would be achievable and

¹¹ People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

¹² Case C-461/17

effective and whether an adequate protective framework exists to ensure that the policy would not lead to an adverse effect on the integrity of any internationally designated sites.

- 2.11 In these instances, the advice of Advocate-General Kokott¹³ is also worth considering. She commented that: *'It would ...hardly be proper to require a greater level of detail in preceding plans [rather than planning applications] or the abolition of multi-stage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure'* [emphasis added].

¹³ Opinion of Advocate General Kokott, 9th June 2005, Case C-6/04. Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland, paragraph 49 <http://curia.europa.eu/juris/document/document.jsf?docid=58359&doclang=EN>

3. Background to Impact Pathways

3.1 The following impact pathways are considered relevant to Wirral's Local Plan:

- Recreational pressure (due to the local population growth);
- Loss of functionally linked habitat (habitat loss due to the potential allocation of greenfield sites for development);
- Water quality (due to increases in sewage effluent and industrial pollutant input);
- Water quantity, level and flow (as a result of increased water abstraction to serve Wirral's potable water demand),
- Visual and noise disturbance (due to construction activities, artificial lighting, other urban development);
- Coastal squeeze (due to the development of greenfield sites adjoining coastal or estuarine European sites); and
- Atmospheric pollution (due to an increase in the number of commuter journeys).

Recreational Pressure

3.2 There is concern over the cumulative impacts of recreation on key nature conservation sites in the UK, as most sites must fulfill conservation objectives while also providing recreational opportunity. Various research reports have provided compelling links between changes in housing and access levels, and impacts on European protected sites^{14,15}. This applies to any habitat, but recreational pressure from housing growth has particularly strong impacts in European sites designated for their bird interest. Different European sites are subject to different types of recreational pressures and have different vulnerabilities. HRAs of planning documents tend to focus on recreational sources of disturbance as a result of new residents¹⁶.

3.3 Studies across a range of species have shown that the effects from recreation can be complex. Human activity can affect birds either directly (e.g. by eliciting flight responses) or indirectly (e.g. through damaging their habitat or reducing their fitness in less obvious ways e.g. stress). The most obvious direct effect is that of immediate mortality such as death by shooting, but human activity can also lead to much subtler behavioural (e.g. alterations in feeding behaviour, avoidance of certain areas and use of sub optimal areas etc.) and physiological changes (e.g. an increase in heart rate). While these are less noticeable, they might result in major population-level changes by altering the balance between immigration / birth and emigration / death¹⁷.

3.4 Concern regarding the effects of disturbance on birds stems from the fact that they are expending energy unnecessarily and the time they spend responding to disturbance is time that is not spent feeding¹⁸. Disturbance therefore risks increasing energetic expenditure of birds while reducing their energetic intake, which can adversely affect the 'condition' and ultimately survival of the birds. Additionally, displacement of birds from one feeding site to others can increase the pressure on the resources available within the remaining sites, as they then must sustain a

¹⁴ Liley D, Clarke R.T., Mallord J.W., Bullock J.M. 2006a. The effect of urban development and human disturbance on the distribution and abundance of nightjars on the Thames Basin and Dorset Heaths. Footprint Ecology report for Natural England.

¹⁵ Liley D., Clarke R.T., Underhill-Day J., Tyldesley D.T. 2006b. Evidence to support the appropriate Assessment of development plans and projects in south-east Dorset. Footprint Ecology report for Dorset County Council.

¹⁶ The RTP1 report 'Planning for an Ageing Population' (2004) which states that 'From being a marginalised group in society, the elderly are now a force to be reckoned with and increasingly seen as a market to be wooed by the leisure and tourist industries. There are more of them and generally they have more time and more money.' It also states that 'Participation in most physical activities shows a significant decline after the age of 50. The exceptions to this are walking, golf, bowls and sailing, where participation rates hold up well into the 70s'.

¹⁷ Riley, J. 2003. Review of Recreational Disturbance Research on Selected Wildlife in Scotland. *Scottish Natural Heritage*.

¹⁸ Riddington, R. *et al.* 1996. The impact of disturbance on the behaviour and energy budgets of Brent geese. *Bird Study* 43:269-279

greater number of birds¹⁹. Moreover, the higher proportion of time a breeding bird spends away from its nest, the more likely it is that eggs will cool and the more vulnerable they, or any nestlings, are to predators. Recreational effects on ground-nesting birds are particularly severe, with many studies concluding that urban sites support lower densities of key species, such as stone curlew and nightjar²⁰²¹.

- 3.5 Several factors (e.g. seasonality, type of recreational activity) may have pronounced impacts on the nature of bird disturbance. Recreation disturbance in winter can be more impactful because food shortages make birds more vulnerable at this time of the year. In contrast, there are often fewer recreational users in the winter months and some effects of disturbance may be reduced because birds are not breeding. Evidence in the literature suggests that the magnitude of disturbance clearly differs between different types of recreational activities. For example, dog walking leads to a significantly higher reduction in bird diversity and abundance compared to hiking²². Scientific evidence also suggests that key disturbance parameters, such as areas of influence and flush distance, are significantly greater for dog walkers than hikers²³. Furthermore, differences in on-site route lengths and usage patterns likely imply that key spatial and temporal parameters (such as the area of a site potentially impacted and the frequency of disturbance) will also differ between recreational activities. This suggests that activity type is a factor that should be taken into account in HRAs.

Non-breeding birds (September to March)

- 3.6 Wirral Borough lies in the vicinity of five European sites that are designated for overwintering waterfowl and waders and breeding terns, including the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, the Dee Estuary SPA and Ramsar, the Mersey Estuary SPA and Ramsar, the Liverpool Bay SPA, and the Ribble and Alt Estuaries SPA and Ramsar. These qualifying species are all sensitive to recreational disturbance and this section focusses on academic research available on this functional group of birds.
- 3.7 Evans & Warrington found that on Sundays total water bird numbers (including shoveler and gadwall) were 19% higher on Stocker's Lake LNR in Hertfordshire and attributed this to observed greater recreational activity on surrounding water bodies at weekends relative to weekdays displacing birds into the LNR. However, in this study, recreational activity was not quantified in detail, nor were individual recreational activities evaluated separately.
- 3.8 Tuite et al²⁴ used a large (379 sites), long-term (10-year) dataset (September – March species counts) to correlate seasonal changes in wildfowl abundance with the presence of various recreational activities. They determined that the shoveler was one of the most sensitive species to recreational activities, such as sailing, windsurfing and rowing. Studies on recreation in the Solent have established that human leisure activities cause direct disturbance to wintering waterfowl populations²⁵²⁶.
- 3.9 A study on recreational disturbance in the Humber²⁷ assesses different types of noise disturbance on waterfowl referring to previous research relating to aircraft (see Drewitt 1999²⁸), traffic

¹⁹ Gill, J.A., Sutherland, W.J. & Norris, K. 1998. The consequences of human disturbance for estuarine birds. *RSPB Conservation Review* **12**: 67-72

²⁰ Clarke R.T., Liley D., Sharp J.M., Green R.E. 2013. Building development and roads: Implications for the distribution of stone curlews across the Brecks. *PLOS ONE*. doi:10.1371/journal.pone.

²¹ Liley D., Clarke R.T. 2003. The impact of urban development and human disturbance on the numbers of nightjar *Caprimulgus europaeus* on heathlands in Dorset, England. *Biological Conservation* **114**: 219-230.

²² Banks P.B., Bryant J.Y. 2007. Four-legged friend or foe? Dog walking displaces native birds from natural areas. *Biology Letters* **3**: 14pp.

²³ Miller S.G., Knight R.L., Miller C.K. 2001. Wildlife responses to pedestrians and dogs. 29: 124-132.

²⁴ Tuite, C.H., Hanson, P.R. & Owen, M. 1984. Some ecological factors affecting winter wildfowl distribution on inland waters in England and Wales and the influence of water-based recreation. *Journal of Applied Ecology* **21**: 41-62

²⁵ Footprint Ecology. 2010. Recreational Disturbance to Birds on the Humber Estuary.

²⁶ Footprint Ecology, Jonathan Cox Associates & Bournemouth University. 2010. Solent Disturbance and Mitigation Project – various reports.

²⁷ Fearnley H., Liley D. & Cruickshanks K. (2012) Results of Recreational Visitor Survey across the Humber Estuary. Footprint Ecology.

²⁸ Drewitt, A. (1999) Disturbance effects of aircraft on birds. *English Nature Reports*, Peterborough.

(Reijnen, Foppen, & Veenbaas 1997²⁹), dogs (Lord, Waas, & Innes 1997³⁰; Banks & Bryant 2007³¹) and machinery (Delaney et al. 1999; Tempel & Gutierrez 2003). It identifies that there is still relatively little work on the effects of different types of water-based craft and the impacts from jet skis, kite surfers, windsurfers etc (see Kirby et al. 2004 for a review³²). In general terms, both distance from the source of disturbance and the scale of the disturbance (noise level, group size) is likely to influence bird responses (Delaney et al. 1999³³; Beale & Monaghan 2005³⁴). On UK estuaries and coastal sites, a review of WeBS data showed that among the volunteer WeBS surveyors, driving of motor vehicles and shooting were the two activities most perceived to cause disturbance (Robinson & Pollitt 2002³⁵).

- 3.10 Disturbing activities present themselves on a continuum. Generally, activities that involve irregular, infrequent and loud noise events, movement or vibration are likely to be most disturbing. For example, the presence of dogs around water bodies generate substantial disturbance due to the type of habitats accessed (e.g. intertidal mudflats and saltmarsh), the area affected and dogs' impacts on bird behaviour. Birds are least likely to be disturbed by activities that involve regular, frequent, predictable and quiet patterns of sound, movement or vibration. The further any activity is from the birds, the less likely it is to result in disturbance. Overall, the factors that determine species responses to disturbance include species sensitivity, timing/duration of the recreational activity and the distance between source and receptor of disturbance.
- 3.11 As part of the Bird Aware Solent Project in southern England, a study monitoring bird disturbance across 20 different locations was undertaken between December 2009 and February 2010³⁶. This involved recording all recreational activities and relating these to behavioural responses of birds in pre-defined focal areas of intertidal habitat. The study recorded a total of 2,507 potential disturbance events, generating 4,064 species-specific behaviours. Roughly 20% of recorded events resulted in disturbance to waterfowl, including behaviours such as becoming alert, walking / swimming away, short flights (< 50m) or major flights. Generally, the likelihood of disturbance decreased with increasing distance to the disturbance stimulus (i.e. the recreational activity being undertaken). Importantly, the study also illustrated that recreational activities in the intertidal zone have the highest disturbance potential (41% of recorded events resulted in disturbance), followed by water-based activities (25%) and shore-based activities (12%).
- 3.12 The specific distance at which a species takes flight when disturbed is known as the 'tolerance distance' (also called the 'escape distance') and greatly differs between species. The tolerance distances of the study carried out for the Bird Aware project are summarised in Table 1. It is reasonable to assume from this evidence that disturbance is unlikely to be relevant at distances of beyond 300m. The data show that disturbance sensitivity differs between species, but that intra-specific variation is equally important. It was also examined how disturbance to different recreational activities varies between species, but for most species the number of recorded events was insufficient for comparison (except for brent goose, oystercatcher and redshank). Again, there may be inter-specific differences in responses to different types of recreation. For example, brent geese responded to dog walkers much further away than oystercatchers and redshanks.

²⁹ Reijnen, R., Foppen, R. & Veenbaas, G. (1997) Disturbance by traffic of breeding birds: evaluation of the effect and considerations in planning and managing road corridors. *Biodiversity and Conservation* **6**: 567-581.

³⁰ Lord, A., Waas, J.R. & Innes, J. (1997) Effects of human activity on the behaviour of northern New Zealand dotterel *Charadrius obscurus aquilonius* chicks. *Biological Conservation* **82**:15-20.

³¹ Banks, P.B. & Bryant, J.V. (2007) Four-legged friend of foe? Dog-walking displaces native birds from natural areas. *Biology Letters* **3**: 611-613.

³² Kirby, J.S., Clee, C. & Seager, V. (1993) Impact and extent of recreational disturbance to wader roosts on the Dee estuary: some preliminary results. *Wader Study Group Bulletin* **68**: 53-58.

³³ Delaney, D.K., Grubb, T.G., Beier, P., Pater, L.L.M. & Reiser, H. (1999) Effects of Helicopter Noise on Mexican Spotted Owls. *The Journal of Wildlife Management* **63**: 60-76.

³⁴ Beale, C.M. & Monaghan, P. (2005) Modeling the Effects of Limiting the Number of Visitors on Failure Rates of Seabird Nests. *Conservation Biology* **19**: 2015-2019.

³⁵ Robinson, J.A. & Pollitt, M.S. (2002) Sources and extent of human disturbance to waterbirds in the UK: an analysis of Wetland Bird Survey data, 1995/96 to 1998/99: Less than 32% of counters record disturbance at their site, with differences in causes between coastal and inland sites. *Bird Study* **49**: 205.

³⁶ Liley D., Stillman R. & Fearnley H. 2011. The Solent Disturbance and Mitigation Project Phase 2: Results of Bird Disturbance Fieldwork 2009/10. Report by Footprint Ecology for the Solent Forum.

Table 1: Tolerance distances in metres of 16 species of waterfowl to various forms of recreational disturbance, as found in recent disturbance fieldwork³⁷. The distances are provided both as a median and a range.

Species	Disturbance Distance (metres from Activity stimulus)					
	Median	Range	Cycling	Dog walking	Jogging	Walking
Brent goose	51.5	5 - 178	100	95	30	50
Oystercatcher	46	10 - 200	150	45		50
Redshank	44.5	75 - 150	125	50	40	58
Curlew	75	25 - 200				
Turnstone	50	5 - 100				
Coot	12	10 - 20				
Mute swan	12	8 - 50				
Grey plover	75	30 - 125				
Little egret	75	30 - 200				
Wigeon	75.5	20 - 125				
Dunlin	75	25 - 300				
Shelduck	77.5	50 - 140				
Great-crested grebe	100	50 - 100				
Lapwing	75	18 - 125				
Teal	60	35 - 200				
Mallard	25	10 - 50				

3.13 Mitigation measures to avoid recreational pressure effects usually involve a combination of access and habitat management, and the provision of alternative recreational space. Typically, Local Authorities (in their role as Competent Authorities) can set out frameworks for improved habitat and access management, in collaboration with other adjoining Local Planning Authorities. Provision of alternative recreational space can help to attract recreational users away from sensitive European sites and reduce pressure on the sites. However, the location and habitat type of such alternative destinations must be carefully selected to be effective.

Breeding Birds (April to September)

3.14 In addition to their overwintering bird assemblages, the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, and the Dee Estuary SPA and Ramsar are also designated for two breeding tern species, namely common tern and little tern. These species breed in the SPAs / Ramsars in the summer months, meaning that the recreational pressure impact pathway in the Merseyside region is not limited to the overwintering period. Terns are ground-nesting species that form their nest as a shallow scrape on bare ground, thus being particularly vulnerable to recreational pressure, including disturbance from dogs, trampling damage, egg theft and vandalism.

3.15 Disturbance to birds during the pre-incubation, incubation and chick provisioning stages may lead to the abandonment of potential nesting sites, eggs or chicks, resulting in failure to reproduce or in reduced calorific intake by chicks. If disturbance is pervasive, the failure to produce viable offspring may result in reduced fitness at the population level. Disturbance from dog walkers is a

³⁷ Ibid.

particular threat to ground-nesting birds, which tend to have lower disturbance tolerances because their nests are at higher risk from predators³⁸.

- 3.16 This is supported in the literature. For example, a study assessing the breeding success of little tern and least tern found that nest success was significantly higher (82%) in artificial habitats than on natural sandy beaches (58%)³⁹. This was primarily due to recreational disturbance on the beaches (which was absent in artificial habitats). Furthermore, even in successful nests, the number of unhatched eggs was twice as high in the natural habitat, most likely due to disturbance leading to the cooling of eggs.
- 3.17 Terns are at particular risk of recreational disturbance where visitors can access breeding sites. However, positively, there is currently no indication that the breeding population in Wirral's European sites is declining, perhaps partly because terns nest in sites with access management in place or without public access. For example, common tern from the Mersey Narrows and North Wirral Foreshore SPA and Ramsar nest on artificial rafts in Seaforth Nature Reserve, managed by the Lancashire Wildlife Trust. Access to the site is strictly managed and only a limited number of day passes are available. Common and little terns from the Dee Estuary SPA and Ramsar mostly nest on shingle / dune habitat in Wales, far away from the parts of Wirral for which residential growth is anticipated. Overall, it is considered that the potential of the Wirral Local Plan to result in increased disturbance to qualifying terns is relatively low.

Trampling damage, erosion and nutrient enrichment

- 3.18 Most terrestrial habitats, especially grassland, heathland and woodland, can be affected by trampling and other mechanical damage, which in turn causes soil compaction and erosion. Some of the following studies have investigated the negative impacts of trampling, associated with different recreational activities:
- Wilson & Seney⁴⁰ examined the degree of track erosion caused by hikers, motorcycles, horses and cyclists from 108 plots along tracks in the Gallatin National Forest, Montana. Although the results proved difficult to interpret, it was concluded that horses and hikers disturbed more sediment on wet tracks, and therefore caused more erosion, than motorcycles and bicycles.
 - Cole et al⁴¹ conducted experimental off-track trampling in 18 closed forest, dwarf scrub and meadow & grassland communities (each tramped between 0 – 500 times) over five mountain regions in the US. Vegetation cover was assessed two weeks and one year after trampling, and an inverse relationship with trampling intensity was discovered, although this relationship was weaker after one year than two weeks indicating some recovery of the vegetation. Differences in plant morphological characteristics were found to explain more variation in response between different vegetation types than soil and topographic factors. Low-growing, mat-forming grasses regained their cover best after two weeks and were considered most resistant to trampling, while tall forbs (non-woody vascular plants other than grasses, sedges, rushes and ferns) were considered least resistant. The cover of hemicryptophytes and geophytes (plants with buds below the soil surface) was heavily reduced after two weeks, but had recovered well after one year and as such these were considered most resilient to trampling. Chamaephytes (plants with buds above the soil surface) were least resilient to trampling. It was concluded that these would be the least tolerant of a regular cycle of disturbance.

³⁸ For a review of disturbance in relation to terns see: Liley D. (2008). Little terns at Great Yarmouth. Disturbance to birds and implications for strategic planning and development control. Unpublished report by Footprint Ecology for Great Yarmouth Borough Council and the RSPB. 14pp

³⁹ Pakanen V-M., Hongell H., Aikio S. & Koivula K. (2014). Little tern breeding success in artificial and natural habitats: Modelling population growth under uncertain vital rates. *Population Ecology* **56**: 581-591.

⁴⁰ Wilson, J.P. & J.P. Seney. 1994. Erosional impact of hikers, horses, motorcycles and off road bicycles on mountain trails in Montana. *Mountain Research and Development* **14**:77-88.

⁴¹ Cole, D.N. 1995a. Experimental trampling of vegetation. I. Relationship between trampling intensity and vegetation response. *Journal of Applied Ecology* **32**: 203-214.

Cole, D.N. 1995b. Experimental trampling of vegetation. II. Predictors of resistance and resilience. *Journal of Applied Ecology* **32**: 215-224

- Cole ⁴² conducted a follow-up study (in 4 vegetation types) in which shoe type (trainers or walking boots) and trampler weight were varied. Although immediate damage was greater with walking boots, there was no significant difference after one year. Heavier trampers caused a greater reduction in vegetation height than lighter trampers, but there was no difference in the effect on cover.
- Cole & Spildie⁴³ experimentally compared the effects of off-track trampling by hiker and horse (at two intensities – 25 and 150 passes) in two woodland vegetation types (one with an erect forb understorey and one with a low shrub understorey). Horse trampling was found to cause the largest reduction in vegetation cover. The forb-dominated vegetation suffered greatest disturbance but recovered rapidly. Generally, it was shown that higher trampling intensities caused more disturbance.
- In heathland sites, trampling damage can also affect the value of a site to wildlife. For example, heavy use of sandy tracks loosens and continuously disturbs sand particles, reducing the habitat's suitability for invertebrates⁴⁴. Species that burrow into flat surfaces such as the centres of paths, are likely to be particularly vulnerable, as the loose sediment can no longer maintain their burrow. In some instances, nature conservation bodies and local authorities resort to hardening paths to prevent further erosion. However, this is concomitant with the loss of habitat used by wildlife, such as sand lizards and burrowing invertebrates.

3.19 A major concern for nutrient-poor terrestrial habitats (e.g. heathlands, bogs and fens) is nutrient enrichment associated through dog fouling, which has been addressed in various reviews (e.g.⁴⁵). It is estimated that dogs will defecate within 10 minutes of starting a walk and therefore most nutrient enrichment arising from dog faeces will occur within 400m of a site entrance. In contrast, dogs will urinate at frequent intervals during a walk, resulting in a more spread out distribution of urine. For example, in Burnham Beeches National Nature Reserve it is estimated that 30,000 litres of urine and 60 tonnes of dog faeces are deposited annually⁴⁶. While there is little information on the chemical constituents of dog faeces, nitrogen is one of the main components⁴⁷. Nutrient levels are the major determinant of plant community composition and the effect of dog defecation in sensitive habitats (e.g. heathland) is comparable to a high-level application of fertiliser, potentially resulting in the shift to plant communities that are more typical for improved grasslands.

Conclusion

3.20 Given its proximity to the Liverpool City Region, the European sites around Wirral, especially the coastal sites that are designated for their non-breeding birds, are likely to be subject to significant recreational pressure from the Wirral Local Plan, including from its policies, housing targets and associated proposed allocations for housing land. Two previous visitor surveys were commissioned to estimate the current baseline of recreational disturbance and to assess the likely impact of future population growth in estuaries and coastal habitats in the Merseyside region. Thomson Ecology undertook a visitor survey at the main car parks providing access onto the Mersey Narrows and the North Wirral Foreshore SPA and Ramsar⁴⁸. Footprint Ecology carried out visitor surveys in various SSSIs, including component parts of the Dee Estuary SPA and Ramsar, the Mersey Estuary SPA and Ramsar, the Ribble and Alt Estuaries SPA and Ramsar,

⁴² Cole, D.N. 1995c. Recreational trampling experiments: effects of trampler weight and shoe type. Research Note INT-RN-425. U.S. Forest Service, Intermountain Research Station, Utah.

⁴³ Cole, D.N., Spildie, D.R. 1998. Hiker, horse and llama trampling effects on native vegetation in Montana, USA. *Journal of Environmental Management* **53**: 61-71

⁴⁴ Taylor K., Anderson P., Liley D. & Underhill-Day J.C. 2006. Promoting positive access management to sites of nature conservation value: A guide to good practice. English Nature / Countryside Agency, Peterborough and Cheltenham.

⁴⁵ Taylor K., Anderson P., Taylor R.P., Longden K. & Fisher P. 2005. Dogs, access and nature conservation. English Nature Research Report, Peterborough.

⁴⁶ Barnard A. 2003. Getting the facts – Dog walking and visitor number surveys at Burnham Beeches and their implications for the management process. *Countryside Recreation* **11**:16-19.

⁴⁷ Taylor K., Anderson P., Liley D. & Underhill-Day J.C. 2006. Promoting positive access management to sites of nature conservation value: A guide to good practice. English Nature / Countryside Agency, Peterborough and Cheltenham.

⁴⁸ Thomson Ecology. (2015). Mersey Narrows and North Wirral Foreshore Sites of Special Scientific Interest – Investigation into the Impacts of Recreational Disturbance on Bird Declines. 107pp.

and the Sefton Coast SAC⁴⁹. Importantly, both surveys also related the recreation patterns to bird disturbance events, demonstrating that SPA and Ramsar birds around Wirral appear to be changing their normal foraging / roosting behaviour in response to recreational pressure. The relevant results from the visitor surveys will be used as supporting evidence in sections of this HRA that discuss the respective European sites.

- 3.21 Recreational pressure in Wirral might also affect functionally linked habitat, particularly where large residential sites (e.g. Wirral Waters in Birkenhead) are proposed. Wirral Waters lies directly adjacent to the Birkenhead Docks, for which TEP undertook a bird survey⁵⁰ under the guidance of MEAS. Further ecological assessments have been completed to support planning proposals adjoining the Birkenhead Docks, such as the Wirral Waters Northbank East (Phase 1) development project⁵¹. Results from these surveys are used in this report to assess whether an increase in recreational pressure may affect birds using the docks.
- 3.22 The available baseline information suggests that the following European Sites are sensitive to recreational pressure due to the presence of waterfowl and wader species through the year (**the sites in bold are taken forward into the following chapters**):
- **Mersey Narrows and North Wirral Foreshore SPA and Ramsar**
 - **Dee Estuary SPA and Ramsar**
 - **Mersey Estuary SPA and Ramsar**
 - **Liverpool Bay SPA**
 - **Ribble and Alt Estuaries SPA and Ramsar**
 - **Dee Estuary SAC**
 - **Sefton Coast SAC**
 - **River Dee and Bala Lake SAC**
 - **Halkyn Mountain SAC**
 - **Deeside and Buckley Newt Sites SAC**

Loss of Functionally Linked Habitat

- 3.23 While most European sites have been geographically defined to encompass the key features that are necessary for coherence of their structure and function, and the support of their qualifying features, this is not necessarily the case. A diverse array of qualifying species including birds, bats and amphibians are not always confined to the boundary of designated sites.
- 3.24 For example, the highly mobile nature of both wader and waterfowl species implies that areas of habitat of crucial importance to the integrity of their populations lie outside the physical limits of European sites. Despite not being part of the formal designation, these habitats are integral to the maintenance of the structure and function of the designated site, for example by encompassing important foraging grounds. Therefore, land use plans that may affect such functionally linked habitat require further assessment.
- 3.25 There is now an abundance of authoritative examples of HRA cases on plans affecting bird populations, where Natural England recognised the potential importance of functionally linked land⁵². For example, bird surveys in relation to a previous HRA established that approximately

⁴⁹ Liley D., Panter C., Marsh P. & Roberts J. (2017). Recreational activity and interactions with birds within the SSSIs on the North-West coast of England. Unpublished report by Footprint Ecology for Natural England.

⁵⁰ <http://www.meas.org.uk/media/5279/4157005-assessment-of-supporting-habitat-liverpool-docks-excl-drawings-aug-2015.pdf>

⁵¹ Available at: https://planning.wirral.gov.uk/online-applications/files/19844EEC8BBB5834829FC0ABE3589A3/pdf/APP_19_01061-ECOLOGICAL_ASSESSMENT-407714.pdf [Accessed on the 11/02/2022]

⁵² Chapman C & Tyldesley D. 2016. Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects – A review of authoritative decisions. *Natural England Commissioned Reports* **207**. 73pp

25% of the golden plover population in the Somerset Levels and Moors SPA would have been potentially affected by development while on functionally linked habitat, and this required the inclusion of mitigation measures in the relevant plan policy wording. Another important case study originates from the Mersey Estuary SPA / Ramsar, where adjacently located functionally linked land had a peak survey count of 108% of the 5 year mean peak population of golden plover. This finding led to considerable amendments in the planning proposal to ensure that the site integrity was not adversely affected.

- 3.26 Generally, the identification of an area as functionally linked habitat is not always a straightforward process. The importance of non-designated land parcels may not be apparent and thus might require the analysis of existing data sources (e.g. Bird Atlases or data from records centres) to be firmly established. In many instances (with the Solent Waders and Brent Goose Strategy being a notable exception), data may not be available at all, requiring further survey work.
- 3.27 Given that Wirral is surrounded by European sites designated for mobile waterfowl, it is possible that the allocation of greenfield sites (i.e. parcels of land without any existing development) would result in the loss of functionally linked habitat. The primary concern would be the loss of greenfield sites in the north-western and western part of Wirral, which mostly constitute agricultural land. Many SPA and Ramsar birds (particularly golden plover, geese and swans) forage in agricultural stubble in winter. Most notably, the Ribble and Alt Estuaries SPA and Ramsar, along the coast of Sefton is designated for species such as pink-footed goose. These species are dependent on agricultural land and are known to travel long distances to foraging sites. The Cheshire and Wirral Bird Atlas provides winter distribution maps for bird species within the wider area⁵³ and the atlas will be consulted as supporting evidence in assessing this impact pathway. In addition, the dock system in eastern Wirral which forms much of the Wirral Waters development area, is also likely to provide functional linkage for a range of qualifying species, including breeding common tern (Mersey Narrows and North Wirral Foreshore SPA and Ramsar), and cormorant and great-crested grebe (part of the waterbird assemblage of several European sites).
- 3.28 Overall, the available baseline information suggests that the following European Sites are sensitive to the loss of functionally linked habitats due to the presence of mobile waterfowl (**the sites in bold are taken forward into the following chapters**):
- **Mersey Narrows and North Wirral Foreshore SPA and Ramsar**
 - **Dee Estuary SPA and Ramsar**
 - **Mersey Estuary SPA and Ramsar**
 - **Ribble and Alt Estuaries SPA and Ramsar**
 - **Liverpool Bay SPA**
 - **Sefton Coast SAC**
 - **Halkyn Mountain SAC**
 - **Deeside and Buckley Newt Sites SAC**

Water Quality

- 3.29 The quality of the water that feeds European sites is an important determinant of the nature of their habitats and the species they support. Poor water quality can have a range of environmental impacts:
- At high levels, toxic chemicals and metals can result in immediate death of aquatic life, and can have detrimental effects even at lower levels, including increased vulnerability to disease and changes in wildlife behaviour.

⁵³ The Cheshire and Wirral Bird Atlas is available online as a free resource. Available at: <http://www.cheshireandwirralbirdatlas.org/species/> [Accessed on the 29/11/2019]

- Eutrophication, the enrichment of water with nutrients, increases plant growth and consequently results in oxygen depletion. Algal blooms, which commonly result from eutrophication, increase turbidity and decrease light penetration. The decomposition of organic wastes that often accompanies eutrophication deoxygenates water further, augmenting the oxygen depleting effects of eutrophication. In the marine environment, nitrogen is the limiting plant nutrient and so eutrophication is associated with discharges containing bioavailable nitrogen.
 - Some pesticides, industrial chemicals, and components of sewage effluent are suspected to interfere with the functioning of the endocrine system, possibly having negative effects on the reproduction and development of aquatic life.
- 3.30 The most notable issue in relation to the Wirral Local Plan is the discharge of treated sewage effluent, which is likely to increase the concentration of nutrients in European sites that are dependent on the input of water of sufficient quality. In marine European sites (e.g. the Mersey Estuary SPA and Ramsar) nitrogen is the main limiting nutrient and an increase in nitrogen may cause eutrophication. Given that Wirral Borough (and the WwTWs serving it) is adjoined by marine / estuarine habitats on all sides, there is little time for natural attenuation before nutrients reach the respective marine sites.
- 3.31 Due to the proximity of development sites to estuarine habitats, particularly in the eastern part of Wirral around Birkenhead and Bromborough, impacts of surface water runoff from hardstanding on marine water quality also require consideration. Water from overflowing sewage systems and from industrial leakages and / or spillages may contribute to the overall nutrient loading in the marine environment.
- 3.32 The Local Plan assessed in this HRA proposes development in the urban catchment served by United Utilities, responsible for the public water supply and waste water treatment in this part of north-west England. However, a relatively small area around Heswall, is served by a Wastewater Treatment Works (Heswall WwTW) operated by Dyr Cymru (Welsh Water). The potential HRA implications of sewage discharge for European sites associated with residential and industrial development allocations are outlined in Table 2.

Table 2: Wastewater Treatment Works serving Wirral Borough, the potential growth accommodated and its HRA implications.

WwTW Catchment	Development quanta allocated in the Wirral Local Plan	HRA implications
Birkenhead, Bromborough and North Wirral (Meols) WwTWs (operated by United Utilities); Heswall WwTW (operated by Dwr Cymru Welsh Water)	13,360 net new residential dwellings and 65.60ha of employment land, particularly focused on the urbanized eastern part of Wirral Borough	Discharge of treated sewage effluent and industrial pollutants directly into Merseyside's European sites or into local freshwater bodies (ultimately entering the coastal environment)

- 3.33 The available baseline information suggests that the following European sites are vulnerable to a decline in water quality (**the sites in bold are taken forward into the following chapters**):
- **Mersey Narrows and North Wirral Foreshore SPA and Ramsar**
 - **Dee Estuary SPA and Ramsar**
 - **Dee Estuary SAC**
 - **Mersey Estuary SPA and Ramsar**

- **Liverpool Bay SPA**
- **Ribble and Alt Estuaries SPA and Ramsar**
- **Sefton Coast SAC**
- **River Dee and Bala Lake SAC**
- **Halkyn Mountain SAC**
- **Deeside and Buckley Newt Sites SAC**

Water Quantity, Level and Flow

- 3.34 The water level, its flow rates and the mixing conditions are important determinants of the condition of European sites and their qualifying features. Hydrological processes are critical in influencing habitat characteristics in wetlands and coastal waters, including current velocity, water depth, dissolved oxygen levels, salinity and water temperature. In turn these parameters determine the short- and long-term viability of plant and animal species, as well as overall ecosystem composition. Changes to the water flow rate within an estuary can be associated with a multitude of further impact pathways, including substratum loss, smothering and changes in wave exposure, and often interact with coastal squeeze.
- 3.35 Coastal habitats rely on hydrological connections with other surface waters, such as rivers, streams and lakes. A constant supply of freshwater is fundamental to maintaining the ecological integrity of coastal marine areas. However, while the natural fluctuation of water levels within narrow limits is desirable, excess or too little water supply might cause the water level to be outside of the required range of qualifying birds, invertebrate or plant species. In extreme cases, this might lead to the loss of the structure and functioning of marine ecosystems. There are two mechanisms through which urban development might negatively affect freshwater supply to European Sites:
- The supply of new housing with potable water will require increased abstraction of water from surface water and groundwater bodies. Depending on the level of water stress in the geographic region, this may decrease freshwater input to European sites sharing the same catchment.
 - The proliferation of impermeable surfaces in urban areas increases the volume and speed of surface water runoff. As traditional drainage systems often cannot cope with the volume of stormwater, sewer overflows are designed to discharge excess water directly into watercourses. This can contribute to so-called flash floods and increased water flow into European sites. Some of the knock-on impacts of surface water runoff include increases in sedimentation, turbidity and anthropogenic pollutants.
- 3.36 Water abstraction for the potable water supply is of particular concern in areas with little rainfall (and limited recharge potential) or where water resources are already depleted. In 2013 the Environment Agency published a map of water-stressed areas, highlighting that both Wirral Borough and the wider north-west of England are identified as areas of low water stress (see Figure 3 below). While this part of England is highly populated, the high annual rainfall appears to be sufficient to replenish groundwater levels over the course of the year.
- 3.37 An initial investigation indicates that Wirral lies within United Utilities' Strategic Resource Zone which currently serves approximately 7 million people in south Cumbria, Lancashire, Greater Manchester, Merseyside, most of Cheshire and a small part of Derbyshire. This zone supplies around 1,706 Ml/d of potable water, which includes water imports from Wales, Cumbria, and other parts of north-west England. It constitutes a large integrated supply network that enables substantial flexibility in distributing supplies within the zone with the 'west to east link' further aiding this flexibility. This has broken the traditional division in which Greater Manchester received water from Cumbria and Merseyside received water from the River Dee (which lies partly in England and partly in Wales) and from purely Welsh sources (e.g. Lake Vyrnwy).

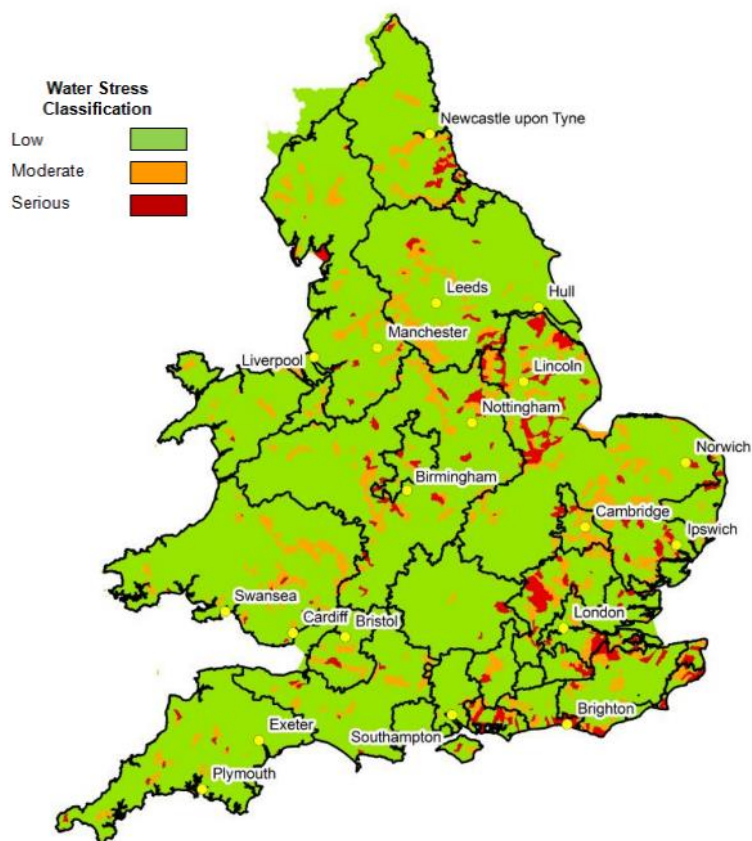


Figure 3: Areas of water stress in England and Wales⁵⁴.

3.38 The following European sites within 10km of Wirral Borough are sensitive to reductions in water quantity, level and flow due to increased potable water demand associated with the Local Plan (the sites in bold are taken forward into the following chapters):

- **Mersey Narrows and North Wirral Foreshore SPA and Ramsar**
- **Dee Estuary SPA and Ramsar**
- **Mersey Estuary SPA and Ramsar**
- **Liverpool Bay SPA**
- **Ribble and Alt Estuaries SPA and Ramsar**
- **Sefton Coast SAC**
- **Halkyn Mountain SAC**
- **Deeside and Buckley Newt Sites SAC**
- **River Dee and Bala Lake SAC**
- **River Eden SAC**

⁵⁴ Figure adapted from Environment Agency. 2013. Water stressed areas – final classification https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/244333/water-stressed-classification-2013.pdf.

Visual and Noise Disturbance from Construction Works (both in European sites and Functionally Linked Habitats)

- 3.39 Development schemes can result in the disturbance of qualifying SPA / Ramsar bird species in European sites or functionally linked habitats through several mechanisms. Noise and visual disturbance arising from construction activities may result in behavioural changes (e.g. flight from the nest, cessation of foraging) in birds. Furthermore, post-construction disturbance from site usage, road traffic and operational lighting might also arise. Three of the most important factors determining the magnitude of disturbance appear to be species sensitivity, proximity of the disturbance source and timing / duration of the disturbance. Generally, the most disturbing visual and auditory stimuli are likely to involve irregular, infrequent, unpredictable loud noise events, movements or vibrations. Birds are least likely to be disturbed by activities that involve regular, predictable and quiet patterns of sound or movement. The further any activity is from the birds, the less likely it is to result in disturbance.
- 3.40 An increasing amount of research on visual and noise disturbance of waterfowl from construction (and other activities) is now available. Both visual and noise stimuli may elicit disturbance responses, potentially affecting the fitness and survival of waterfowl and waders. Noise is a complex disturbance parameter requiring the consideration of multiple parameters, including the fact that it is not described on a linear scale, its nonadditive effect and the source-receptor distance. A high level of noise disturbance constitutes a sudden noise event of over 60dB or prolonged noise of over 72dB. Bird responses to high noise levels include major flight or the cessation of feeding, both of which might affect the survival of birds if other stressors are present (e.g. cold weather, food scarcity).
- 3.41 Generally, research has shown that above noise levels of 84 dB waterfowl show a flight response, while at levels below 55dB there is no effect on their behaviour⁵⁵. These two thresholds are therefore considered useful as defining two extremes. The same authors have advised that regular noise levels should be below 70 dB at the bird, as birds will habituate to noise levels below this level⁵⁶. Generally, noise is attenuated by 6 dB with every doubling of distance from the source. Impact piling, the noisiest construction process of approx. 110 dB at 0.67m from source, will therefore reduce to 67-68dB by 100m away from the source. The loudest construction noise should therefore have fallen to below disturbing levels by 100m, and certainly by 200m, away from the source even without mitigation. Note that this is a rule of thumb and does not obviate the need for application-level noise modelling. However, comparison with baseline noise levels will also be important in any assessment rather than purely using comparison with the 70 dB metric.
- 3.42 Visual disturbance is generally considered to have a higher impact than noise disturbance as, in most instances, visual stimuli will elicit a disturbance response at much greater distances than noise⁵⁷. For example, a flight response is triggered in most species when they are approached to within 150m across a mudflat. Visual disturbance can be exacerbated by workers operating equipment outside machinery, undertaking sudden movements and using large machinery. Several species are particularly sensitive to visual disturbance⁵⁸, including curlew (taking flight at 275m), redshank (at 250m), shelduck (at 199m) and bar-tailed godwit (at 163m), all of which are qualifying species of the Portsmouth SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar. Overall, specific regard should be given to assemblage composition when identifying threshold levels for both visual and noise disturbance.
- 3.43 Disturbance can also result post-construction, although substantial changes in traffic flow are generally needed for significant noise disturbance to arise from roads. For example, a 25% increase in road traffic (e.g. through a road scheme) will result in only a 1dB(A) increase at the roadside, with a 100% increase needed to result in a 3dB(A) increase – the lowest increase in

⁵⁵ Cutts N & Allan J. 1999. Avifaunal Disturbance Assessment. Flood Defence Works: Saltend. Report to Environment Agency).

⁵⁶ Cutts, N., Phelps, A. and Burdon, D. 2009. Construction and waterfowl: Defining Sensitivity, Response, Impacts and Guidance. Report to Humber INCA, Institute of Estuarine and Coastal Studies, University of Hull.

⁵⁷ Research undertaken by the Institute of Estuarine & Coastal Studies, University of Hull. 2013. Available at: http://bailey_persona-pi.com/Public-Inquiries/M4%20-%20Revised/11.3.67.pdf [Accessed on the 01/12/2020]

⁵⁸ Ibid. Response distances to visual stimuli are given in the Estuarine & Coastal Studies report.

noise that is thought to be even perceivable by humans and birds. In contrast, the introduction of operational lighting of schemes into areas that are not currently lit can result in disturbance of animal species within European sites or those that rely on functionally linked habitats. At the same time, it must be noted that the Portsmouth area is already generally a brightly lit urban frontage.

- 3.44 Large structures (e.g. new bridges, offshore and onshore wind turbines), have the potential to alter bird flight paths (e.g. hunting flight paths for raptors, bird migratory paths, regular flight paths between roosting and feeding sites, and foraging routes for bats etc.). This may result in a collision risk barrier effect or displacement which could make birds either vulnerable to predation or loss of vital energy stores.
- 3.45 Animals can also be disturbed by the movement of ships. For instance, a DTI study of birds of the North West coast noted that: *“Divers and scoters were absent from the mouths of some busier estuaries, notably the Mersey... Both species are known to be susceptible to disturbance from boats, and their relative scarcity in these areas... may in part reflect the volume of boat traffic in these areas”*⁵⁹.
- 3.46 It is noted that visual and noise disturbance is relevant not only to designated sites themselves, but also to habitat that is functionally linked to such sites. Because qualifying species depend on linked habitats for foraging and roosting (see earlier impact pathway), any visual and noise disturbance might impair the species' ability to use such land appropriately. For Wirral, visual and noise disturbance is most likely to be relevant in agricultural land and the Birkenhead docks, the latter having been identified as supporting >1% of some SPA / Ramsar waterbird species.
- 3.47 The following European sites within 10km of Wirral Borough are sensitive to visual and noise disturbance in both the sites themselves and functionally linked habitats due to Local Plan development, both during and post construction (**the sites in bold are taken forward into the following chapters**):
- **Mersey Narrows and North Wirral Foreshore SPA and Ramsar**
 - **Dee Estuary SPA and Ramsar**
 - **Dee Estuary SAC**
 - **Mersey Estuary SPA and Ramsar**
 - **Liverpool Bay SPA**
 - **Ribble and Alt Estuaries SPA and Ramsar**
 - **River Dee and Bala Lake SAC**

Coastal Squeeze

- 3.48 Coastal squeeze⁶⁰ is a term that originates from coastal management, whereby qualifying intertidal habitats (i.e. the habitats themselves and as a foraging / roosting resource for SPA and Ramsar birds) are lost to rising sea levels and inland brownfield development (e.g. a sea wall or an industrial complex) prevents the inland migration of these features. As a result, habitat is 'squeezed' and reduces in size. This is a significant process, particularly in geographic areas that are highly urbanised or that are rapidly transitioning from an undeveloped to developed state.
- 3.49 Additionally, as development frequently takes place immediately inland from the sea wall, flood defences generally cannot be moved landwards to accommodate the managed retreat of threatened habitats. This may result in gradually reducing areas of saltmarsh and mudflat habitats adjacent to built-up areas. In areas where sediment availability is low, the coastal squeeze also includes an increasingly steep beach profile and foreshortening of the seaward zones.

⁵⁹ DTI (2006). Aerial Surveys of Waterbirds in Strategic Wind Farm Areas: 2004/05 Final Report.

⁶⁰ For a comprehensive review of coastal squeeze please see: Doody J.P. (2013). Coastal squeeze and managed realignment in southeast England, does it tell us anything about the future? *Ocean & Coastal Management* **79**: 34-41.

- 3.50 Wirral Borough is covered by Sub-Cell 11a of the North West Shoreline Management Plan⁶¹ (SMP) that has been published by the North West North Wales Coastal Group. The document indicates that there will be a combination of 'Hold the Line' and 'Managed Realignment' strategies for European sites adjoining Wirral. For example, it is highlighted that Managed Realignment is intended in parts of the Dee Estuary SPA and Ramsar and SAC and the Mersey Estuary SPA and Ramsar to allow for the natural evolution of shoreline processes and to offset habitat loss from designated sites elsewhere. Enabling the natural reclamation of greenfield sites adjoining coastal habitats would benefit European sites as this would reduce the potential for coastal squeeze.
- 3.51 In order to conclude that development allocated in the Wirral Local Plan would not result in LSEs regarding coastal squeeze, the implementation of the Plan should not require the North West SMP policies for Wirral's frontage to be altered. Development should not be situated in locations that require new defences in currently undefended parts of the coastline or in areas allocated for managed realignment (i.e. adjustments to coastal flood defences). To assess this impact pathway, residential and employment sites allocated in the Wirral Local Plan will be assessed as to their relative distance to designated coastal habitats, whether they are on greenfield sites (very few are present in the urbanised eastern part of Wirral) and if they lie within sections of the coast identified for managed realignment.
- 3.52 The following European sites within 10km of Wirral Borough are sensitive to coastal squeeze and the loss of habitat as a result of Local Plan development (**the sites in bold are taken forward into the following chapters**):
- **Mersey Narrows and North Wirral Foreshore SPA and Ramsar**
 - **Mersey Estuary SPA and Ramsar**
 - **Dee Estuary SPA and Ramsar and SAC**

Atmospheric Pollution

- 3.53 The main pollutants of concern for European sites are oxides of nitrogen (NO_x), ammonia (NH₃) and sulphur dioxide (SO₂) and are summarised in Table 3. Ammonia can have a directly toxic effect upon vegetation, particularly at close distances to the source such as near road verges⁶². NO_x can also be toxic at very high concentrations (far above the annual average critical level). However, in particular, high levels of NO_x and NH₃ are likely to increase the total N deposition to soils, potentially leading to deleterious knock-on effects in resident ecosystems. Increases in nitrogen deposition from the atmosphere is widely known to enhance soil fertility and to lead to eutrophication. This often has adverse effects on the community composition and quality of semi-natural, nitrogen-limited terrestrial and aquatic habitats^{63 64}.

Table 3: Main sources and effects of air pollutants on habitats and species⁶⁵.

Pollutant	Source	Effects on habitats and species
Sulphur Dioxide (SO ₂)	The main sources of SO ₂ are electricity generation, and industrial and domestic fuel combustion. However, total SO ₂ emissions in the UK have decreased substantially since the 1980's.	Wet and dry deposition of SO ₂ acidifies soils and freshwater, and may alter the composition of plant and animal communities.
	Another origin of sulphur dioxide is the shipping industry and high atmospheric concentrations of SO ₂ have been	The magnitude of effects depends on levels of deposition, the buffering capacity of soils and the sensitivity of impacted species.

⁶¹ North West & North Wales Coastal Group. (February 2011). North West England and North Wales Shoreline Management Plan SMP2 – Main SMP2 Document. Available at: <https://onedrive.live.com/?cid=E5153484C5971E2D&id=E5153484C5971E2D%21111&parId=E5153484C5971E2D%21108&OneUp> [Accessed on the 12/10/2021].

⁶² http://www.apis.ac.uk/overview/pollutants/overview_NOx.htm.

⁶³ Wolseley, P. A.; James, P. W.; Theobald, M. R.; Sutton, M. A. **2006**. Detecting changes in epiphytic lichen communities at sites affected by atmospheric ammonia from agricultural sources. *Lichenologist* 38: 161-176

⁶⁴ Dijk, N. **2011**. Dry deposition of ammonia gas drives species change faster than wet deposition of ammonium ions: evidence from a long-term field manipulation *Global Change Biology* 17: 3589-3607

⁶⁵ Information summarised from the Air Pollution Information System (<http://www.apis.ac.uk/>)

Pollutant	Source	Effects on habitats and species
	documented in busy ports. In future years shipping is likely to become one of the most important contributors to SO ₂ emissions in the UK.	However, SO ₂ background levels have fallen considerably since the 1970's and are now not regarded a threat to plant communities. For example, decreases in Sulphur dioxide concentrations have been linked to returning lichen species and improved tree health in London.
Acid deposition	<p>Leads to acidification of soils and freshwater via atmospheric deposition of SO₂, NO_x, ammonia and hydrochloric acid. Acid deposition from rain has declined by 85% in the last 20 years, which most of this contributed by lower sulphate levels.</p> <p>Although future trends in S emissions and subsequent deposition to terrestrial and aquatic ecosystems will continue to decline, increased N emissions may cancel out any gains produced by reduced S levels.</p>	<p>Gaseous precursors (e.g. SO₂) can cause direct damage to sensitive vegetation, such as lichen, upon deposition.</p> <p>Can affect habitats and species through both wet (acid rain) and dry deposition. The effects of acidification include lowering of soil pH, leaf chlorosis, reduced decomposition rates, and compromised reproduction in birds / plants.</p> <p>Not all sites are equally susceptible to acidification. This varies depending on soil type, bed rock geology, weathering rate and buffering capacity. For example, sites with an underlying geology of granite, gneiss and quartz rich rocks tend to be more susceptible.</p>
Ammonia (NH ₃)	<p>Ammonia is a reactive, soluble alkaline gas that is released following decomposition and volatilisation of animal wastes. It is a naturally occurring trace gas, but ammonia concentrations are directly related to the distribution of livestock.</p> <p>Ammonia reacts with acid pollutants such as the products of SO₂ and NO_x emissions to produce fine ammonium (NH₄⁺) - containing aerosol. Due to its significantly longer lifetime, NH₄⁺ may be transferred much longer distances (and can therefore be a significant trans-boundary issue).</p> <p>While ammonia deposition may be estimated from its atmospheric concentration, the deposition rates are strongly influenced by meteorology and ecosystem type.</p>	<p>The negative effect of NH₄⁺ may occur via direct toxicity, when uptake exceeds detoxification capacity and via N accumulation.</p> <p>Its main adverse effect is eutrophication, leading to species assemblages that are dominated by fast-growing and tall species. For example, a shift in dominance from heath species (lichens, mosses) to grasses is often seen.</p> <p>As emissions mostly occur at ground level in the rural environment and NH₃ is rapidly deposited, some of the most acute problems of NH₃ deposition are for small relict nature reserves located in intensive agricultural landscapes.</p>
Nitrogen oxides (NO _x)	<p>Nitrogen oxides are mostly produced in combustion processes. Half of NO_x emissions in the UK derive from motor vehicles, one quarter from power stations and the rest from other industrial and domestic combustion processes.</p> <p>In contrast to the steep decline in Sulphur dioxide emissions, nitrogen oxides are falling slowly due to control strategies being offset by increasing numbers of vehicles.</p>	<p>Direct toxicity effects of gaseous nitrates are likely to be important in areas close to the source (e.g. roadside verges). A critical level of NO_x for all vegetation types has been set to 30 ug/m3.</p> <p>Deposition of nitrogen compounds (nitrates (NO₃), nitrogen dioxide (NO₂) and nitric acid (HNO₃)) contributes to the total nitrogen deposition and may lead to both soil and freshwater acidification.</p> <p>In addition, NO_x contributes to the eutrophication of soils and water, altering the species composition of plant communities at the expense of sensitive species.</p>
Nitrogen deposition	The pollutants that contribute to the total nitrogen deposition derive mainly from oxidized (e.g. NO _x) or reduced (e.g. NH ₃) nitrogen emissions (described separately above). While oxidized nitrogen mainly	<p>All plants require nitrogen compounds to grow, but too much overall N is regarded as the major driver of biodiversity change globally.</p> <p>Species-rich plant communities with high proportions of slow-growing perennial species and bryophytes are</p>

Pollutant	Source	Effects on habitats and species
	<p>originates from major conurbations or highways, reduced nitrogen mostly derives from farming practices.</p> <p>The N pollutants together are a large contributor to acidification (see above).</p>	<p>most at risk from N eutrophication. This is because many semi-natural plants cannot assimilate the surplus N as well as many graminoid (grass) species.</p> <p>N deposition can also increase the risk of damage from abiotic factors, e.g. drought and frost.</p>
Ozone (O ₃)	<p>A secondary pollutant generated by photochemical reactions involving NO_x, volatile organic compounds (VOCs) and sunlight. These precursors are mainly released by the combustion of fossil fuels (as discussed above).</p> <p>Increasing anthropogenic emissions of ozone precursors in the UK have led to an increased number of days when ozone levels rise above 40ppb ('episodes' or 'smog'). Reducing ozone pollution is believed to require action at international level to reduce levels of the precursors that form ozone.</p>	<p>Concentrations of O₃ above 40 ppb can be toxic to both humans and wildlife, and can affect buildings.</p> <p>High O₃ concentrations are widely documented to cause damage to vegetation, including visible leaf damage, reduction in floral biomass, reduction in crop yield (e.g. cereal grains, tomato, potato), reduction in the number of flowers, decrease in forest production and altered species composition in semi-natural plant communities.</p>

- 3.54 Sulphur dioxide emissions overwhelmingly derive from power stations and industrial processes that require the combustion of coal and oil, as well as (particularly on a local scale) shipping⁶⁶. Ammonia emissions originate from agricultural practices⁶⁷, with some chemical processes also making notable contributions. As such, it is unlikely that material increases in SO₂ or NH₃ emissions will be associated with the Wirral Local Plan. NO_x emissions, however, are dominated by the output of vehicle exhausts (more than half of all emissions). A 'typical' housing development will contribute by far the largest portion to its overall NO_x footprint (92%) through the associated road traffic. Other sources, although relevant, are of minor importance (8%) in comparison⁶⁸. Emissions of NO_x could therefore be reasonably expected to increase as a result of an increase in commuter traffic associated with the Plan.
- 3.55 According to the World Health Organisation, the critical NO_x concentration (critical threshold) for the protection of vegetation is 30 µgm⁻³; the threshold for sulphur dioxide is 20 µgm⁻³. In addition, ecological studies have determined 'Critical Loads'⁶⁹ of atmospheric nitrogen deposition (that is, NO_x combined with ammonia NH₃).
- 3.56 The Department of Transport's Transport Analysis Guidance outlines that, beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels is not significant (Figure 4 and see reference ⁷⁰). This is therefore the distance that has been used throughout this HRA in order to determine whether European sites are likely to be significantly impacted by Local Plan development.

⁶⁶ http://www.apis.ac.uk/overview/pollutants/overview_SO2.htm.

⁶⁷ Pain, B.F.; Weerden, T.J.; Chambers, B.J.; Phillips, V.R.; Jarvis, S.C. 1998. A new inventory for ammonia emissions from U.K. agriculture. *Atmospheric Environment* **32**: 309-313

⁶⁸ Proportions calculated based upon data presented in Dore CJ et al. 2005. UK Emissions of Air Pollutants 1970 – 2003. UK National Atmospheric Emissions Inventory. <http://www.airquality.co.uk/archive/index.php>

⁶⁹ The critical load is the rate of deposition beyond which research indicates that adverse effects can reasonably be expected to occur

⁷⁰ <http://www.dft.gov.uk/webtag/documents/expert/unit3.3.3.php#013> [Accessed on the 01/12/2020]

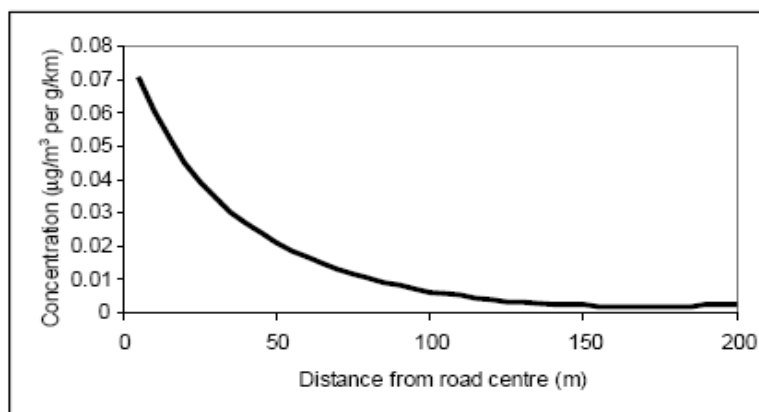


Figure 4: Traffic contribution to concentrations of pollutants at different distances from a road (Source: DfT71).

3.57 The following European sites within 10km of Wirral Borough are sensitive to atmospheric pollution associated with an increase in commuter journeys due to the Wirral Local Plan (**the sites in bold are taken forward into the following chapters**):

- **Dee Estuary SPA and Ramsar**
- **Dee Estuary SAC**
- **Mersey Estuary SPA and Ramsar**
- **Mersey Narrows and North Wirral Foreshore SPA and Ramsar**
- **Liverpool Bay SPA**
- **Ribble and Alt Estuaries SPA and Ramsar**
- **Sefton Coast SAC**
- **Halkyn Mountain SAC**
- **Deeside and Buckley Newt Sites SAC**

⁷¹ <http://www.dft.gov.uk/ha/standards/dmrb/vol11/section3/ha20707.pdf> [Accessed on the 01/12/2020]

4. Test of Likely Significant Effects (ToLSE)

Recreational Pressure in European Sites and Functionally Linked Habitat

4.1 The following European sites within 10km of Wirral Borough are sensitive to recreational pressure arising from the 13,360 net new residential dwellings allocated in the Wirral Local Plan (the sites in bold are taken forward to Appropriate Assessment):

- **Mersey Narrows and North Wirral Foreshore SPA and Ramsar**
- **Dee Estuary SPA and Ramsar**
- **Dee Estuary SAC**
- **Mersey Estuary SPA and Ramsar**
- **Liverpool Bay SPA**
- **Ribble and Alt Estuaries SPA and Ramsar**
- **Sefton Coast SAC**
- **Halkyn Mountain SAC**
- River Dee and Bala Lake SAC
- Deeside and Buckley Newt Sites SAC

4.2 The Mersey Narrows and North Wirral Foreshore SPA and Ramsar borders the Wirral Peninsula to the north, extending towards The Dee Estuary SPA and Ramsar in the west and the Mersey Estuary SPA and Ramsar in the south-east. The SPA and Ramsar is designated for several non-breeding waterfowl species, including bar-tailed godwit, knot, little gull and common tern, and its overall waterbird assemblage. All qualifying species are sensitive to recreational disturbance, because this may impact upon the local distribution and abundance of these birds, potentially altering their feeding and breeding behaviour. Natural England's Site Improvement Plan highlights that recreational disturbance is one of the major pressures acting on this SPA and Ramsar. For example, on the North Wirral Foreshore, various recreational activities (some of which unregulated) are carried out, the impacts of which are currently difficult to manage. The WLP allocates residential growth in close proximity and is therefore likely to increase recreational pressure within the SPA and Ramsar. **Likely Significant Effects (LSEs) cannot be excluded and the site is screened in for Appropriate Assessment.**

4.3 The Dee Estuary SPA and Ramsar borders the Wirral peninsula on its western side, extending on a north-south axis towards the Mersey Narrows and North Wirral Foreshore SPA and Ramsar. The site is designated for its sensitive non-breeding waterfowl species (e.g. black-tailed godwit, dunlin, knot, redshank), its overall waterbird assemblage and several breeding species (e.g. common tern, little tern). Natural England's Site Improvement Plan for the Mersey Narrows and North Wirral Foreshore SPA and Ramsar also covers this European site, identifying recreational pressure as a threat to the site integrity. The 13,360 residential dwellings to be delivered in Wirral over the Plan period of 2021 and 2037, are likely to increase the overall recreational footfall in the Dee Estuary SPA and Ramsar. **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**

4.4 The Mersey Estuary SPA and Ramsar is the third coastal site that borders Wirral, extending along its south-eastern side. It is designated for several migratory species, including non-breeding dunlin, redshank, teal and shelduck, and its overall waterbird assemblage. Natural England's Site

Improvement Plan identifies recreational pressure as one of the three main threats to the site. As for the other estuarine and coastal sites bordering Wirral, the provision of additional residential dwellings is likely to increase the number of recreational visits to the Mersey Estuary SPA and Ramsar. **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**

- 4.5 The Dee Estuary SAC partly overlaps with the Dee Estuary SPA and Ramsar, but extends to the northern side of Wirral into the Mersey Narrows and North Wirral Foreshore SPA and Ramsar. Several habitats and species in the Dee Estuary SAC, notably areas of saltmarsh (*Salicornia* spp. and the Atlantic salt meadows) concentrated on the foreshore in the Heswall Beach area, are sensitive to abrasion arising from recreational activities. This is also highlighted in Natural England's Site Improvement Plan, which mentions recreational pressure as an issue for the site. The net additional residential dwellings proposed in the WLP are likely to increase the number of recreational visits into the upper foreshore saltmarsh habitats of the SAC. **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.6 The Liverpool Bay SPA stretches along the east of the Irish Sea, bordering both northern England and northern Wales. Most importantly for this HRA, it stretches along the northern coastline of Wirral and up the River Mersey towards Bebington, thereby being directly accessible to residents from this authority. Both the red-throated diver and common scoter are highly sensitive to visual and noise disturbance stemming from activities in the open water. This includes disturbance from wind turbines and helicopters. Boating can also result in disturbance to these species⁷², which may be increased due to the implementation of the WLP. **Given the proximity of the SPA to Wirral Borough, LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.7 The Ribble and Alt Estuaries SPA and Ramsar is designated for several non-breeding waterfowl and wader species (e.g. Bewick's swan, whooper swan, pink-footed goose, redshank), which are all sensitive to recreational disturbance. Natural England's Site Improvement Plan mentions public access and disturbance as a key pressure in the SPA and Ramsar, particularly arising from recreational activities on the foreshore⁷³. The net increase in residential dwellings within Wirral has the potential to increase the number of recreational visits to the site. It is noted that Wirral's boundary is only 1.5km in straight-line distance from the Ribble and Alt Estuaries SPA and Ramsar. However, the actual by-road distance for Wirral residents will amount to over 9km and involve a crossing of the Mersey Narrows via the Kingsway or Queensway Tunnels. As such it is considered that recreational disturbance will primarily arise in-combination with growth in the authorities of Liverpool and Sefton. **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.8 The Sefton Coast SAC is designated for dune habitats (e.g. shifting dunes, fixed vegetated coastal dunes), which are all highly sensitive to recreational trampling and nutrient enrichment from dog fouling. Natural England's Site Improvement Plan mentions public access and disturbance as a key pressure in the SAC, particularly arising from recreational impacts in the dune systems⁷⁴. The net increase in residential dwellings within Wirral has the potential to increase the number of recreational visits to the Sefton Coast SAC. Given the SAC largely overlaps with the Ribble and Alt Estuaries SPA and Ramsar, it also only lies at approx. 1.5km in straight-line distance from Wirral. However, as for the SPA and Ramsar, the actual by-road distance for Wirral residents will amount to over 9km and involve a crossing of the Mersey Narrows via the Kingsway or Queensway Tunnels. As such it is considered that recreational disturbance will primarily arise in-combination with growth in the authorities of Liverpool and Sefton. **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.9 The Halkyn Mountain SAC is designated for its population of great-crested newts and several habitats, including Calaminarian grasslands (vegetation associated with old mines), European dry heaths and semi-natural dry grassland. The SAC comprises a large common with a right of public access, which is frequently used for dog walking and horse riding. The heathland habitats within the common are particularly sensitive to recreational pressure as a result of trampling damage and nutrient enrichment. The closest component site of the Halkyn Mountain SAC lies approx. 5.5km to the south-west of Wirral, with the common being even further away. The driving

⁷² <http://publications.naturalengland.org.uk/file/5733149452009472> [Accessed on the 20/11/2019]

⁷³ <http://publications.naturalengland.org.uk/publication/6274126599684096> [Accessed on the 19/11/2019]

⁷⁴ <http://publications.naturalengland.org.uk/publication/6274126599684096> [Accessed on the 19/11/2019]

distance from the closest major population centre (Heswall) is 30km due to the intervening presence of the Dee Estuary. It is not considered that the SAC is a major destination for residents from Wirral and therefore a conclusion of no LSE is reached.

- 4.10 The Deeside and Buckley Newt Sites SAC is designated for its population of great-crested newts and its old sessile oak woods. Natural Resources Wales' Site Conservation Advice highlights that the site is heavily used for recreational purposes, particularly by residents from Deeside and Buckley. However, the site lies 9.1km to the south of Wirral Borough and thus lies beyond a typical visitor catchment for a non-coastal site. Furthermore, it is not considered that the qualifying features of the site are particularly sensitive to recreational pressure impacts. As such, LSEs of the WLP are excluded and the site is screened out from Appropriate Assessment.

Policy Screening

- 4.11 The following policies of the Reg.19 Wirral Local Plan have been screened in for Appropriate Assessment because they are likely to result in increased recreational pressure in European sites, particularly the coastal and estuarine SPAs / Ramsars:

- **Policy WS1.1 (Homes)** – Allocates a minimum of 13,360 net additional dwellings in Regeneration Areas, on former allocated employment land and spread across the authority
- **Policy WS4.4 (Tourism)** – Promotes tourism development in urban locations of the borough and enhancing access to Wirral's coastline (e.g. in Hoylake and West Kirby)
- **Policy RA1 (Seacombe River Corridor Regeneration Area)** – provides for approx. 340 net additional dwellings in the Seacombe River Corridor Regeneration Area
- **Policy RA2 (Scotts Quay Regeneration Area)** – provides for approx. 900 net additional dwellings in the Scotts Quay Regeneration Area
- **Policy RA3 (Birkenhead Waterfront Regeneration Area)** – allocates approx. 630 net additional dwellings in the Birkenhead Waterfront Regeneration Area
- **Policy RA4 (Central Birkenhead Regeneration Area)** – allocates approx. 1,450 net additional dwellings in the Central Birkenhead Regeneration Area
- **Policy RA5 (Hind Street and St Werburghs Regeneration Area)** – provides for approx. 1,640 net additional dwellings in the Hind Street and St Werburghs Regeneration Area
- **Policy RA6 (Wirral Waters Regeneration Area)** – provides for approx. 3,230 net additional dwellings in the Wirral Waters Regeneration Area
- **Policy RA7 (Hamilton Park Regeneration Area)** – allocates approx. 1,025 net additional dwellings in the Hamilton Park Regeneration Area
- **Policy RA9 (Liscard Regeneration Area)** – allocates approx. 200 net additional dwellings in the Liscard Regeneration Area
- **Policy RA10 (New Brighton Regeneration Area)** – provides for a minimum quantum of 315 net additional dwellings in the New Brighton Regeneration Area
- **Policy RA11 (New Ferry Regeneration Area)** – provides for a minimum quantum of 109 net additional dwellings in the New Ferry Regeneration Area
- **Policy WP1.2 (Residential Sites)** – Wallasey – a net additional 130 dwellings will be delivered on smaller residential sites across Wallasey
- **Policy WP3.3 (Residential Sites)** – Suburban Birkenhead – a net additional 138 dwellings will be delivered on smaller residential sites across Suburban Birkenhead
- **Policy WP4.2 (Residential Sites)** – Bebington, Bromborough and Eastham – a net additional 1,981 dwellings will be delivered on smaller residential sites across Bebington, Bromborough and Eastham

- **Policy WP5.1 (Residential Sites)** – Leasowe, Moreton, Upton, Greasby and Woodchurch – a net additional 353 dwellings will be delivered on smaller residential sites across Leasowe, Moreton, Upton, Greasby and Woodchurch
- **Policy WP6.3 (Residential Sites)** – West Kirby and Hoylake – a net additional 58 dwellings will be delivered on smaller residential sites across West Kirby and Hoylake
- **Policy WP7.2 (Residential Sites)** – Irby, Thingwall, Pensby, Heswall and Gayton – a net additional 34 dwellings will be delivered on smaller residential sites across Irby, Thingwall, Pensby, Heswall and Gayton

Loss of Functionally Linked Habitat

4.12 The following European sites within 10km of Wirral⁷⁵ are sensitive to the loss of functionally linked habitat due to development (the sites in bold are taken forward to Appropriate Assessment):

- **Mersey Narrows and North Wirral Foreshore SPA and Ramsar**
- **Dee Estuary SPA and Ramsar**
- **Mersey Estuary SPA and Ramsar**
- **Ribble and Alt Estuaries SPA and Ramsar**
- **Liverpool Bay SPA**
- Sefton Coast SAC
- Halkyn Mountain SAC
- Deeside and Buckley Newt Sites SAC

4.13 The Mersey Narrows and North Wirral Foreshore SPA and Ramsar is designated for several waterfowl and wader species, and its overall waterbird assemblage. The site harbours a variety of mobile bird species that are likely to use functionally linked habitat beyond the designated site boundary. The SPA and Ramsar stretches along the northern coastline and the eastern shoreline of the Wirral peninsula and several sites allocated for development in the WLP. Natural England's Site Conservation Supplementary Advice note specifies that the bird features use habitats outside the site boundary, indicating that the integrity of the SPA and Ramsar will partly depend on functionally linked habitat⁷⁶. **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**

4.14 The Dee Estuary SPA and Ramsar is designated for several waterfowl and wader species, and its overall waterbird assemblage. Notably, the qualifying species assemblage includes some mobile species that are sometimes associated with functionally linked habitat, including curlew, lapwing and wigeon. The SPA and Ramsar stretches along the western shoreline of the Wirral peninsula. This is the less urbanised part of Wirral, where some greenfield sites are allocated. **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**

4.15 The Mersey Estuary SPA and Ramsar is designated for several waterfowl and wader species, and its overall waterbird assemblage. Notably, the qualifying species assemblage includes some mobile species that are often recorded on functionally linked habitat, including curlew, lapwing and wigeon. The SPA and Ramsar stretches along the eastern shoreline of the Wirral peninsula. This is the section of Wirral that is already highly urbanised, but any allocation of greenfield sites could lead to the loss of functionally linked habitat. **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**

⁷⁵ It is possible that species using functionally linked land in Wirral are associated with SPAs further afield, but it is considered probable that the functionally-linked land in Wirral is most significant for the SPAs and Ramsars that border the Wirral peninsula.

⁷⁶ <https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9020287&SiteName=mersey+narrows&SiteNameDisplay=Mersey+Narrows+and+North+Wirral+Foreshore+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAAraea=&NumMarineSeasonality=5> [Accessed on the 01/12/2020]

- 4.16 The Ribble and Alt Estuaries SPA and Ramsar is designated for several waterfowl and wader species, most importantly whooper swan, Bewick's swan and pink-footed goose. Both geese and swans are particularly mobile and might use foraging or roosting sites beyond 10km from the SPA and Ramsar. Natural England's Supplementary Advice Note highlights that Bewick's swans feed on arable land outside the SPA boundary, whereas pink-footed geese show complex flyways and use agricultural land in the wider region⁷⁷. The SPA and Ramsar is only approx. 1.5km to the north-east of Wirral and well within the distance that the geese and swans would be expected to travel to access functionally linked habitat parcels. **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.17 The Liverpool Bay SPA is predominantly a marine designation that protects important foraging areas for diver and tern species. Like the qualifying birds of the other European sites considered here, all these species are highly mobile and likely to routinely forage beyond the designated site boundary. However, the SPA is also designated for an internationally important waterbird assemblage, including red-breasted merganser and cormorant. Cormorant in particular are known to rely on functionally linked habitats (e.g. the area surrounding the Birkenhead Docks) **Therefore, LSEs of the WLP cannot be excluded and this site is screened in for Appropriate Assessment regarding this impact pathway.**
- 4.18 The Sefton Coast SAC is partly designated for its Annex II species great-crested newt. This species is known to migrate from its summer breeding ponds to non-breeding terrestrial habitats, which are integral to the viability of this species. However, great-crested newts have limited mobility and most adults will remain within approx. 250m from their breeding ponds. The SAC is approx. 1.5km to the north-east of Wirral and separated from the Borough by the Mersey Narrows. This is beyond 250m and LSEs can thus be excluded. The site is screened out from Appropriate Assessment.
- 4.19 The Halkyn Mountain SAC is also partly designated for its Annex II species great-crested newt. This species is known to migrate from its summer breeding ponds to non-breeding terrestrial habitats, which provide essential functionally linked habitat to these newts. However, most adult great-crested newts will remain within approx. 250m from their breeding ponds. The SAC is approx. 5.7km to the south-west of Wirral, which is beyond the 250m distance used for great-crested newts. Therefore, LSEs can be excluded and the site is screened out from Appropriate Assessment.
- 4.20 The Deeside and Buckley Newt Sites SAC is designated for one of Great Britain's largest great-crested newt populations. Given that the species moves up to 250m beyond the designated site boundary to utilise non-breeding habitats, there is potential for the loss of functionally linked habitat arising from development plans. However, the SAC lies approx. 9.1km to the south of Wirral Borough, which is far beyond the 250m distance used for great-crested newts. LSEs can be excluded, and the site is screened out from Appropriate Assessment.

Policy Screening

- 4.21 The following policies of the Reg.19 Wirral Local Plan have been screened in for Appropriate Assessment because they provide for development that may result in the loss of greenfield sites and, potentially, functionally linked habitat:
- **Policy WS1.1 (Homes)** – Allocates a minimum of 13,360 net additional dwellings in Regeneration Areas, on former allocated employment land and spread across the authority
 - **Policy WS1.2 (Employment)** – Allocates 65.60ha of employment land on sites across Wirral Borough, including port and marine related facilities
 - **Policy WS4.1 (Meeting the Strategy)** – Helps deliver the objectives of the Council's economic strategy by allocating 65.60ha of land for main employment uses

⁷⁷

<https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9005103&SiteName=ribble&SiteNameDisplay=Ribble+and+Alt+Estuaries+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAAArea=&NumMarineSeasonality=20>
[Accessed on the 20/11/2019]

- **Policy WS4.2 (Designated Employment Areas)** – Safeguards land within designated Primarily Employment Areas for redevelopment, renewal, intensification and extension employment proposals
- **Policy RA3 (Birkenhead Waterfront Regeneration Area)** – allocates approx. 1.58ha of employment land in the Birkenhead Waterfront Regeneration Area (Twelve Quays, South of Morpeth Wharf)
- **Policy RA6 (Wirral Waters Regeneration Area)** – allocates approx. 29.61ha of employment land in the Wirral Waters Regeneration Area, particularly along the West Float
- **Policy RA7 (Hamilton Park Regeneration Area)** – allocates approx. 0.98ha of employment land in the Hamilton Park Regeneration Area (Kern's Warehouse, Cleveland Street, Birkenhead)
- **Policy RA8 (Northside Regeneration Area)** – allocates approx. 13.11ha of employment land in the Northside Regeneration Area (two employment allocations)
- **Policy WP2.3 (Employment Sites)** – Birkenhead Commercial Core – delivers approx. 6.58ha of employment land on two employment allocations
- **Policy WP3.4 (Employment Sites)** – Suburban Birkenhead – delivers approx. 0.58ha of employment land on one site allocation (Land west of Prenton Way, North Cheshire Trading Estate, Prenton)
- **Policy WP4.3 (Employment Sites)** – Bebington, Bromborough and Eastham – approx. 15.66ha of employment land will be delivered on five allocations across Bebington, Bromborough and Eastham
- **Policy WP5.2 (Employment Sites)** – Leasowe, Moreton, Upton, Greasby and Woodchurch – approx. 4.74ha of employment land will be delivered on four sites across Leasowe, Moreton, Upton, Greasby and Woodchurch
- **Policy WD13 (Telecommunications Development)** – this policy supports the delivery of telecommunications apparatuses along Wirral's coastline, which may involve the delivery of tall structures

Water Quality

4.22 The following European sites within 10km of Wirral are sensitive to changes in water quality arising from the discharge of treated wastewater effluent and surface runoff associated with the emerging Wirral Local Plan (the sites in bold are taken forward to Appropriate Assessment):

- **Mersey Narrows and North Wirral Foreshore SPA and Ramsar**
- **Dee Estuary SPA and Ramsar**
- **Dee Estuary SAC**
- **Mersey Estuary SPA and Ramsar**
- **Liverpool Bay SPA**
- **Ribble and Alt Estuaries SPA and Ramsar**
- Sefton Coast SAC
- River Dee and Bala Lake SAC
- Halkyn Mountain SAC
- Deeside and Buckley Newt Sites SAC

- 4.23 The water quality in the Mersey Narrows and North Wirral Foreshore SPA and Ramsar is likely to be impacted by urban development in the WLP, particularly through an increase in the discharge of treated sewage effluent. An increase in nitrogen might lead to phytoplankton and macroalgal blooms, potentially affecting the invertebrate communities that the SPA and Ramsar birds rely on. The site extends along the northern and eastern shorelines of Wirral and could be affected by discharges from local Wastewater Treatment Works (WwTWs). **Given the sensitivity of the SPA and Ramsar to water quality issues, LSEs cannot be excluded and the site is screened in for Appropriate Assessment.**
- 4.24 The Dee Estuary SPA and Ramsar might also be affected by treated wastewater discharge associated with the WLP. The increase in nutrient levels (especially nitrogen) might lead to phytoplankton and macroalgal blooms, potentially affecting the invertebrate communities that the SPA and Ramsar birds rely on. The site extends along the western shoreline of Wirral and could be affected by discharge from local WwTWs. **Given the sensitivity of the SPA and Ramsar to water quality issues, LSEs cannot be excluded and the site is screened in for Appropriate Assessment.**
- 4.25 The Dee Estuary SAC is designated for several habitats (e.g. sand- and mudflats, estuaries) and plant assemblages (e.g. Atlantic salt meadows, *Salicornia* colonising mud / sand). The SAC comprises some of the habitats underpinning the Dee Estuary SPA and Ramsar and parts of the North Wirral Foreshore SSSI. Natural England's and Natural Resources Wales' joint Conservation Advice highlights that the SAC is highly sensitive to non-toxic contamination arising from inorganic nutrient loading⁷⁸. This is because the additional nutrients are likely to alter the resident plant communities and invertebrate populations. The site extends along the northern and western shorelines of Wirral and could be affected by discharge from local WwTWs. **Given the sensitivity of the SAC to water quality issues, LSEs cannot be excluded and the site is screened in for Appropriate Assessment.**
- 4.26 In line with the previous estuarine sites, the Mersey Estuary SPA and Ramsar is likely to be affected by urban development proposed in the WLP, particularly as a result of increasing discharges of treated sewage effluent. The site is designated for several waterfowl species that are dependent on food resources in the intertidal sand- and mudflats. An increase in the nitrogen loading of the SPA and Ramsar might lead to changes in invertebrate and plant communities within the site. Natural England's Supplementary Advice highlights that the SPA and Ramsar depends both on good water quality and sufficiently high dissolved oxygen concentrations⁷⁹. **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.27 The Liverpool Bay SPA is designated for its non-breeding populations of red-throated diver and common scoter. Both waterfowl species depend on a sufficient number of fish available to prey upon. An increase in the nutrient loading in the SPA could lead to changes in the food supply of the fish. Furthermore, a depletion of dissolved oxygen concentrations might also have direct negative impacts on fish populations. The SPA borders the northern shoreline of Wirral Borough and might therefore be affected by WwTWs discharging treated effluent directly into the bay or into areas that are hydrologically connected to the SPA. **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.28 The Ribble and Alt Estuaries SPA and Ramsar is sensitive to changes in water quality through the impact of increased nutrient loading and eutrophication on the prey communities of the qualifying waterfowl. The site is also in hydrological continuity with the Mersey Estuary SPA and Ramsar, the Liverpool Bay SPA, and the Mersey Narrows and North Wirral Foreshore SPA and Ramsar. As such, while being approx. 1.5km to the north-east of Wirral Borough, excessive nutrient loadings may reach the SPA and Ramsar via these connecting waterbodies. **Given the sensitivity of the SPA and Ramsar and its hydrological linkage with other European sites in the area, LSEs cannot be excluded and the site is screened in for Appropriate Assessment.**

⁷⁸ https://naturalresources.wales/media/673576/Dee%20Estuary-Reg33-Volume%201-English-091209_1.pdf [Accessed on the 20/11/2019]

⁷⁹ <https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9005131&SiteName=mersey+estuary&SiteNameDisplay=Mersey+Estuary+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAAArea=&NumMarineSeasonality=7> [Accessed on the 20/11/2019]

- 4.29 The Sefton Coast SAC's qualifying dune habitats and great-crested newts are all potentially sensitive to changes in water quality resulting from development plans. The site largely overlaps with the Ribble and Alt Estuaries SPA and Ramsar, which was screened in above. However, in contrast to that SPA and Ramsar, which will receive hydrological input from other coastal sites adjacent to Wirral, the hydrology and water quality in the SAC is primarily determined from inland water sources in Sefton. Natural England's Conservation Objectives Supplementary Advice Note highlights that the hydrology of the SAC is not well understood and requires further study⁸⁰. Given the above, it is concluded that there is no hydrological connectivity between the SAC and development proposed in the WLP. LSEs can be excluded, and the site is screened out from Appropriate Assessment.
- 4.30 The River Dee and Bala Lake SAC is designated for several habitats (e.g. water course from plain to montane levels) and species (e.g. Atlantic salmon, species of lamprey), all of which are highly sensitive to changes in water quality. In contrast to the marine sites, the main impact would be through increases in phosphorus concentrations linked to wastewater from Wirral Borough. Natural Resources Wales has published a Core Management Plan for the site, highlighting that water quality is an important threat to site integrity⁸¹. However, the site lies 7.3km south of Wirral and therefore upstream of any watercourses that local WWTWs are likely to discharge into. Therefore, given that there is no linking impact pathway between the SAC and WWTWs in Wirral, LSEs can be excluded, and the site is screened out from Appropriate Assessment.
- 4.31 The Halkyn Mountain SAC is partly designated for its great-crested newt population, which requires sufficiently good water quality ensuring that there are no surface sheens or algal blooms in the breeding ponds⁸². However, the SAC lies 5.7km to the south-west of Wirral and upstream of any of Wirral's WWTWs that are likely to be discharging treated sewage effluent as a result of WLP development. Given that the site lies on an elevated plateau, it is also much more likely to be receiving water from higher terrain. Therefore, it is considered that there is no hydrological connectivity with development in Wirral Borough. LSEs can be excluded, and the site is screened out from Appropriate Assessment.
- 4.32 While the qualifying great-crested newts in the Deeside and Buckley Newt Sites SAC are sensitive to low water quality, such issues need to be considered on a site-by-site basis. The Core Management Plan published by Natural Resources Wales states that '*water pollution is not considered to be a significant factor affecting the presence of great-crested newts on this site*'⁸³. Furthermore, the site lies 9.1km to the south of Wirral Borough, upstream of any waterbodies that might receive additional treated sewage effluent as a result of the WLP. As such it is considered that there is no hydrological connectivity with development in Wirral. LSEs can be excluded and the site is screened out from Appropriate Assessment.

Policy Screening

- 4.33 The following policies of the Reg.19 Wirral Local Plan have been screened in for Appropriate Assessment because they provide for development that will increase the discharge of treated sewage effluent and / or may result in surface run-off to waterbodies within and around Wirral Borough:
- **Policy WS1.1 (Homes)** – Allocates a minimum of 13,360 net additional dwellings in Regeneration Areas, on former allocated employment land and spread across the authority
 - **Policy WS1.2 (Employment)** – Allocates 65.60ha of employment land on sites across Wirral Borough, including port and marine related facilities
 - **Policy WS4.1 (Meeting the Strategy)** – Helps deliver the objectives of the Council's economic strategy by allocating 65.60ha of land for main employment uses

⁸⁰ <http://publications.naturalengland.org.uk/publication/6588974160150528> [Accessed on the 20/11/2019]

⁸¹ https://naturalresources.wales/media/673374/River_De_Bala_Lake_32_Plan.pdf [Accessed on the 20/11/2019]

⁸² https://naturalresources.wales/media/672548/Halkyn%20SAC%20Plan%20Eng_.pdf [Accessed on the 20/11/2019]

⁸³ https://naturalresources.wales/media/671740/Deeside_and_Buckley_WES32_Plan_English.pdf [Accessed on the 20/11/2019]

- **Policy WS4.2 (Designated Employment Areas)** – Safeguards land within designated Primarily Employment Areas for redevelopment, renewal, intensification and extension employment proposals
- **Policy WS4.4 (Tourism)** – Promotes tourism development in urban locations of the borough and enhancing access to Wirral's coastline (e.g. in Hoylake and West Kirby)
- **Policy RA1 (Seacombe River Corridor Regeneration Area)** – provides for approx. 340 net additional dwellings in the Seacombe River Corridor Regeneration Area
- **Policy RA2 (Scotts Quay Regeneration Area)** – provides for approx. 900 net additional dwellings in the Scotts Quay Regeneration Area
- **Policy RA3 (Birkenhead Waterfront Regeneration Area)** – allocates approx. 630 net additional dwellings and 1.58ha of employment land in the Birkenhead Waterfront Regeneration Area
- **Policy RA4 (Central Birkenhead Regeneration Area)** – allocates approx. 1,450 net additional dwellings in the Central Birkenhead Regeneration Area
- **Policy RA5 (Hind Street and St Werburghs Regeneration Area)** – provides for approx. 1,640 net additional dwellings in the Hind Street and St Werburghs Regeneration Area
- **Policy RA6 (Wirral Waters Regeneration Area)** – provides for approx. 3,230 net additional dwellings and 29.61ha of employment land in the Wirral Waters Regeneration Area
- **Policy RA7 (Hamilton Park Regeneration Area)** – allocates approx. 1,025 net additional dwellings and 0.98ha of employment land in the Hamilton Park Regeneration Area
- **Policy RA8 (Northside Regeneration Area)** – allocates approx. 13.11ha of employment land in the Northside Regeneration Area
- **Policy RA9 (Liscard Regeneration Area)** – allocates approx. 200 net additional dwellings in the Liscard Regeneration Area
- **Policy RA10 (New Brighton Regeneration Area)** – provides for a minimum quantum of 315 net additional dwellings in the New Brighton Regeneration Area
- **Policy RA11 (New Ferry Regeneration Area)** – provides for a minimum quantum of 109 net additional dwellings in the New Ferry Regeneration Area
- **Policy WP1.2 (Residential Sites)** – Wallasey – a net additional 130 dwellings will be delivered on smaller residential sites across Wallasey
- **Policy WP2.3 (Employment Sites)** – Birkenhead Commercial Core – delivers approx. 6.58ha of employment land on two employment allocations
- **Policy WP3.3 (Residential Sites)** – Suburban Birkenhead – a net additional 138 dwellings will be delivered on smaller residential sites across Suburban Birkenhead
- **Policy WP3.4 (Employment Sites)** – Suburban Birkenhead – delivers approx. 0.58ha of employment land on one site allocation (Land west of Prenton Way, North Cheshire Trading Estate, Prenton)
- **Policy WP4.2 (Residential Sites)** – Bebington, Bromborough and Eastham – a net additional 1,981 dwellings will be delivered on smaller residential sites across Bebington, Bromborough and Eastham
- **Policy WP4.3 (Employment Sites)** – Bebington, Bromborough and Eastham – approx. 15.66ha of employment land will be delivered on five allocations across Bebington, Bromborough and Eastham

- **Policy WP5.1 (Residential Sites)** – Leasowe, Moreton, Upton, Greasby and Woodchurch – a net additional 353 dwellings will be delivered on smaller residential sites across Leasowe, Moreton, Upton, Greasby and Woodchurch
- **Policy WP5.2 (Employment Sites)** – Leasowe, Moreton, Upton, Greasby and Woodchurch – approx. 4.74ha of employment land will be delivered on four sites across Leasowe, Moreton, Upton, Greasby and Woodchurch
- **Policy WP6.3 (Residential Sites)** – West Kirby and Hoylake – a net additional 58 dwellings will be delivered on smaller residential sites across West Kirby and Hoylake
- **Policy WP7.2 (Residential Sites)** – Irby, Thingwall, Pensby, Heswall and Gayton – a net additional 34 dwellings will be delivered on smaller residential sites across Irby, Thingwall, Pensby, Heswall and Gayton
- **Policy WD13 (Telecommunications Development)** – this policy supports the delivery of telecommunications apparatuses along Wirral's coastline, which may involve the delivery of tall structures

Water Quantity, Level and Flow

4.34 The following European sites within 10km of Wirral Borough are vulnerable to decreases in water quantity, level and flow potentially associated with the Wirral Local Plan (the sites in bold are taken forward to Appropriate Assessment):

- **Mersey Narrows and North Wirral Foreshore SPA and Ramsar**
- **Dee Estuary SPA and Ramsar**
- **Mersey Estuary SPA and Ramsar**
- **Liverpool Bay SPA**
- **Ribble and Alt Estuaries SPA and Ramsar**
- **Sefton Coast SAC**
- **Halkyn Mountain SAC**
- **Deeside and Buckley Newt Sites SAC**
- **River Dee and Bala Lake SAC**
- **River Eden SAC**

4.35 The qualifying birds in the Mersey Narrows and North Wirral Foreshore SPA and Ramsar are reliant on a diverse assemblage of aquatic invertebrates in intertidal sand- and mudflats. The Wirral Local Plan allocates development that will be supplied with potable water, potentially increasing pressure on freshwater abstractions. Natural England's Site Conservation Objectives Supplementary Advice Note mentions that changes in source, depth, duration, frequency, magnitude and timing of water supply / flow can have important implications to the foraging resources of waders and seabirds. Furthermore, the suitability of habitats for drinking, preening and roosting may also be affected. The availability of freshwater both within and outside of the SPA and Ramsar is highlighted. **LSEs of the emerging Wirral Local Plan on the Mersey Narrows and North Wirral Foreshore SPA and Ramsar cannot be excluded, and the site is screened in for Appropriate Assessment.**

4.36 The Dee Estuary SPA and Ramsar is designated for bird species that all depend on natural fluctuations in water depth in their supporting habitats. For example, redshank (a medium-sized wader species) feed on molluscs and crustaceans by probing their bills into substrate, requiring a standing water depth between 1-5cm deep. A substantial increase or decrease of water levels due to the Wirral Local Plan may impede the ability of this (and other) species to forage

adequately. **LSEs of the emerging Wirral Local Plan on the Dee Estuary SPA and Ramsar cannot be excluded, and the site is screened in for Appropriate Assessment.**

- 4.37 The Mersey Estuary SPA and Ramsar is designated for several species of waders and waterfowl, which depend on sufficient freshwater input, both within the site boundary as well as on functionally linked supporting habitats such as grassland. For example, regarding black-tailed godwit, Natural England advises that high water tables and damp field conditions should be maintained, including 20-30% of supporting habitats to be soggy or flooded. Within intertidal sand- and mudflats, invertebrate communities require adequate mixing conditions for survival. **LSEs of the emerging Wirral Local Plan on the Mersey Estuary SPA and Ramsar cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.38 Wintering red-throated divers, qualifying species of the Liverpool Bay SPA, are associated with shallow inshore waters, such as in sandy bays, firths and lochs. There is an indication that this species associates with areas of salinity gradients, especially where river freshwater meets sea water. These areas tend to fluctuate with the state of tides, volume of river flow and prevailing wind conditions. Therefore, a reduction in the volume of freshwater supplied to the site may result in knock-on impacts on this qualifying species. **Overall, LSEs of the emerging Wirral Local Plan on the Liverpool Bay SPA cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.39 The Ribble and Alt Estuaries SPA and Ramsar is sensitive to a reducing supply of freshwater, both due to potential impacts within designated intertidal habitats as well as off-site supporting habitats. Some qualifying species, especially ducks and geese, are attracted to freshwater flows for preening and drinking. Others, such as waders, may be associated with freshwater inflows due to enhanced microclimate, shelter and prey densities. As for the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, Natural England's Supplementary Advice Note states that changes in the source, depth, duration, frequency, magnitude and timing of freshwater supply can have significant direct or indirect impacts on qualifying species. **LSEs of the emerging Wirral Local Plan on the Ribble and Alt Estuaries SPA and Ramsar cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.40 Several habitats and species in the Sefton Coast SAC are sensitive to hydrological changes, including embryonic shifting dune, shifting dunes along the shoreline with *Ammophila arenaria*, fixed dunes, humid dune slacks and great-crested newts. The hydrology of the dune system in the Sefton Coast SAC is not completely understood, but it is considered likely that they partly depend on a high water table. Changes to the hydrological regime may alter the characteristic assemblage of plants. Furthermore, a reduced water supply to waterbodies supporting great-crested newts may contribute to the drying out of essential newt habitat. **Overall, LSEs of the Wirral Local Plan on the Sefton Coast SAC cannot be excluded and the site is screened in for Appropriate Assessment.**
- 4.41 Both *Molinia* meadows and great-crested newts, both qualifying features of the Halkyn Mountain SAC, are sensitive to reduced freshwater supply. An increased drying of the ground would lead to a decline in abundance of damp-loving species (e.g. rushes and purple moor-grass), shifting communities toward communities that are typical of dry grasslands. Natural Resources Wales' Core Management Plan for the SAC identifies that great-crested newts require water depths of over 10cm in at least 50% of display / breeding ponds between July and September. **Due to a risk of increase abstraction rates, LSEs of the Wirral Local Plan on the Halkyn Mountain SAC cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.42 The Deeside and Buckley Newt Sites SAC is partly designated for great-crested newts, which are critically dependent on sufficient water depths in their ponds during the breeding season (over 10cm depth in at least 50% of their breeding ponds). The development outlined in the Wirral Local Plan will increase the requirement for potable water within Wirral Borough, which could be obtained from sources in hydrological connectivity with the SAC. **Therefore, LSEs of the Wirral Local Plan on the Deeside and Buckley Newt Sites SAC cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.43 While the River Dee and Bala Lake SAC lies over 10km from Wirral Borough, the site is considered here due to its high sensitivity to changes in the flow regime. The SAC's Annex I habitat (water courses of plain to montane levels) and various qualifying species (e.g. Atlantic

salmon, sea lamprey, brook lamprey, river lamprey and bullhead) all depend on flow parameters (i.e. current velocity, water depth, wetted area) to be kept within narrow limits. A sufficient flow regime is particularly important to anadromous species that have to migrate upstream to spawning grounds. **In conclusion, LSEs of the Wirral Local Plan on the River Dee and Bala Lake SAC cannot be excluded, and the site is screened in for Appropriate Assessment.**

- 4.44 The River Eden SAC, while far beyond 10km from Wirral Borough, supplies a large volume of freshwater to United Utilities' Integrated Supply Zone. The site is designated for a wide variety of interest features that are sensitive to water level changes, including oligotrophic to mesotrophic standing waters, water courses of plain to montane levels and anadromous fish species. Natural England's Site Improvement Plan identifies that additional abstractions could negatively impact certain parts of the SAC's catchment (e.g. the River Leith). **As a precautionary measure, despite the long distance to the borough, LSEs of the Wirral Local Plan on the River Eden SAC cannot be excluded, and the site is screened in for Appropriate Assessment.**

Policy Screening

- 4.45 The following policies of the Reg.19 Wirral Local Plan have been screened in for Appropriate Assessment because they are associated with an increase in the potable water demand within Wirral Borough:

- **Policy WS1.1 (Homes)** – Allocates a minimum of 13,360 net additional dwellings in Regeneration Areas, on former allocated employment land and spread across the authority
- **Policy WS1.2 (Employment)** – Allocates 65.60ha of employment land on sites across Wirral Borough, including port and marine related facilities
- **Policy WS4.1 (Meeting the Strategy)** – Helps deliver the objectives of the Council's economic strategy by allocating 65.60ha of land for main employment uses
- **Policy WS4.2 (Designated Employment Areas)** – Safeguards land within designated Primarily Employment Areas for redevelopment, renewal, intensification and extension employment proposals
- **Policy WS4.4 (Tourism)** – Promotes tourism development in urban locations of the borough and enhancing access to Wirral's coastline (e.g. in Hoylake and West Kirby)
- **Policy RA1 (Seacombe River Corridor Regeneration Area)** – provides for approx. 340 net additional dwellings in the Seacombe River Corridor Regeneration Area
- **Policy RA2 (Scotts Quay Regeneration Area)** – provides for approx. 900 net additional dwellings in the Scotts Quay Regeneration Area
- **Policy RA3 (Birkenhead Waterfront Regeneration Area)** – allocates approx. 630 net additional dwellings and 1.58ha of employment land in the Birkenhead Waterfront Regeneration Area
- **Policy RA4 (Central Birkenhead Regeneration Area)** – allocates approx. 1,450 net additional dwellings in the Central Birkenhead Regeneration Area
- **Policy RA5 (Hind Street and St Werburghs Regeneration Area)** – provides for approx. 1,640 net additional dwellings in the Hind Street and St Werburghs Regeneration Area
- **Policy RA6 (Wirral Waters Regeneration Area)** – provides for approx. 3,230 net additional dwellings and 29.61ha of employment land in the Wirral Waters Regeneration Area
- **Policy RA7 (Hamilton Park Regeneration Area)** – allocates approx. 1,025 net additional dwellings and 0.98ha of employment land in the Hamilton Park Regeneration Area

- **Policy RA8 (Northside Regeneration Area)** – allocates approx. 13.11ha of employment land in the Northside Regeneration Area
- **Policy RA9 (Liscard Regeneration Area)** – allocates approx. 200 net additional dwellings in the Liscard Regeneration Area
- **Policy RA10 (New Brighton Regeneration Area)** – provides for a minimum quantum of 315 net additional dwellings in the New Brighton Regeneration Area
- **Policy RA11 (New Ferry Regeneration Area)** – provides for a minimum quantum of 109 net additional dwellings in the New Ferry Regeneration Area
- **Policy WP1.2 (Residential Sites)** – Wallasey – a net additional 130 dwellings will be delivered on smaller residential sites across Wallasey
- **Policy WP2.3 (Employment Sites)** – Birkenhead Commercial Core – delivers approx. 6.58ha of employment land on two employment allocations
- **Policy WP3.3 (Residential Sites)** – Suburban Birkenhead – a net additional 138 dwellings will be delivered on smaller residential sites across Suburban Birkenhead
- **Policy WP3.4 (Employment Sites)** – Suburban Birkenhead – delivers approx. 0.58ha of employment land on one site allocation (Land west of Prenton Way, North Cheshire Trading Estate, Prenton)
- **Policy WP4.2 (Residential Sites)** – Bebington, Bromborough and Eastham – a net additional 1,981 dwellings will be delivered on smaller residential sites across Bebington, Bromborough and Eastham
- **Policy WP4.3 (Employment Sites)** – Bebington, Bromborough and Eastham – approx. 15.66ha of employment land will be delivered on five allocations across Bebington, Bromborough and Eastham
- **Policy WP5.1 (Residential Sites)** – Leasowe, Moreton, Upton, Greasby and Woodchurch – a net additional 353 dwellings will be delivered on smaller residential sites across Leasowe, Moreton, Upton, Greasby and Woodchurch
- **Policy WP5.2 (Employment Sites)** – Leasowe, Moreton, Upton, Greasby and Woodchurch – approx. 4.74ha of employment land will be delivered on four sites across Leasowe, Moreton, Upton, Greasby and Woodchurch
- **Policy WP6.3 (Residential Sites)** – West Kirby and Hoylake – a net additional 58 dwellings will be delivered on smaller residential sites across West Kirby and Hoylake
- **Policy WP7.2 (Residential Sites)** – Irby, Thingwall, Pensby, Heswall and Gayton – a net additional 34 dwellings will be delivered on smaller residential sites across Irby, Thingwall, Pensby, Heswall and Gayton
- **Policy WD13 (Telecommunications Development)** – this policy supports the delivery of telecommunications apparatuses along Wirral's coastline, which may involve the delivery of tall structures

Visual and Noise Disturbance from Construction Works

4.46 The following European sites (and habitat that is functionally linked to these sites) within 10km of Wirral Borough are sensitive to visual and noise disturbance arising from construction works associated with the Wirral Local Plan (the sites in bold are taken forward to Appropriate Assessment):

- **Mersey Narrows and North Wirral Foreshore SPA and Ramsar**
- **Dee Estuary SPA and Ramsar**

- **Mersey Estuary SPA and Ramsar**
- **Liverpool Bay SPA (primarily due to visual and noise disturbance issues in habitat that is functionally linked to the SPA)**
- **Ribble and Alt Estuaries SPA and Ramsar**

- 4.47 This section considers disturbance effects on qualifying bird species through pathways other than recreational pressure, such as construction and vehicular noise, construction lighting, operational lighting and other types of visual and noise disturbance during and post construction. Professional experience suggests that these impacts are unlikely to arise on sites located more than 300m from designated sites or functionally linked habitats.
- 4.48 For example, the noisiest construction activity (impact piling, which involves a hammer dropping onto a pile) has a typical maximum noise level of 100-110dB at 1m from source. However, it will result in noise levels below the 70 dB threshold at which studies on the Humber estuary identified habituation was likely to occur, at distances of more than 100m from source, because atmospheric noise attenuates by 6dB for every doubling of distance. Therefore, a 200m screening distance for noise disturbance was used to assess the development proposals with the most significant impact potential on European sites. For visual stimuli a precautionary distance of 300m was used, which is the distance at which the most sensitive waterfowl have been observed to react to such stimuli. It should be noted that these distances are used purely for the purposes of identifying those development sites which are (in the absence of mitigation) at greatest risk of causing construction-period disturbance to SPA birds. However, this does not mean that it is impossible for disturbance to arise from construction at greater distances and project-level noise modelling may be required for developments located more than 200m from SPA and Ramsar sites. It should also be noted that for bespoke noise modelling assessments comparison with baseline noise levels is also likely to be required.
- 4.49 The Mersey Narrows and North Wirral Foreshore SPA and Ramsar is designated for waterfowl and wader species that are all sensitive to visual and noise disturbance. The precautionary distance for non-recreational disturbance is 300m, meaning that potential development sites within this buffer are likely to result in LSEs. Several proposed site allocations lie within 200m of the Mersey Narrows and the North Wirral Foreshore SPA and Ramsar. **LSEs of the WLP cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.50 The Dee Estuary SPA and Ramsar, also designated for sensitive waterfowl and wader species, lies adjacent to the western shoreline of the Wirral Peninsula. Development in the western part of Wirral (especially in the wider area around West Kirby and Heswall) within 300m of the SPA and Ramsar has the potential to cause visual and noise disturbance on SPA and Ramsar birds. **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.51 The Mersey Estuary SPA and Ramsar, designated for disturbance-sensitive waterfowl and waders, lies adjacent to the eastern shoreline of the Wirral Peninsula. Development in the urbanised area of Wirral (for example Birkenhead and Bebington) within 300m of the SPA and Ramsar has the potential to cause visual and noise disturbance on SPA and Ramsar birds (if present). **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.52 The Liverpool Bay SPA lies over 300m to the north of Wirral Borough, such that visual and noise disturbance arising from the construction and post-construction periods of WLP development is not considered to be an issue for the European site itself. However, as highlighted earlier, a significant number of individuals of qualifying species of the SPA use the Birkenhead Docks as functionally linked foraging habitat. The docks lie directly adjacent to some of the sites proposed for development, most notably Wirral Waters, and might be affected by visual and noise disturbance arising from WLP development. **LSEs cannot be excluded, and the site is screened in for Appropriate Assessment.**
- 4.53 The Ribble and Alt Estuaries SPA and Ramsar, designated for disturbance-sensitive bird species, lies approx. 1.5km to the north-east of Wirral's boundary. Therefore, the entire European site boundary lies beyond the precautionary 300m visual and noise disturbance distance applied to waterbirds. As such, it is concluded that development in Wirral will not result in visual and noise

disturbance of the SPA's and Ramsar's qualifying birds. LSEs can be excluded, and the site is screened out from Appropriate Assessment.

Policy Screening

4.54 The following policies of the Reg.19 Wirral Local Plan have been screened in for Appropriate Assessment because they will involve construction activities with the potential to result in visual and noise disturbance to SPA and Ramsar waterfowl and waders:

- **Policy WS1.1 (Homes)** – Allocates a minimum of 13,360 net additional dwellings in Regeneration Areas, on former allocated employment land and spread across the authority
- **Policy WS1.2 (Employment)** – Allocates 65.60ha of employment land on sites across Wirral Borough, including port and marine related facilities
- **Policy WS4.1 (Meeting the Strategy)** – Helps deliver the objectives of the Council's economic strategy by allocating 65.60ha of land for main employment uses
- **Policy WS4.2 (Designated Employment Areas)** – Safeguards land within designated Primarily Employment Areas for redevelopment, renewal, intensification and extension employment proposals
- **Policy WS4.4 (Tourism)** – Promotes tourism development in urban locations of the borough and enhancing access to Wirral's coastline (e.g. in Hoylake and West Kirby)
- **Policy RA1 (Seacombe River Corridor Regeneration Area)** – provides for approx. 340 net additional dwellings in the Seacombe River Corridor Regeneration Area
- **Policy RA2 (Scotts Quay Regeneration Area)** – provides for approx. 900 net additional dwellings in the Scotts Quay Regeneration Area
- **Policy RA3 (Birkenhead Waterfront Regeneration Area)** – allocates approx. 630 net additional dwellings and 1.58ha of employment land in the Birkenhead Waterfront Regeneration Area
- **Policy RA4 (Central Birkenhead Regeneration Area)** – allocates approx. 1,450 net additional dwellings in the Central Birkenhead Regeneration Area
- **Policy RA5 (Hind Street and St Werburghs Regeneration Area)** – provides for approx. 1,640 net additional dwellings in the Hind Street and St Werburghs Regeneration Area
- **Policy RA6 (Wirral Waters Regeneration Area)** – provides for approx. 3,230 net additional dwellings and 29.61ha of employment land in the Wirral Waters Regeneration Area
- **Policy RA7 (Hamilton Park Regeneration Area)** – allocates approx. 1,025 net additional dwellings and 0.98ha of employment land in the Hamilton Park Regeneration Area
- **Policy RA8 (Northside Regeneration Area)** – allocates approx. 13.11ha of employment land in the Northside Regeneration Area
- **Policy RA9 (Liscard Regeneration Area)** – allocates approx. 200 net additional dwellings in the Liscard Regeneration Area
- **Policy RA10 (New Brighton Regeneration Area)** – provides for a minimum quantum of 315 net additional dwellings in the New Brighton Regeneration Area
- **Policy RA11 (New Ferry Regeneration Area)** – provides for a minimum quantum of 109 net additional dwellings in the New Ferry Regeneration Area
- **Policy WP1.2 (Residential Sites)** – Wallasey – a net additional 130 dwellings will be delivered on smaller residential sites across Wallasey

- **Policy WP2.3 (Employment Sites)** – Birkenhead Commercial Core – delivers approx. 6.58ha of employment land on two employment allocations
- **Policy WP3.3 (Residential Sites)** – Suburban Birkenhead – a net additional 138 dwellings will be delivered on smaller residential sites across Suburban Birkenhead
- **Policy WP3.4 (Employment Sites)** – Suburban Birkenhead – delivers approx. 0.58ha of employment land on one site allocation (Land west of Prenton Way, North Cheshire Trading Estate, Prenton)
- **Policy WP4.2 (Residential Sites)** – Bebington, Bromborough and Eastham – a net additional 1,981 dwellings will be delivered on smaller residential sites across Bebington, Bromborough and Eastham
- **Policy WP4.3 (Employment Sites)** – Bebington, Bromborough and Eastham – approx. 15.66ha of employment land will be delivered on five allocations across Bebington, Bromborough and Eastham
- **Policy WP5.1 (Residential Sites)** – Leasowe, Moreton, Upton, Greasby and Woodchurch – a net additional 353 dwellings will be delivered on smaller residential sites across Leasowe, Moreton, Upton, Greasby and Woodchurch
- **Policy WP5.2 (Employment Sites)** – Leasowe, Moreton, Upton, Greasby and Woodchurch – approx. 4.74ha of employment land will be delivered on four sites across Leasowe, Moreton, Upton, Greasby and Woodchurch
- **Policy WP6.3 (Residential Sites)** – West Kirby and Hoylake – a net additional 58 dwellings will be delivered on smaller residential sites across West Kirby and Hoylake
- **Policy WP7.2 (Residential Sites)** – Irby, Thingwall, Pensby, Heswall and Gayton – a net additional 34 dwellings will be delivered on smaller residential sites across Irby, Thingwall, Pensby, Heswall and Gayton
- **Policy WD13 (Telecommunications Development)** – this policy supports the delivery of telecommunications apparatuses along Wirral's coastline, which may involve the delivery of tall structures

Coastal Squeeze

4.55 The following European sites within 10km of Wirral Borough are sensitive to the impact pathway coastal squeeze⁸⁴, arising from development on greenfield sites allocated adjacent to Wirral Borough's coastline (it is to be noted that the potential for an effect would only arise where there is a net increase in impermeable development):

- **Mersey Narrows and North Wirral Foreshore SPA and Ramsar**
- **Mersey Estuary SPA and Ramsar**
- **Dee Estuary SPA and Ramsar and SAC**

4.56 The Mersey Narrows and North Wirral Foreshore SPA and Ramsar is a 2,078.41ha large site that comprises extensive areas of intertidal sand- and mudflats, which provide foraging and roosting areas for the site's qualifying species. Development allocations on greenfield sites immediately inland from the SPA and Ramsar would increase the risk of coastal squeeze, as supporting habitats (and the associated bird assemblages) would be unable to naturally recede inland. **As such, the sites allocated in the Wirral Local Plan require further appraisal and LSEs of the Plan cannot be excluded. The site is screened in for Appropriate Assessment.**

4.57 The Mersey Estuary SPA and Ramsar designation covers an area of 5.023ha, which encompass large areas of saltmarsh and intertidal sand- and mudflats. Large parts of eastern Wirral are

⁸⁴ Sites within 10km of Wirral Borough that are sensitive to coastal squeeze but are not directly impacted by Wirral Borough's Local Plan have been excluded from the assessment.

already developed and as such the risk of coastal squeeze associated with the Plan is inherently limited. Notwithstanding this, there are pockets of greenfield sites immediately inland from the SPA and Ramsar. **Therefore, LSEs of the Wirral Local Plan on the Mersey Estuary SPA and Ramsar cannot be excluded, and the site is screened in for Appropriate Assessment.**

- 4.58 As was relevant to the previous European sites, the qualifying species and habitats in the Dee Estuary SPA and Ramsar and SAC are all at risk from being 'squeezed' between rising sea levels and brownfield sites adjoining the coastline. This risk of coastal squeeze in western Wirral is particularly high because of its rural and undeveloped nature. **In conclusion, LSEs of the Wirral Local Plan on the Dee Estuary SPA and Ramsar and SAC cannot be excluded, and the site is screened in for Appropriate Assessment.**

Policy Screening

- 4.59 The following policies of the Reg.19 Wirral Local Plan have been screened in for Appropriate Assessment because they may involve urban development in close proximity to Wirral's coastline, which would contribute to the process of coastal squeeze:

- **Policy WS1.1 (Homes)** – Allocates a minimum of 13,360 net additional dwellings in Regeneration Areas, on former allocated employment land and spread across the authority
- **Policy WS1.2 (Employment)** – Allocates 65.60ha of employment land on sites across Wirral Borough, including port and marine related facilities
- **Policy WS4.1 (Meeting the Strategy)** – Helps deliver the objectives of the Council's economic strategy by allocating 65.60ha of land for main employment uses
- **Policy WS4.2 (Designated Employment Areas)** – Safeguards land within designated Primarily Employment Areas for redevelopment, renewal, intensification and extension employment proposals
- **Policy WS4.4 (Tourism)** – Promotes tourism development in urban locations of the borough and enhancing access to Wirral's coastline (e.g. in Hoylake and West Kirby)
- **Policy RA1 (Seacombe River Corridor Regeneration Area)** – provides for approx. 340 net additional dwellings in the Seacombe River Corridor Regeneration Area
- **Policy RA2 (Scotts Quay Regeneration Area)** – provides for approx. 900 net additional dwellings in the Scotts Quay Regeneration Area
- **Policy RA3 (Birkenhead Waterfront Regeneration Area)** – allocates approx. 630 net additional dwellings and 1.58ha of employment land in the Birkenhead Waterfront Regeneration Area
- **Policy RA4 (Central Birkenhead Regeneration Area)** – allocates approx. 1,450 net additional dwellings in the Central Birkenhead Regeneration Area
- **Policy RA5 (Hind Street and St Werburghs Regeneration Area)** – provides for approx. 1,640 net additional dwellings in the Hind Street and St Werburghs Regeneration Area
- **Policy RA6 (Wirral Waters Regeneration Area)** – provides for approx. 3,230 net additional dwellings and 29.61ha of employment land in the Wirral Waters Regeneration Area
- **Policy RA7 (Hamilton Park Regeneration Area)** – allocates approx. 1,025 net additional dwellings and 0.98ha of employment land in the Hamilton Park Regeneration Area
- **Policy RA8 (Northside Regeneration Area)** – allocates approx. 13.11ha of employment land in the Northside Regeneration Area

- **Policy RA9 (Liscard Regeneration Area)** – allocates approx. 200 net additional dwellings in the Liscard Regeneration Area
- **Policy RA10 (New Brighton Regeneration Area)** – provides for a minimum quantum of 315 net additional dwellings in the New Brighton Regeneration Area
- **Policy RA11 (New Ferry Regeneration Area)** – provides for a minimum quantum of 109 net additional dwellings in the New Ferry Regeneration Area
- **Policy WP1.2 (Residential Sites)** – Wallasey – a net additional 130 dwellings will be delivered on smaller residential sites across Wallasey
- **Policy WP2.3 (Employment Sites)** – Birkenhead Commercial Core – delivers approx. 6.58ha of employment land on two employment allocations
- **Policy WP3.3 (Residential Sites)** – Suburban Birkenhead – a net additional 138 dwellings will be delivered on smaller residential sites across Suburban Birkenhead
- **Policy WP3.4 (Employment Sites)** – Suburban Birkenhead – delivers approx. 0.58ha of employment land on one site allocation (Land west of Prenton Way, North Cheshire Trading Estate, Prenton)
- **Policy WP4.2 (Residential Sites)** – Bebington, Bromborough and Eastham – a net additional 1,981 dwellings will be delivered on smaller residential sites across Bebington, Bromborough and Eastham
- **Policy WP4.3 (Employment Sites)** – Bebington, Bromborough and Eastham – approx. 15.66ha of employment land will be delivered on five allocations across Bebington, Bromborough and Eastham
- **Policy WP5.1 (Residential Sites)** – Leasowe, Moreton, Upton, Greasby and Woodchurch – a net additional 353 dwellings will be delivered on smaller residential sites across Leasowe, Moreton, Upton, Greasby and Woodchurch
- **Policy WP5.2 (Employment Sites)** – Leasowe, Moreton, Upton, Greasby and Woodchurch – approx. 4.74ha of employment land will be delivered on four sites across Leasowe, Moreton, Upton, Greasby and Woodchurch
- **Policy WP6.3 (Residential Sites)** – West Kirby and Hoylake – a net additional 58 dwellings will be delivered on smaller residential sites across West Kirby and Hoylake
- **Policy WP7.2 (Residential Sites)** – Irby, Thingwall, Pensby, Heswall and Gayton – a net additional 34 dwellings will be delivered on smaller residential sites across Irby, Thingwall, Pensby, Heswall and Gayton
- **Policy WD13 (Telecommunications Development)** – this policy supports the delivery of telecommunications apparatuses along Wirral's coastline, which may involve the delivery of tall structures

Atmospheric Pollution

4.60 The following European sites within 10km of Wirral Borough would be sensitive to atmospheric pollution resulting from an increase in the number of car-based commuter journeys due to the implementation of the Wirral Local Plan (the sites in bold are taken forward to Appropriate Assessment), taking into account key journey-to-work routes of Wirral residents:

- **Dee Estuary SPA and Ramsar**
- **Dee Estuary SAC**
- Mersey Estuary SPA and Ramsar
- Mersey Narrows and North Wirral Foreshore SPA and Ramsar

- Liverpool Bay SPA
- Ribble and Alt Estuaries SPA and Ramsar
- Sefton Coast SAC
- River Dee and Bala Lake SAC
- Halkyn Mountain SAC
- Deeside and Buckley Newt Sites SAC

4.61 The Dee Estuary SAC comprises habitats with varying degrees of sensitivity to atmospheric pollution. APIS indicates that the most sensitive features in the SAC are the fixed coastal dunes with herbaceous vegetation (critical nitrogen load of 8-15 kg N/ha/yr), the humid dune slacks (10-20 kg N/ha/yr), the embryonic shifting dunes (10-20 kg N/ha/yr) and the shifting dunes with *Ammophila arenaria* (10-20 kg N/ha/yr) and these are also the habitats where the SAC species petalwort is found. An exceedance of critical nitrogen loads may result in the biomass increase of tall graminoids, soil acidification and a loss of lichens species. However, these habitats occupy a relatively small proportion of the SAC (considerably less than 1% according to the JNCC website) and are not found within the parts of the SAC within 200m of major roads relevant to Wirral Borough. The other main habitat with sensitivity to nitrogen deposition is the Atlantic salt meadows and *Salicornia* vegetation, both with a critical load of 20-30 kg N/ha/yr; the lowest part of the critical load range is currently exceeded in places. Saltmarsh has relatively low sensitivity to nitrogen deposition (hence the high critical load) because it's a habitat with naturally high nitrogen levels. There are no significant roads within 200m of this part of the SAC. Moreover, it is important to note that the experimental studies which underlie conclusions regarding the sensitivity of saltmarsh (the habitat representative of littoral sediment on which most studies have occurred) to nitrogen deposition have '*... neither used very realistic N doses nor input methods i.e. they have relied on a single large application more representative of agricultural discharge*'⁸⁵, which is far in excess of anything that would be deposited from atmosphere. There is good reason to believe the upper part of the critical load range (30 kgN/ha/yr) may be more appropriate than the lower part (20 kgN/ha/yr). The Dee Estuary SAC lies within 200m of the A548 in Flintshire (Wales), on the opposite side of the estuary. Commuters originating from Wirral Borough might use the A548 to reach work locations in Flintshire, including at Flint and Holywell. **Therefore, the Welsh part of the Dee Estuary SAC is screened in for Appropriate Assessment regarding atmospheric pollution.**

4.62 The Dee Estuary SPA and Ramsar is designated for its non-breeding waterfowl and breeding tern species, some of which are indirectly sensitive to atmospheric pollution. This is because excess nitrogen deposition might lead to changes to the food resources and habitats of these species. APIS states that supralittoral sediment, immediately inland from the high-water mark (the main breeding habitat for all three tern species), is sensitive to nitrogen deposition. For example, coastal acid and calcareous dune grasslands have critical nitrogen loads of 8-10 kg N/ha/yr and 10-15 kg N/ha/yr respectively. Exceedance of these critical loads might lead to increases in tall grasses and N leaching, while decreasing prostrate plants and typical lichen species. However, there are no tern nest sites located within 200m of the A548. Waterfowl and waders primarily depend on the littoral zone of the SPA and Ramsar, particularly the saltmarsh habitats, which have a critical nitrogen load of 20-30 kg N/ha/yr. According to APIS only one wader species (curlew) for which the SPA is designated is potentially sensitive to nitrogen deposition to saltmarsh, due to potential effects on its habitat structure. Given that the southern part of the SPA and Ramsar overlaps with the boundary of the Dee Estuary SAC, it also lies within 200m of the A548 in Wales (see previous paragraph). **Therefore, for completeness, this site is also screened in for Appropriate Assessment regarding atmospheric pollution.**

4.63 The Site Relevant Critical Load on APIS⁸⁶ for nitrogen deposition to the Mersey Estuary SPA and Ramsar, as it relates to each bird for which the site was designated, indicates that maximum baseline nitrogen deposition to littoral sediment for the grid squares within which the site is situated is 19 kg N/ha/yr (last checked 01/12/2020), with an average deposition rate of 14 kg

⁸⁵ UK Air Pollution Information System website [accessed 21/04/15]: <http://www.apis.ac.uk/node/968>

⁸⁶ <http://www.apis.ac.uk/>

N/ha/yr. This compares to a critical load for littoral sediment of 20-30 kg N/ha/yr. Therefore, the current nitrogen deposition rate is below the critical load for this habitat. Moreover, it is important to note that the experimental studies which underlie conclusions regarding the sensitivity of saltmarsh (the habitat representative of littoral sediment for which most data are available) to nitrogen deposition have ‘... *neither used very realistic N doses nor input methods i.e. they have relied on a single large application more representative of agricultural discharge*’⁸⁷, which is far in excess of anything that would be deposited from atmosphere. There is good reason to believe the upper part of the critical load range (30 kgN/ha/yr) may be more appropriate than the lower part (20 kgN/ha/yr).

- 4.64 Moreover, APIS concludes the effects of nitrogen deposition may be positive for most birds for which the SPA is designated because nitrogen enrichment potentially translates into higher prey availability. The only SPA species for which nitrogen deposition is identified as being potentially negative are great-crested grebe *Podiceps cristatus* (if algal blooms were to occur, which is very unlikely due to inherent turbidity and low water temperatures in the Mersey Estuary, or if saltmarsh experienced a change in grass cover, which is not expected to occur since the nitrogen deposition rate is well below the critical load) and wigeon *Anas penelope*, golden plover *Pluvialis apricaria*, black-tailed godwit *Limosa limosa* and curlew *Numenius arquata* (if nitrogen deposition increases the sward height of their grassland foraging grounds; however, sward height is much more strongly influenced by other factors than atmospheric nitrogen deposition such as cut height, frequency and fertilisation).
- 4.65 Finally, the relevant habitats of the Mersey Estuary SPA and Ramsar are subject to regular tidal flushing. This both deposits far more nitrogen in a single tidal cycle than would be contributed from commuter traffic (reflected on APIS itself, which states regarding saltmarsh that ‘*Overall, N deposition [from atmosphere] is likely to be of low importance for these systems as the inputs are probably significantly below the large nutrient loadings from river and tidal inputs*’⁸⁸) and controls the growth of otherwise competitive plant species. Overall, LSEs of the emerging WLP on the Mersey Estuary SPA and Ramsar regarding atmospheric pollution can be excluded. The site is screened out from Appropriate Assessment in relation to this impact pathway.
- 4.66 Regarding the Liverpool Bay SPA, while terns are vulnerable to nitrogen deposition on their nesting sites, the SPA is not designated for nesting terns but for foraging birds. These are plunge-diving fishers - as are cormorant and red-throated diver (other qualifying species of the SPA) - and their use of the SPA will be unaffected by atmospheric nitrogen deposition. Similarly, common scoter is a sea-duck that does not rely on vegetation or the intertidal foreshore as foraging resources. The analysis regarding the waterbirds of the Mersey Estuary SPA and Ramsar also applies to the waterbird assemblage of the Liverpool Bay SPA. Overall, LSEs of the emerging WLP on the Liverpool Bay SPA regarding atmospheric pollution can be excluded. The site is screened out from Appropriate Assessment in relation to this impact pathway.
- 4.67 An investigation of APIS indicates that the only species for which the Mersey Narrows & North Wirral Foreshore SPA and Ramsar is designated that are potentially sensitive to nitrogen deposition are the nesting terns. However, it has been established that there is no semi-natural vegetated nesting tern habitat within the SPA and Ramsar within 200m of roads on the Wirral peninsula (the terns in the SPA nest primarily on Seaforth Nature Reserve in Sefton; they have also been known to nest at Birkenhead Docks but there is no semi-natural habitat here that would be affected by atmospheric nitrogen deposition). Therefore, it is concluded that LSEs will not arise on this SPA and Ramsar due to air quality.
- 4.68 The qualifying species of the Ribble and Alt Estuaries SPA and Ramsar include a range of waterfowl and wader species, some of which are indirectly sensitive to atmospheric pollution. For example, APIS highlights that most of the littoral zone that the waders depend on has a critical nitrogen load of 20-30 kg N/ha/yr. Natural England’s Supplementary Advice on Site Conservation Objectives also states that air quality is an important feature determining the quality of the species’ supporting habitat⁸⁹. However, the Advice Note also specifies that ‘*there is a lack of*

⁸⁷ UK Air Pollution Information System website: <http://www.apis.ac.uk/node/968> [Accessed on the 01/12/2020]

⁸⁸ APIS website: <http://www.apis.ac.uk/node/968> [Accessed on the 01/12/2020]

⁸⁹ <https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9005103&SiteName=ribble&SiteNameDisp>

evidence that the feature [the qualifying bird species] is being impacted by any anthropogenic activities'. Furthermore, while Sefton is in the top five list of origins and destinations of commuter traffic to and from Wirral Borough, the SPA and Ramsar is beyond 200m of any major road likely to form a journey-to-work route. Therefore, it is concluded that the WLP will not result in LSEs on the Ribble and Alt Estuaries SPA and Ramsar regarding atmospheric pollution. No air quality modelling for this site will be required for the emerging Local Plan.

- 4.69 The Sefton Coast SAC's qualifying dune systems and associated plant species are highly sensitive to atmospheric pollution. This includes the fixed acidic coastal dunes with vegetation (critical nitrogen load: 8-10 kg N/ha/yr) and the humid dune slacks (critical nitrogen load: 10-15 kg N/ha/yr). An exceedance of this nutrient deposition would change the community composition of the dunes towards an increased biomass of tall graminoids. This is also reflected in Natural England's Conservation Objectives Supplementary Advice Note, which confirms that the current nitrogen deposition already exceeds the critical loads within the shifting dunes⁹⁰. However, a review of the existing roads along the SAC highlights that the dune systems are within approx. 150m of the A565 (Liverpool Road) near Southport, relatively far north in Sefton and only a very short c. 200m section of road lies this close (i.e. considerably less than 0.01% of the SAC lies within 200m). While review of the 2011 Census data shows that there is a relatively high number of commutes between Wirral and Sefton, most of these journeys are likely to be to / from the settlements of Bootle, Litherland and Maghull, and therefore will not affect the Sefton Coast SAC further north. Therefore, it is concluded that the WLP will not result in LSEs on the Sefton Coast SAC regarding atmospheric pollution. No air quality modelling will be required for the emerging Local Plan.
- 4.70 The River Dee and Bala Lake SAC is a freshwater lake site and therefore not generally considered to be nitrogen-limited (most open freshwater bodies are phosphorus limited instead). This SAC is partly designated for floating water-plantain. APIS reports a nitrogen Critical Load (CL) of 3-10 kg N/ha/yr and exceedance impacts may change the species composition of macrophyte communities, increase algal productivity and result in a shift in nutrient limitation of phytoplankton from nitrogen to phosphorus. Notably, APIS states that this CL is only to be applied where the population of this species is found in oligotrophic (low-nutrient) or dystrophic (acidic) lakes, which clearly does not apply to the River Dee component of the SAC. The section of the SAC closest to Wirral Borough (approx. 7.3km) and, more importantly, the A548 does not comprise any such lake habitats. As such, the relevant parts of the River Dee and Bala Lake SAC are not sensitive to nitrogen deposition associated with the WLP. LSEs can be excluded and the site is screened out from Appropriate Assessment in relation to this impact pathway.
- 4.71 The Halkyn Mountain SAC is designated for several habitats that are sensitive to atmospheric nitrogen deposition, including European dry heaths and Calaminarian grasslands. APIS identifies a critical nitrogen load for Calaminarian grasslands of 10-15 kg N/ha/yr and for European dry heaths of 10-20 kg N/ha/yr. Component parts of the SAC, notably Halkyn Common, lie directly adjacent to the A55 south of Holywell. However, while Flintshire is clearly a major workplace destination for Wirral residents, it is most likely that commuters from Wirral will work in settlements in the south-east of the district on the English border, including Connah's Quay, Buckley, Flint and Mold, since these are the focal areas for employment. These journeys would not involve driving within 200m of Halkyn Common. Therefore, LSEs on the Halkyn Mountain SAC can be excluded. No air quality modelling will be required for the emerging Local Plan.
- 4.72 The Deeside and Buckley Newt Sites SAC is partly designated for stands of sessile oak woods containing *Ilex* and *Blechnum*. On APIS a critical nitrogen load of 10-15 kg N/ha/yr is identified for this habitat type that, if exceeded, would result in the decrease of mycorrhiza, epiphytic lichens and bryophytes. The only transect at which the SAC lies within 200m of a major road is south-west of Ewloe adjacent to the A55. However, a review of Natural Resources Wales' Core Management Plan shows that none of the management units within the Buckley Claypits and Commons SSSI (which covers this part of the SPA and Ramsar), contains this habitat feature. As such, there is no impact pathway linking the SAC to increased traffic arising from the WLP.

[lay=Ribble+and+Alt+Estuaries+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&NumMarineSeasonality=20](#)
[Accessed on the 01/12/2020]

⁹⁰ <http://publications.naturalengland.org.uk/publication/6588974160150528> [Accessed on the 01/12/2020]

Therefore, LSEs on the Deeside and Buckley Newt Sites SAC regarding atmospheric pollution can be excluded. No air quality modelling will be required for the emerging Local Plan.

Policy Screening

4.73 The following policies of the Reg.19 Wirral Local Plan have been screened in for Appropriate Assessment because they will increase the volume of commuter traffic within Wirral Borough and to adjoining authorities, potentially within 200m of sensitive European sites:

- **Policy WS1.1 (Homes)** – Allocates a minimum of 13,360 net additional dwellings in Regeneration Areas, on former allocated employment land and spread across the authority
- **Policy WS1.2 (Employment)** – Allocates 65.60ha of employment land on sites across Wirral Borough, including port and marine related facilities
- **Policy WS4.1 (Meeting the Strategy)** – Helps deliver the objectives of the Council's economic strategy by allocating 65.60ha of land for main employment uses
- **Policy WS4.2 (Designated Employment Areas)** – Safeguards land within designated Primarily Employment Areas for redevelopment, renewal, intensification and extension employment proposals
- **Policy WS4.4 (Tourism)** – Promotes tourism development in urban locations of the borough and enhancing access to Wirral's coastline (e.g. in Hoylake and West Kirby)
- **Policy RA1 (Seacombe River Corridor Regeneration Area)** – provides for approx. 340 net additional dwellings in the Seacombe River Corridor Regeneration Area
- **Policy RA2 (Scotts Quay Regeneration Area)** – provides for approx. 900 net additional dwellings in the Scotts Quay Regeneration Area
- **Policy RA3 (Birkenhead Waterfront Regeneration Area)** – allocates approx. 630 net additional dwellings and 1.58ha of employment land in the Birkenhead Waterfront Regeneration Area
- **Policy RA4 (Central Birkenhead Regeneration Area)** – allocates approx. 1,450 net additional dwellings in the Central Birkenhead Regeneration Area
- **Policy RA5 (Hind Street and St Werburghs Regeneration Area)** – provides for approx. 1,640 net additional dwellings in the Hind Street and St Werburghs Regeneration Area
- **Policy RA6 (Wirral Waters Regeneration Area)** – provides for approx. 3,230 net additional dwellings and 29.61ha of employment land in the Wirral Waters Regeneration Area
- **Policy RA7 (Hamilton Park Regeneration Area)** – allocates approx. 1,025 net additional dwellings and 0.98ha of employment land in the Hamilton Park Regeneration Area
- **Policy RA8 (Northside Regeneration Area)** – allocates approx. 13.11ha of employment land in the Northside Regeneration Area
- **Policy RA9 (Liscard Regeneration Area)** – allocates approx. 200 net additional dwellings in the Liscard Regeneration Area
- **Policy RA10 (New Brighton Regeneration Area)** – provides for a minimum quantum of 315 net additional dwellings in the New Brighton Regeneration Area
- **Policy RA11 (New Ferry Regeneration Area)** – provides for a minimum quantum of 109 net additional dwellings in the New Ferry Regeneration Area
- **Policy WP1.2 (Residential Sites)** – Wallasey – a net additional 130 dwellings will be delivered on smaller residential sites across Wallasey

- **Policy WP2.3 (Employment Sites)** – Birkenhead Commercial Core – delivers approx. 6.58ha of employment land on two employment allocations
- **Policy WP3.3 (Residential Sites)** – Suburban Birkenhead – a net additional 138 dwellings will be delivered on smaller residential sites across Suburban Birkenhead
- **Policy WP3.4 (Employment Sites)** – Suburban Birkenhead – delivers approx. 0.58ha of employment land on one site allocation (Land west of Prenton Way, North Cheshire Trading Estate, Prenton)
- **Policy WP4.2 (Residential Sites)** – Bebington, Bromborough and Eastham – a net additional 1,981 dwellings will be delivered on smaller residential sites across Bebington, Bromborough and Eastham
- **Policy WP4.3 (Employment Sites)** – Bebington, Bromborough and Eastham – approx. 15.66ha of employment land will be delivered on five allocations across Bebington, Bromborough and Eastham
- **Policy WP5.1 (Residential Sites)** – Leasowe, Moreton, Upton, Greasby and Woodchurch – a net additional 353 dwellings will be delivered on smaller residential sites across Leasowe, Moreton, Upton, Greasby and Woodchurch
- **Policy WP5.2 (Employment Sites)** – Leasowe, Moreton, Upton, Greasby and Woodchurch – approx. 4.74ha of employment land will be delivered on four sites across Leasowe, Moreton, Upton, Greasby and Woodchurch
- **Policy WP6.3 (Residential Sites)** – West Kirby and Hoylake – a net additional 58 dwellings will be delivered on smaller residential sites across West Kirby and Hoylake
- **Policy WP7.2 (Residential Sites)** – Irby, Thingwall, Pensby, Heswall and Gayton – a net additional 34 dwellings will be delivered on smaller residential sites across Irby, Thingwall, Pensby, Heswall and Gayton

Plans / projects to be Considered In-Combination

- 4.74 It is obligatory to not only assess the impacts of a proposed plan alone, but also to investigate whether there might be 'in-combination' effects with plans proposing development in other authorities surrounding a European protected site. In practice, such an 'in-combination' assessment is of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential.
- 4.75 For the purposes of this HRA, AECOM identified several other authorities that have developed their own Local Plans or Local Development Plans (applicable to Welsh authorities), outlining residential and / or employment growth within their own boundary. These include the English authorities of Sefton, Liverpool, Cheshire West and Chester, Halton and the Welsh authority of Flintshire. Table 4 summarises the residential and / or employment growth allocated within the respective Plans for these authorities. It is to be noted that several authorities are nearing the end of their plan period and are currently working on updated Plans. However, Table 4 summarises the currently adopted, and therefore legally effective, Plans.

Table 4: Number of residential dwellings and employment space that are to be delivered in authorities adjacent to Wirral, according to their adopted Local Plans or Local Development Plans.

Local Authority	Total housing provided	Total employment space provided (ha)
Sefton (Adopted April 2017) ⁹¹	11,520 (2012-2030)	81.6
Liverpool (Pre-submission draft, January 2018) ⁹²	34,780 (2013-2033)	149.5
Cheshire West and Chester (Adopted January 2015) ⁹³	22,000 (2010-2030)	365
Flintshire (Local Development Plan – Preferred Strategy) ⁹⁴	7,645 (2015-2030)	223
Halton (Pre-submission draft, July 2019) ⁹⁵	8,050 (2014-2037)	NA
Wirral (Reg.19 Local Plan, October 2021)	13,360 (2021-2037)	57.82
Total In-Combination Growth	97,355	Min. 876.9

4.76 Other ongoing projects in the Borough of Wirral and its surrounding authorities must also be considered, as these might have in-combination effects with the WLP. For example, a project to enhance the scope for tourism in the Liverpool City Region might lead to higher recreational pressure in the coastal and estuarine European sites in Merseyside, thereby acting in-combination. The following further projects (in addition to the Plans of adjoining authorities outlined in the previous section) are considered in this HRA:

- **Hydrodec Oil Re-Refinery Eastham** - The construction of a new hazardous waste recovery facility at Power House Road, Eastham, Port Wirral, Merseyside comprising the construction and operation of a waste oil re-refining plant together with associated and ancillary development;
- **Alexandra Dock Biomass Project** - New Biomass energy project (output of between 100 and 150MW);
- **Liverpool John Lennon Airport Masterplan** to 2050 (March 2018). This project constitutes part of the Halton Local Plan and Liverpool Local Plan, but the Masterplan provides considerably more detail on some issues than relevant Local Plan policy;
- **Mersey Ports Masterplan** (Consultation draft; June 2011), including the Port expansion into Seaforth Nature Reserve and the Seaforth River Terminal (a deepwater container port expansion in Sefton is currently under construction and due for completion imminently), new opportunities for renewable energy, development of single and multi-user port centric warehousing and of new processing facilities for imported commodities, potentially leading to the Liverpool SuperPort – An integrated port, airport, intermodal terminal, freight and commercial network based upon the Port of Liverpool, the Manchester Ship Canal, Liverpool John Lennon Airport and the Mersey Multimodal Gateway (Liverpool City Region);
- **North-West Marine Plan**, the Marine Management Organisation (MMO) is responsible for preparing marine plans for the English inshore and offshore regions according to the policies and objectives set out in the Marine Policy Statement (MPS). This plan is now adopted and will guide the sustainable development of marine industries, such as wind farms, shipping and marine aggregates; and

⁹¹ <https://www.sefton.gov.uk/media/1270013/A-Local-Plan-for-Sefton-for-ADOPTION-FINAL.pdf> [Accessed on the 21/11/2019]

⁹² <https://liverpool.gov.uk/media/1356834/01-local-plan-january-2018-final.pdf> [Accessed on the 21/11/2019]

⁹³ http://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/adopted_cwac_lp/ [Accessed on the 21/11/2019]

⁹⁴ Pre-Deposit Consultation version of the Plan. Available at: <https://www.flintshire.gov.uk/en/Resident/Planning/Home.aspx> [Accessed on the 21/11/2019]

⁹⁵ Revised Delivery and Allocations Local Plan. Available at: <https://www3.halton.gov.uk/Pages/planning/policyguidance/planningplans.aspx> [Accessed on the 21/11/2019]

- **Liverpool City Region Spatial Development Strategy (SDS)**; created by the Liverpool City Region Combined Authority that sets out a strategic framework for land use over the next 15 years. The SDS addresses a range of subjects, some of which are likely to benefit European sites. For example, Objective 1 seeks to target climate change and create a greener Liverpool City Region. Furthermore, the SDS also aims at fostering an inclusive buildings and creating high-quality buildings.

4.77 The following projects are noted, but are not formally taken into account in the assessment because they are at very early stages:

- **Mersey Tidal Power** - Liverpool City Region Combined Authority (LCRCA) approved £650,000 of funding to complete work on a business case for the proposed Mersey tidal energy project at a meeting held on July 27 2018.
- **Mersey Approach Channel Dredging Project**, a £300 million-pound project to dredge the Mersey Approach has now begun to allow larger ships to dock on Merseyside.

4.78 The Liverpool City Region now is a combined authority and that authority has published several plans of its own. These include a Construction Action Plan (2018-2020), a Skills & Investment Statement (2018/19), a Skills Strategy (2018-2030), an Apprenticeship Growth Plan (2018-20), an Employability Action Plan, a Low Carbon Action Plan, an Advanced Manufacturing Action Plan, a Visitor Economy Action Plan, a Visitor Economy Strategy and Destination Management Plan, a Rights of Way Improvement Plan (2018-2028), a Long-Term Rail Strategy, a Local Journeys Strategy, a Transport Plan for Growth, a Road Safety Strategy and a Single Growth Strategy. It must also be noted that the various Liverpool City Region Local Plans are part of the mechanism by which the Mayor's strategic objectives will be delivered and therefore it is important not to double-count impacts.

5. Appropriate Assessment

Summary of growth allocated in the WLP

- 5.1 Over the Plan period between 2021 and 2037, 13,360 residential dwellings will be delivered, focussing on development in the Birkenhead and Bebington area of Wirral. The Wirral Local Plan seeks to deliver most housing development within existing urban areas by developing defunct brownfield sites and increasing residential housing densities in accordance with the Council's approach set out in the plan. The Plan also allocates 65.60ha of employment land, primarily aiming for the intensification of employment uses in established employment areas.

Recreational Pressure (in European Sites and Functionally Linked Habitats)

- 5.2 Recreational pressure is an impact pathway that is relevant to designated European sites themselves, as well as to functionally linked habitat outside site boundaries. This is because recreation might affect the extent to which qualifying species (e.g. common tern, cormorant and great-crested grebe) are able to use supporting habitats, such as the Birkenhead Docks. This section will assess recreational pressure in European sites, while also considering any functionally linked habitats that may be impacted.

Mersey Narrows and North Wirral Foreshore SPA and Ramsar – Description and Background Evidence

- 5.3 The Mersey Narrows and North Wirral Foreshore SPA and Ramsar supports internationally important waterfowl species as well as a significant overall waterbird assemblage. Furthermore, it is particularly important to note that the site supports qualifying features throughout the year (e.g. non-breeding bar-tailed godwit and knot, as well as breeding common tern and little gull on passage), and the issue of recreational pressure is therefore not seasonal (as it is in many other estuarine sites).
- 5.4 Not all qualifying features of the Mersey Narrows and North Wirral Foreshore SPA and Ramsar are equally sensitive to recreational disturbance. The most sensitive species of the SPA and Ramsar are bar-tailed godwit and knot because they rely heavily on roost sites and foraging habitat within the intertidal mudflats, which are frequently subject to recreational use. In contrast, while little gull and common tern are sensitive to disturbance in principle, Natural England considers that the local disturbance potential to these species is limited because they largely roost or nest within the confines of the Seaforth Nature Reserve, which has limited access to the public. Visitors need to be members of the Lancashire Wildlife Trust and require a visitor's and vehicle pass from the port police.
- 5.5 Generally, Wirral has a high-quality and beautiful coastline that is well-provisioned for a wide range of formal and informal recreation, catering for locals and holiday makers. A recent study has demonstrated a direct link between the number of residential dwellings and the number of visitors to nearby European protected sites, both at foot access and car park access locations⁹⁶. Another study showed that there is a link between visitor numbers and the magnitude of bird disturbance⁹⁷. Therefore, in order to assess the potential impacts of recreation on birds, it is fundamentally important to understand how the local housing density affects access patterns and the activities undertaken in estuarine sites⁹⁸.

⁹⁶ Weitowitz, D.C., Panter C., Hoskin R. & Liley D. (2019). The effect of urban development on visitor numbers to nearby protected nature conservation sites. doi: 10.1093/jue/juz019: 1-12.

⁹⁷ Clarke R., Fearnley H. & Liley D. (2012). Solent Disturbance and Mitigation Project. Available at: http://www.solentforum.org/forum/sub_groups/Natural_Environment_Group/Disturbance_and_Mitigation_Project/Solent%20Mitigation%20and%20Disturbance%20Project%20Non%20Technical%20Summary%20February%202012.pdf

⁹⁸ Stillman R.A., Cox J., Liley D., Ravenscroft N., Sharp J. & Wells M. (2009). Solent Disturbance and Mitigation Project: Phase 1 report. Solent Forum.

- 5.6 There are high existing levels of housing in the proximity of the SPA and Ramsar, particularly around the eastern section of the site near the Mersey Narrows. Site accessibility plays a major role in modulating the geographic spread of recreational pressure. A review of satellite imagery on Google Maps shows that there are at least eight formal car parks directly adjacent to the North Wirral Foreshore facilitating access, amidst a network of footpaths and public bridleways. There is also a large number of informal parking locations, as well as unrestricted or time-limited roadside parking along much of the linear frontage of the North Wirral coastline. Furthermore, three toilet blocks, refreshment infrastructure and several bathing beaches are also present.
- 5.7 In December 2014, Natural England commissioned Thomson Ecology to investigate the contribution of recreational disturbance to bird declines in the SPA and Ramsar. While these exercises were not carried out specifically in relation to growth in Wirral, they constitute important evidence base in the context of Wirral's projected housing growth. The report by Thomson Ecology comprised the following three stages, which are discussed further in the following sections:
- Desk-based review that puts the bird population declines in the SPA and Ramsar into the context of recreational use;
 - Visitor questionnaire of people visiting the SPA and Ramsar; and
 - Bird disturbance observations collected in the field

Visitor Survey

- 5.8 The visitor survey was carried out at seven key access points, including King's Gap Road / North Parade, Bennets Lane / Meols Parade, Pasture Road Car Park, Seafront Car Park, Green Lane, Wallasey Beach (all access points to the North Wirral Foreshore), Victoria Road Slipway (New Brighton) and Vale Park (both access points to the Mersey Narrows). The busiest survey points in terms of the number of interviewees were Bennets Lane (78 interviews), Pasture Road (87 interviews), Wallasey Beach (91 interviews), Victoria Road Slipway (83 interviews) and Vale Park (84 interviews). At all survey locations except for Victoria Road Slipway, dog walking was by far the most frequently undertaken activity. Importantly, there was a high proportion of dog walkers that exercise their dogs off-lead (44% of all interviewees), the user group that is typically considered to have the highest disturbance potential. Most visitors travelled less than 5 miles from home, either visiting by car (64%) or on foot (33%). Most interviewees stated that they visit daily or more than twice a week. Interestingly, while most visitors are aware of the site's conservation designation and vulnerable species, few of them regard bird disturbance as a significant issue.
- 5.9 Comparing visitor numbers in the Mersey Narrows and North Wirral Foreshore SPA and Ramsar to other coastal and estuarine sites in the UK, it is evident that the SPA and Ramsar receives more recreational visits than the Teesmouth area, the Solent and the North Kent Marshes. Furthermore, the intertidal zone is also more popular than in other marine sites (e.g. Solent, North Kent Marshes), especially for off-lead dog walking (81% of all dogs). Importantly, recreational pressure in the Mersey Narrows and North Wirral Foreshore SPA and Ramsar is likely to be primarily influenced by new housing in Wirral, given it is exclusively accessible from the peninsula and shares no direct border with any other authorities.

Relating Visitor Data to Bird Responses

- 5.10 To assess whether there is a link between recreation and bird disturbance in the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, bird surveys were carried out in December 2014 and in January and February 2015. Several important high-tide roost sites for knot, dunlin, bar-tailed godwit, redshank and oystercatcher close to major access points were surveyed, including Hoylake (near Bennets Lane Car Park), Leasowe (near Pasture Road and Seafront Car Parks), North Mersey and South Mersey (both near Victoria Road Slipway and Vale Park Car Parks), allowing for a direct link between visitor numbers and disturbance events to be made.
- 5.11 The most frequent activity of visitors determined by spot counts was walking (71%), followed by off-lead dog walking (16%). Roughly a third of visitors (27%) used the intertidal zone compared to 73% of visitors remaining on the shore or the promenade. At Hoylake, one of the most important bird roosts, the proportion of intertidal zone users was the highest (55%), with off-lead

dog walking being particularly popular. These data are significant in that recreational activities in the intertidal zone, in particular off-lead dog walking, are likely to have the greatest disturbance effect on SPA and Ramsar bird species. Relating the visitor spot counts to bird abundances, showed a negative correlation between the number of birds and visitors.

- 5.12 An investigation of Potential Disturbance Events (PDEs) highlighted that of the 223 PDEs that were recorded, 73 (33%) evoked a response by the birds, such as long flight or leaving the area that are likely to be associated with the highest fitness impacts. Off-lead dog walking was the activity that triggered the highest percentage of active responses. Some roost sites (e.g. Leasowe) had very high numbers of PDEs and disturbance responses due to their proximity to focal areas for recreation. Overall, behavioural responses to disturbance (33%) were higher in this SPA and Ramsar than in other studies (ranging from 7% to 28%). Because only a third of PDEs result in behavioural impacts, a degree of habituation might naturally mitigate the effects of recreational pressure to some extent. As in other studies^{99 100}, activities in the intertidal zone resulted in the highest amount of disturbance.
- 5.13 However, Thomson Ecology's report also highlights that the bird declines in the SPA and Ramsar cannot be solely attributed to disturbance. While bar-tailed godwit and turnstone have declined considerably in recent years at Hoylake and Leasowe respectively, other species have increased in abundance. Some wader species (e.g. knot, bar-tailed godwit, dunlin) have a relatively low roost fidelity¹⁰¹. As such, a decline in bird numbers at one location might merely represent a redistribution of these birds within the wider area. To evaluate the role of disturbance in bird declines, one solution might be to introduce recreation exclusion zones in intertidal habitats and assess whether this results in a recovery of bird numbers.

Review of current management practices

- 5.14 Thomson Ecology also undertook a review of the management measures currently in place to address recreational pressure in the SPA and Ramsar. Currently, there are targeted measures to manage vehicle and boat access / movement, sporting activities and public safety. However, none of these specifically address bird disturbance. Information boards and disturbance warnings are located at several access points where there are strong recreational interactions with birds, including three locations at the Hoylake frontage. Despite this, there is a notable disconnect between the importance that relevant authorities assign to recreational disturbance and the lack of awareness of disturbance issues among members of the public. This is a clear indication that the current approaches are not sufficiently effective. Overall, the report concludes that there are few formal mitigation measures in place that specifically address bird disturbance.
- 5.15 Ideally, a need for mitigation measures is demonstrated prior to their enactment. However, as discussed above, a cause-and-effect is not easy to demonstrate due to numerous confounding factors and the difficulty of surveying birds. Potential mitigation measures include managing human access by delineating zonal systems, providing screens, establishing dog control orders and enhancing path management. Zonation might encompass an approach similar to that in the Dee Estuary, where high tide lines between October and March are closed off by a warden. Thomson Ecology's report concludes that the relevant authority (in this case Wirral Borough Council) should cooperate with site owners and local interest groups to devise a management scheme for the SPA and Ramsar, accounting for the site's qualifying features and Conservation Objectives¹⁰².
- 5.16 A review of the geographic distribution of the allocations shows that few residential sites lie north-west of the M53 in the north-western part of Wirral, including Wallasey, Moreton and Hoylake. This is potentially positive for the North Wirral Foreshore SSSI (the more sensitive part of the SPA and Ramsar compared to the Mersey Narrows SSSI), as it may lead to a relatively limited

⁹⁹ Liley D., Cruickshanks K. Waldon J. & Fearnley H. (2011). Exe Disturbance Study. Report by Footprint Ecology for the Exe Estuary Management Partnership.

¹⁰⁰ Liley D. & Fearnley H. (2011). Bird Disturbance Study, North Kent 2010-2011. Report by Footprint Ecology for Greening the Gateway.

¹⁰¹ Rehfisch M.M., Insley H.U.G.H. & Swann B. (2003). Fidelity of overwintering shorebirds to roosts on the Moray Basin, Scotland: Implications for predicting impacts of habitat loss. *Ardea* 91: 53-70.

¹⁰² Page 60 of the following report: Thomson Ecology. (2015). Mersey Narrows and North Wirral Foreshore Sites of Special Scientific Interest – Investigation into the Impacts of Recreational Disturbance on Bird Declines. Natural England Commissioned Report NECR201. 107pp. Available at: <http://publications.naturalengland.org.uk/publication/5547581758242816> [Accessed on the 14/12/2020].

increase in visitor numbers along this stretch of the coastline. Most of the larger residential sites (e.g. Wirral Waters) lie much closer to the Mersey Narrows part of the site, where most future residents of this development could choose to visit.

Dee Estuary SPA and Ramsar – Description and Background Evidence

- 5.17 The Dee Estuary SPA and Ramsar stretches along the north-west border of Wirral Borough and is designated for sensitive waterfowl species. It harbours qualifying species throughout the entire year and this impact pathway therefore requires consideration across all seasons. Natural England's and Natural Resources Wales' joint Conservation Advice Note¹⁰³ for the site stipulates that there is to be no significant reduction in numbers of birds attributable to disturbance.
- 5.18 While the Dee Estuary SPA and Ramsar is clearly a very attractive natural space, the magnitude of recreational disturbance will partly depend on how accessible a destination is. Regarding estuarine and coastal sites, suitable parameters to determine accessibility include car parks, the extent of the path network, opportunities for direct access to intertidal sand- and mudflats, and other nearby attractions (e.g. nature reserves, marine pools, beaches, sporting clubs, etc.). In the first instance, this HRA therefore establishes public access to the Dee Estuary SPA and Ramsar. A review of the Ordnance Survey Map on ViewRanger indicates that public access to the SPA and Ramsar north of West Kirby is likely to be limited, because the Royal Liverpool Golf Course is a barrier to direct access. However, to the south at West Kirby Beach, residents of Grange Hill and Newton have direct foot access on to the SPA's and Ramsar's mudflats. The Dee Estuary SPA and Ramsar is easily accessible all the way south to Neston with numerous beaches marked on Google Maps, including beaches at Caldy, Thurstaston and Heswall. The Wirral Way is a long-distance walking path that runs parallel to the SPA and Ramsar all the way from West Corby past Neston, providing hikers with ample opportunity for beach access. There are two main car parks along this stretch of the coast with one being located at West Kirby Beach (50+ capacity) and one further south at Heswall Beach (30-40 capacity).
- 5.19 According to Natural England and Natural Resources Wales, the current overall disturbance and noise levels along the intertidal sand- and mudflats are relatively low. However, on some parts of the shore that are popular for beach recreation (e.g. Gronant, Talacre, West Kirby, Thurstaston), noise disturbance is high, which might be particularly impactful at high tides when birds are pushed closer to the coastline. The Conservation Advice Note identifies water sports at West Kirby as a particular disturbance concern for redshank roosting on the upper shore¹⁰⁴. Both kite surfing and windsurfing is considered to cause significant disturbance on oystercatchers (and other species) roosting on Little Eye, Hilbre Islands. Birds using the saltmarsh further south in the SPA and Ramsar, experience exposure to frequent disturbance from dog walking, fishing, motorcycle scrambling and the flying of model aircraft and drones. Disturbance to the breeding tern colonies in the Dee Estuary SPA and Ramsar is primarily an issue on the Welsh side of the European site (Gronant, Point of Ayr) and is therefore unlikely to be relevant to the Wirral Local Plan.
- 5.20 Footprint Ecology undertook a visitor survey in SSSIs on the north-west coast of England, which covered two locations in the Dee Estuary SPA and Ramsar, namely West Kirby and Thurstaston Car Parks¹⁰⁵. Both survey locations were popular in general (368 and 408 people passing over 16 hours respectively), especially among dog walkers (119 and 100 dogs entering over 16 hours respectively). Compared to the other SSSI sites surveyed, the SSSIs forming part of the Dee Estuary SPA and Ramsar, were among the busiest stretches of coast in the north-west of England. Notably, the proportion of dog walkers (> 75%) was also higher in the Dee Estuary SPA and Ramsar than in any of the other estuaries that were surveyed. At both survey locations, over 90% of visitors exercise their dogs off-lead. For West Kirby the core visitor catchment (i.e. the distance that 75% of visitors travelled from home) was 5.3km, compared to 8.8km for

¹⁰³ As this is a trans-border European site, the Conservation Advice is jointly published by Natural England and Natural Resources Wales. It is available at: https://naturalresources.wales/media/673576/Dee%20Estuary-Reg33-Volume%201-English-091209_1.pdf [Accessed on the 14/12/2020]

¹⁰⁴ Smith R. (2003). The effect of kite surfing on wader roosts at West Kirby, Dee Estuary. Unpublished Report on behalf of the West Kirby Voluntary Wardens.

¹⁰⁵ Liley D., Panter C., Marsh P. & Roberts J. (2017). Recreational activity and interactions with birds within the SSSIs on the North-West coast of England. Unpublished report by Footprint Ecology for Natural England.

Thurstaston. Given the relatively small size of Wirral, this puts much of the authority, including the outskirts of proposed Regeneration Areas, within the catchment of the SPA and Ramsar. Importantly, visitors also undertook longer routes (a median route of 3.4km) in the Dee Estuary than in other estuaries, indicating that the average visitor has the potential for affecting multiple roosting or feeding areas within the site.

Liverpool Bay SPA – Description and Background Evidence

- 5.21 The Liverpool Bay SPA qualifies for its sensitive non-breeding bird species red-throated diver and common scoter. Natural England's Site Conservation Advice Note states that red-throated divers are highly sensitive to non-physical disturbance by noise and visual stimuli, potentially resulting in the cessation of foraging or displacement. While the main impact on this species stems from the construction and operation of wind turbines, recreational boating is also associated with high disturbance potential. Very similar pressures are noted for the common scoter.
- 5.22 The Liverpool Bay SPA runs alongside Wirral's northern and eastern shoreline (extending relatively far upstream the Mersey Estuary). However, much of the area encompassed by the SPA is open coastal water. Given this, and that the qualifying species of the site are primarily associated with open water, recreational activities on the shoreline or adjacent stretches of shallow water are unlikely to have a high disturbance potential. However, as stated above, there is the potential for boating to result in disturbance to the birds. A review of satellite imagery on Google Maps shows that there are multiple boating clubs along northern Wirral's coastline, including the Hoylake Sailing Club, the Wirral Sailing Centre, the West Cheshire Sailing Club and the Wirral Sand Yacht Club. Recreational boats can be launched into the Liverpool Bay SPA from all these locations, potentially contributing to disturbance impacts on qualifying species.
- 5.23 Generally, the nature and popularity of activities (i.e. how many people engage in it) should be considered in Appropriate Assessments. Due to the large potential area affected and high noise emissions, boating is associated with high disturbance potential. However, it is also a niche activity that is undertaken by relatively few people (as well as future residents). As such, it is not possible to directly relate residential growth to a significant increase in boating in the same way that it will lead to an increase in dog walking (an activity carried out by a much larger proportion of the population). Therefore, it is concluded that the emerging Wirral Local Plan will not result in adverse effects on the Liverpool Bay SPA alone. However, as a precautionary approach, in-combination adverse effects with the wider growth in the Merseyside region are not excluded.

Mersey Estuary SPA and Ramsar – Description and Background Evidence

- 5.24 The Mersey Estuary SPA and Ramsar is vulnerable to recreational disturbance due to its sensitive qualifying species and its proximity to urban Wirral, where much of the regeneration will take place in the Plan period. In contrast to the sites discussed in the previous sections, this SPA and Ramsar only harbours sensitive species that are non-breeding or on passage. As such, recreational disturbance in this SPA and Ramsar has a seasonal dimension, with recreation only being of concern between October and March.
- 5.25 The main disturbance effects would be delivered by activities that are carried out on the intertidal sand- and mudflats, and water-based activities. Therefore, accessibility will be one of the key factors determining the magnitude of recreational effects. The SPA and Ramsar stretches from below the oil terminal in southern Birkenhead, extending southward to the mouth of the River Mersey. The shoreline of the estuary in Wirral is highly urbanised. Review of Ordnance Survey Mapping on ViewRanger shows that there are few Public Right of Ways (PRoWs) adjacent to the estuary. However, notwithstanding this, there are several locations where direct access onto intertidal habitats is possible. For example, to the south of Rock Ferry Waterfront, residents can walk onto intertidal sand- and mudflats, potentially in close proximity to roosting or foraging waterfowl and waders. The Rock Ferry Promenade leads southward to The Esplanade, providing visitors with further opportunities to access the foreshore. Further south, both the Port Sunlight River Park and Eastham Country Park provide visitor attractions, but access onto the estuary is largely prohibited through rock armour and / or fencing. To the south of Eastham Country Park, the estuary is separated from residential development by the Manchester Ship Canal, which runs

all the way to Runcorn and makes access to the SPA and Ramsar virtually impossible. The overall number of visitors to this section of the SPA and Ramsar is likely to be relatively small and, due to the absence of designated car parks, limited to residents that live in adjoining properties.

- 5.26 Accessibility to the Mersey Estuary SPA and Ramsar is considerably higher on its northern side in the authorities of Liverpool and Halton. While the shoreline in Liverpool is also very industrial in character (there are several docks, industrial estates and Liverpool John Lennon Airport), there are several footpaths that lead adjacent to the estuary, such as the Mersey Way between Garston and Hale. From there the Trans-Pennine Trail follows the SPA and Ramsar in a north-easterly direction. Due to these access conditions, it is considered that the main source of recreational pressure in the SPA and Ramsar will be the authorities of Liverpool and Halton. This assessment is supported by Natural England's Site Improvement Plan, which states that 'users of public footpaths immediately adjacent to the north shore of the site can cause disturbance to birds roosting and feeding' here¹⁰⁶, whereas no reference to the southern part of the SPA and Ramsar is made. It is considered relatively unlikely that residents of Wirral will frequently visit the northern side of the Mersey Estuary, which would involve use of the Runcorn-Widnes Bridge and an additional by-road distance of over 30km just to reach the bridge. Additionally, there are accessible destinations of similar appeal (e.g. Mersey Narrows and North Wirral Foreshore SPA and Ramsar) much closer.
- 5.27 Footprint Ecology's visitor survey in north-west England also covered one survey point in the Mersey Estuary SPA and Ramsar, namely Hale Head on the more accessible northern side of the estuary. Bird disturbance work found that bird flight responses in this part of the estuary were the lowest of any of the estuaries surveyed (0.3 bird flights per hour). In contrast to the Dee Estuary SPA and Ramsar, Hale Head was much less busy (under 4.4 people per hour, 122 people passing in 16 hours). It was the only estuary where dog walkers constituted less than 50% of all recorded activities and the proportion of people that visited often (i.e. daily or on most days) was less than 40%. Overall, this indicates that the Mersey Estuary SPA and Ramsar, even on its more accessible northern shore, is not a primary destination for recreation. Notwithstanding this, the core visitor catchment of Hale Head was 8.3km, which would encompass residents in Wirral.
- 5.28 Overall, due to the relatively long distance that Wirral residents would have to travel to the northern shore of the site, it is concluded that the Wirral Local Plan will not result in adverse effects on integrity when considered alone. However, given that Wirral is a component of the highly urbanised wider Liverpool City Region and it lies within the core recreational catchment identified for Hale Head, in-combination effects of the Plan on the Mersey Estuary SPA and Ramsar cannot be excluded.

Ribble and Alt Estuaries SPA and Ramsar – Description and Background Evidence

- 5.29 The Ribble and Alt Estuaries SPA and Ramsar is vulnerable to recreational pressure due to disturbance of its qualifying bird species. Natural England's Site Improvement Plan highlights that both on-shore activities (e.g. dog walking, jogging, walking) and off-shore activities (e.g. kite surfing, boating, sand yachting, jet-skiing) are significant concerns for the site¹⁰⁷. The site lies over 9km by road from the Borough of Wirral and involves a partial crossing of Liverpool City. Therefore, AECOM considers that Wirral residents are not a primary contributor to recreational pressure in the site. Furthermore, there are several coastal and estuarine destinations with similar characteristics that lie much closer to the borough (e.g. the Mersey Narrows and North Wirral Foreshore SPA and Ramsar). Notwithstanding this, it cannot be excluded that at least some future residents would visit this SPA and Ramsar, contributing to disturbance impacts on its designated bird populations.
- 5.30 The shoreline of the Ribble and Alt Estuaries SPA and Ramsar attracts tourists from across the country. The Ribble Estuary (the most distant part of the SPA and Ramsar from Wirral) is a major recreation destination, partly due to its proximity to Blackpool. For Wirral Borough, the southern part of the site (the area around Seaforth, Crosby and Formby) is likely to be of greatest relevance

¹⁰⁶ Page 4 of the Site Improvement Plan. Available at: <http://publications.naturalengland.org.uk/publication/6273450410770432> [Accessed on the 30/11/2020]

¹⁰⁷ <http://publications.naturalengland.org.uk/publication/6274126599684096> [Accessed on the 30/11/2020]

due to shorter travel times. A key feature of the SPA and Ramsar is its seasonal sensitivity (restricted to the overwintering period of birds), whereas the partially overlapping Sefton Coast SAC is vulnerable throughout the entire year.

- 5.31 A review of Ordnance Survey Mapping on ViewRanger¹⁰⁸ shows that the coastline between Seaforth and Formby has easy access (except for a small section that forms part of a rifle range). The Sefton Coastal Path leads directly past the intertidal sandbanks of the SPA and Ramsar and there is direct access onto the foreshore. The existing path network and the general infrastructure in the area (i.e. no buildings or fencelines blocking access to the beach) are one of the reasons for the popularity of the Sefton Coast for recreation. It is also to be noted that in Crosby alone, there are four formal public car parks (two at the marine lake and two north of Brighton le Sands). The presence of car parks is a prerequisite for attracting car-based visitors, such as residents from Wirral.
- 5.32 Footprint Ecology surveyed three locations in the Ribble Estuary with relatively long by-road distances to Wirral. Indeed, the surveyed locations only had core recreation catchments of between 1.9 and 4.4km, which would place Wirral well beyond the catchment. However, given that the Ribble and Alt Estuaries SPA and Ramsar site overlaps with the Sefton Coast SAC, it is considered that a core visitor catchment of 15.3km (for the Sefton Coast SAC) is more representative for the SPA and Ramsar (see following section on the Sefton Coast SAC). Given the site's good accessibility and overall appeal, adverse effects of the Wirral Local Plan in-combination (with growth in other authorities) cannot be excluded.

Dee Estuary SAC – Description and Background Evidence

- 5.33 The Dee Estuary SAC is vulnerable to recreational pressure, primarily as a result of abrasion to its qualifying habitats and aquatic plant species. Furthermore, negative impacts on SAC habitats are also likely to affect the waterfowl species of overlapping SPAs / Ramsars, because these birds forage in SAC habitats.
- 5.34 Natural England's and Natural Resources Wales' joint Conservation Advice Note highlights the potential effect of physical damage through abrasion, which can damage plants individually as well as leading to changes in the overall saltmarsh and sediment communities. Abrasion damage can be attributed to three main sources, including dredging, commercial fisheries and recreational activities. The intertidal sand- and mudflats are sensitive to sediment compaction, alteration of micro-habitats and the potential loss of invertebrate species. Bait digging (raised particularly for the North Wirral Foreshore part of the SAC) is a particular concern because it results in the reworking of sediment, mudflat compaction and lowers the abundance of lugworms and rag worms. Finally, the *Salicornia* and the Atlantic salt meadows within the SAC, both sensitive to abrasion, experience considerable abrasion from recreational activities near the shoreline, most notably from motorcycling.
- 5.35 The Dee Estuary SAC covers large sections of the Dee Estuary SPA and Ramsar and the Mersey Narrows and North Wirral Foreshore SPA and Ramsar. As such, in these areas, public access to the SAC will follow the same pattern as discussed in relation to these sites in previous sections of this HRA. In summary, these established that both SPAs and Ramsars are highly accessible because they have nearby formal car parks (making them appealing to visitors from further away), comprise extensive networks of Public Right of Ways along the shoreline (making them accessible for local residents), offer direct access onto the intertidal zone and have numerous local watersports clubs.
- 5.36 Review of detailed priority habitat mapping on MAGIC shows that coastal saltmarsh habitat in the SAC occurs along the south-west tip of Wirral, towards the mouth of the River Dee. Between Heswall and Neston there are PRoWs directly along the shoreline. Furthermore, there are two notable car parks in this area; one at Heswall Beach (30-40 capacity) and one at the Old Baths Picnic Area near Neston (30-40 capacity). Natural England's site condition assessment identifies that the Dee Estuary SSSI (Southern Salt Marsh, 001) is in favourable condition. During the site visit, typical saltmarsh zonation was observed and no evidence of damage / disturbance of unit attributes was observed. This lack of recreational impacts could be partly due to difficult access

¹⁰⁸ <https://my.viewranger.com> [Accessed on the 14/12/2020]

onto the foreshore in the area south of Heswall. For example, the saltmarsh near the Wirral Country Park is separated from the coastline by an intervening stream. However, notwithstanding this, both Natural England and Natural Resources Wales highlight recreational pressure, particularly motorcycling, as a threat in the upper saltmarsh, which indicates that at least some visitors do access this part of the SAC. Overall, because the WLP focuses its growth in the eastern part of the borough, relatively distant from the SAC, the potential for recreational impacts arising from the WLP is considered to be lower than for the European sites discussed in the previous sections.

Sefton Coast SAC – Description and Background Evidence

- 5.37 The Sefton Coast SAC is vulnerable to recreational pressure partly due its sand dune systems. Trampling can result in excessive physical disturbance, ultimately retarding or reversing dune development process. Although it is to be noted that a limited amount of recreational trampling is beneficial for community diversity as this ensures that the dune vegetation does not all succeed to late stages of development. Natural England's Site Improvement Plan states that dog walking in dune systems can result in nutrient enrichment through dog fouling, which potentially affects the community structure in dune communities¹⁰⁹.
- 5.38 Given that the Sefton Coast SAC is largely contiguous with the Ribble and Alt Estuaries SPA and Ramsar, its accessibility and geographic location in relation to Wirral will not be re-assessed here. As for the SPA and Ramsar, it is considered that residents from Wirral are unlikely to account for a large proportion of the recreational footprint within the SAC, especially because there are similar coastal destinations much closer to proposed development in Wirral. Regardless, the habitat features of the Sefton Coast SAC, particularly the dunes, are likely to exert a strong recreational draw on people, meaning that some of Wirral's current and future residents may choose to visit the SAC nonetheless.
- 5.39 A study on recreational use of Sefton's Natural Coast¹¹⁰ estimated that half of its recreational users were locals (i.e. residents within the Borough of Sefton). The recreational hotspots (i.e. highest visitor numbers) were observed around Formby and Crosby. However, the study did not explore where the remaining 50% of visitors (i.e. visitors from beyond Sefton) came from. Visitor surveys in coastal and estuarine sites often observe core catchments up to 10km, and sometimes greater. The by-road distance for visitors from Wirral would be approx. 9km, which places Wirral just within a potential core catchment. Therefore, some Wirral residents may visit the SAC, although likely far fewer than from the authorities of Sefton, Liverpool or Lancashire.
- 5.40 Footprint Ecology's visitor survey in the north-west coast of England covered two survey locations in the SAC, namely Ainsdale-on-sea and Formby (the latter being more relevant to Wirral due to its closer situation). Formby was by far the busiest of any of the survey locations with 771 people passing and 364 people entering over 16 hours, the latter equating to 22.8 people entering per hour. For comparison, the next busiest location only had 13.8 people entering per hour (10 less than at Formby). The overall proportion of dog walkers at the two locations was approx. 60%, which was considerably higher than in the Mersey Estuary but much lower than in the Dee Estuary. Notably, at Formby over 70% of visitors stay for relatively long periods (1 hour and above), but visit relatively infrequently (only 20% of interviewees visit daily or on most days). This is supported by Formby's large core recreation catchment of 15.3km. While Wirral is within a 15km straight-line distance of Formby, the actual by-road travel distance for residents from Birkenhead would be approx. 20km, putting it beyond its catchment. Other destinations within the SAC (e.g. Crosby) lie closer and are probably more realistic destinations for Wirral residents. Overall, given the easy access and appeal of the SAC, it is concluded that adverse effects of the Wirral Local Plan, in-combination with growth in other authorities, cannot be excluded.

¹⁰⁹ <http://publications.naturalengland.org.uk/publication/6274126599684096> [Accessed on the 30/11/2020]

¹¹⁰ England's North West Research Service for Economic Development and Tourism (May 2009) Sefton's Natural Coast Local Users of the Coast (Version 2)

Implications of Wirral Local Plan Growth Alone

Table 5: Residential allocations within 1km distance of a SPA and Ramsar, detailing site capacities.

Site Reference	Site Name	Number of Dwellings	Distance to nearest SPA and Ramsar (metres)	Name of SPA and Ramsar
RES-SA1.3	Rear of Gibson House, Maddock Road, Egremont	87	13.47	Mersey Narrows & North Wirral Foreshore
RES-SA4.7	Former D1 Oils, Dock Road South, Bromborough	1,300	14.15	Mersey Estuary
RES-SA1.2	Gibson House, Seabank Road, Egremont	15	49.66	Mersey Narrows & North Wirral Foreshore
RES-RA10.3	New Palace Amusements	43	70.3	Mersey Narrows & North Wirral Foreshore
RES-RA2.1	Land East of Birkenhead Road, Seacombe (North)	400	140.54	Liverpool Bay
RES-RA2.2	Land East of Birkenhead Road, Seacombe (South)	250	138.4	Liverpool Bay
RES-RA10.1	Former Grand Hotel, Marine Promenade	8	170.14	Mersey Narrows & North Wirral Foreshore
RA4	Birkenhead Central	1,777	221.71	Liverpool Bay
RA5	Hind Street (and St Werburgh's)	10	352.36	Liverpool Bay
RES-SA3.3	Sevenoaks Extra Care	43	389.49	Liverpool Bay
RES-SA6.9	Sundial, 61 Caldy Road, Caldy, CH48 2HN	7	394.75	Dee Estuary
RES-RA10.2	Egerton Street Playground, New Brighton	7	401.33	Mersey Narrows & North Wirral Foreshore
RES-SA6.10	174 Birkenhead Road, Meols, CH47 0NE	2	404.62	Mersey Narrows & North Wirral Foreshore
RES-SA4.6	Former Croda, Bromborough Pool	100	411.69	Mersey Estuary
RES-SA6.11	7 Caldy Road, West Kirby, CH48 2HE	5	412.73	Dee Estuary

RES-RA6.5	Wirral Waters – Northbank East 3 (Tower Road)	150	421.18	Liverpool Bay
RES-SRA5.1	Land North of Hind Street	740	491.12	Liverpool Bay
RES-SA4.3	Land at Riverside Park, Wirral International Business Park	320	493.43	Mersey Estuary
RES-RA6.7	Wirral Waters Belong	34	527.85	Liverpool Bay
RES-SA1.4	Cleared Site Grassed, Oakdale Road, Seacombe, CH44 7HW	10	571.19	Mersey Narrows & North Wirral
RES-RA11.2	Woodhead Street Car Park, New Ferry	37	575.21	Mersey Estuary
RES-RA11.5	100 New Chester Road, New Ferry	27	570.23	Mersey Estuary
RA7	Hamilton Park	1,570	615.28	Liverpool Bay
RES-RA6.3	Wirral Waters – Northbank East (urban Splash)	120	617.43	Liverpool Bay
RES-RA4.3	WGC Town Centre Plot I + J	205	667.4	Liverpool Bay
RES-SA4.2	Former MOD, Wirral International Business Park	280	683.76	Mersey Estuary
RES-RA11.3	Land at Grove Street and Bebington Road, New Ferry	14	686.82	Mersey Estuary
RES-RA11.1	43 Bebington Road, New Ferry	20	704.16	Mersey Estuary
RES-SA1.5	Old Manor Club, Withens Lane, Liscard, CH45 7NF	10	720.4	Mersey Narrows & North Wirral Foreshore
RES-SA6.8	Ridge Rowans, 25 Wetstone Lane, West Kirby, CH48 7HG	1	748.59	Dee Estuary
RES-RA11.4	Site of 78, 78A and 82 Bebington Road, New Ferry, CH62 5AE	10	778.39	Mersey Estuary
RES-SA7.6	Strathcraig, Phillips Way, Heswall, CH60 4RT	2	802.35	Dee Estuary
RES-RA4.2	WGC Town Centre Plot G	280	803.56	Liverpool Bay
RES-RA6.4	Wirral Waters – Northbank West (Urban Splash)	230	829.41	Liverpool Bay

RES-SA6.5	Adjacent 1 Cholmondeley Road, West Kirby	1	847.46	Dee Estuary
RES-SA1.1	Rear of the Lighthouse PH	10	900.76	Mersey Narrows & North Wirral Foreshore
RES-RA6.2	Wirral Waters – Vittoria Studios	2,700	911.81	Liverpool Bay
RES-RA4.1	WGC Town Centre Plot E	170	916.52	Liverpool Bay
Total Number of Dwellings within 1km Walking Distance of an European site		10,968		

5.41 Avoiding implications for European sites usually involves locating new residential development beyond their core recreational catchments. In the case of Wirral this is not possible, as it is bordered by sensitive European sites on three sides. AECOM considers that any net increase in dwellings within 1km of European sites is likely to have the greatest implication regarding recreational pressure, given that this represents a realistic walking distance for local residents. Proximity to home is one of the most frequently cited reasons given by interviewees in surveys for visiting designated sites and is likely to lead to the greatest number of repeat visits. Table 5 lists the 37 residential allocations / Regeneration Areas within 1km distance of one of Wirral's European sites and shows that 10,968 dwellings will be delivered in walking distance. Furthermore, 15 sites are allocated for over 100 dwellings (shaded yellow), which are likely to cause the biggest recreation footprint on Wirral's coastline¹¹¹. The largest residential sites are the following:

- Wirral Waters – Vittoria Studios: 2,700 dwellings
- Birkenhead Central (Regeneration Area): 1,777 dwellings
- Hamilton Park (Regeneration Area): 1,570 dwellings
- Land of Dock Road South, Bromborough: 1,300 dwellings
- Land North of Hind Street: 740 dwellings
- Land East of Birkenhead Road, Seacombe (North): 400 dwellings

5.42 It is noted that the European sites bordering eastern Wirral along the River Mersey (Mersey Estuary SPA / Ramsar, Liverpool Bay SPA) would receive the highest volume of residential growth within close proximity. For example, 79.1% of the allocated dwellings (most of which are situated in Birkenhead) are located closest to the Liverpool Bay SPA, such that the highest increase in recreational pressure may be expected there. However, due to the relatively compact nature of the Wirral Peninsula, it is possible that future residents would visit any of the SPAs and Ramsars adjoining the Wirral coastline in practice. As such, in the case of Wirral, geographic proximity may not be the best predictor for visiting European sites, particularly because other factors (e.g. accessibility, specific recreational draws) may also play important roles.

5.43 Accessibility of the foreshore, especially foot access to intertidal sand- and mudflats, is expected to increase recreational pressure, as this enables walking in attractive habitats and provides rare opportunities for specialised activities (e.g. sand yachting and bait digging). Foot access to the Mersey Estuary SPA and Ramsar and Liverpool Bay SPA adjoining eastern Wirral is generally limited by permanent sea defences, vessel traffic and dangerous tides. In contrast, the Mersey Narrows and North Wirral Foreshore SPA / Ramsar, which stretches northwards from the Birkenhead Docks, provides easy access to intertidal habitats such as the Egremont Foreshore,

¹¹¹ This list encompasses the residential allocations likely associated with the largest recreational footprint. Smaller developments will still need to contribute to the mitigation of recreational pressure, although not through the provision of on-site greenspace.

facilitating numerous recreational activities such as sand yachting. In 2014, a report identified the Mersey Narrows and North Wirral Foreshore SPA and Ramsar as the second most vulnerable out of 39 sites investigated in the study, due to a combination of high surrounding housing density, good accessibility and a high number of formal car parks per kilometre of shoreline¹¹². A more recent study on bird disturbance and recreation patterns¹¹³ across coastal SSSIs in north-west England identified the Mersey Narrows and North Wirral Foreshore SPA and Ramsar as a focal point for disturbance events.

In-combination Assessment

5.44 Evidently, Wirral is not the only source of recreational pressure in the Merseyside region, particularly given the fact that there are numerous other densely populated authorities within a relatively short distance. Visitor surveys in other coastal European sites in England have been undertaken, which may serve as a broad indicator for the sites assessed in this HRA, provided they are used with care:

- In the Exe Estuary SPA and Ramsar, a visitor survey undertaken by Footprint Ecology¹¹⁴, established that 60% of visitors had travelled by car compared to 29% that had travelled on foot. Foot visitors tended to be very local, whereas car-borne visitors were travelling considerable distances: 51% of interviewees (taking only those visiting from home on a short visit/day trip rather than holidaymakers) lived within a 10km radius and 75% within 20km.
- A visitor survey in the Humber Estuary SAC / SPA and Ramsar¹¹⁵ showed that 88% of interviewees were local residents on a short trip from home. 70% of interviewees arrived by car. Home postcodes indicated people travelled a median distance of 4.4km from home. 50% of interviewees arriving on foot lived within 0.95km and 50% of interviewees arriving by car lived within 8.4km.
- A visitor survey in the North Kent Estuaries undertaken by Footprint Ecology¹¹⁶ identified that most regular visitors lived within 6km, after which points of origin became more dispersed.
- Data for the Solent Maritime SAC and overlapping SPAs obtained from the Solent Disturbance and Mitigation Project¹¹⁷ showed that visitors undertook a wide range of activities, with walking and dog walking being the most popular activities. In these sites, half of visitors arrived on foot and the other half by car. 90% of the interviewees arriving on foot lived within 2km, whereas 80% of interviewees arriving by car lived within 10km.

5.45 These case studies illustrate that, while there is between-site variability, estuarine and coastal European sites have fairly large core recreational catchments of up to 10km and potentially beyond. This agrees with a recent meta-analysis relating visitor numbers to the number of residential dwellings surrounding protected sites across the UK. It was shown that the number of visitors correlated most strongly with housing numbers over 15km in estuaries than in any of the other habitats that were investigated, thereby confirming their large recreational catchments¹¹⁸. Given strong draw of estuarine sites on the public, it is likely that people will be travelling from adjacent authorities to visit these sites. Therefore, the recreational pressure arising from Wirral needs to be set into the context of urban growth in other Merseyside authorities. The same conclusion was reached in the HRAs of other Local Plans, such as the Plans for Liverpool and

¹¹² Ross K., Liley D., Austin G., Burton N., Stillman R., Cruickshanks K. & Underhill-Day J. (2014). Housing development and estuaries in England: Developing methodologies for assessing the impacts of disturbance to non-breeding waterfowl.

¹¹³ Liley D., Panter C., Marsh P. & Roberts J. (2017). Recreational activity and interactions with birds within the SSSIs on the North-West coast of England. Unpublished report for Natural England.

¹¹⁴ Liley, D. & Cruickshanks, K. (2010). Exe Visitor Survey, 2010. Report by Footprint Ecology for Teignbridge District Council.

¹¹⁵ Fearnley, H., Liley, D. & Cruickshanks, K. (2012). Humber Management Scheme Visitor Survey. Unpublished report by Footprint Ecology for the Humber Management Scheme.

¹¹⁶ Fearnley, H. & Liley, D. (2011). North Kent Visitor Survey Results. Report by Footprint Ecology.

¹¹⁷ Stillman, R. A., West, A. D., Clarke, R. T. & Liley, D. (2012) Solent Disturbance and Mitigation Project Phase II: Predicting the impact of human disturbance on overwintering birds in the Solent. Report by Footprint Ecology for the Solent Forum.

¹¹⁸ Weitowitz D.C., Panter C., Hoskin R. & Liley D. (2019). The effect of urban development on visitor numbers to nearby protected nature conservation sites. *Journal of Urban Ecology* 5. <https://doi.org/10.1093/jue/juz019>

Halton. Both HRAs determined that there was a potential for adverse effects from recreational pressure, especially when considered in-combination.

Recreation Mitigation and Avoidance Strategy (RMAS)

- 5.46 Research into the recreation patterns within the north-west coastal European sites has confirmed that the core recreational catchment (i.e. defined as 75th percentile of all visitors) encompasses housing within 5.2km of the nature conservation sites. This places most housing sites allocated in Wirral Borough (especially those in the urban regeneration areas of Birkenhead and Wallasey) within the Zone of Influence of the coastline. Current data trends indicate that the bird populations in SPAs and Ramsars are showing geographic redistributions and overall declines, and recreational disturbance is thought to be a major contributing factor. In response to this significant threat, Wirral Borough Council and other Merseyside authorities are developing a Liverpool City Region Recreation Mitigation and Avoidance Strategy (RMAS) in collaboration with MEAS, Natural England and Natural Resources Wales, which is to be adopted and implemented by 2023. The RMAS is set out to help major residential developments to mitigate recreational pressure impacts on coastal SPAs and Ramsars, and remain in compliance with the Habitats and Species Regulations 2017 (as amended). All residential allocations of 10 dwellings or more within 5km of designated sites, are to make financial contributions towards mitigation and avoidance schemes in the LCR.
- 5.47 In other areas of England, mitigation strategies typically involve the contribution of individual residential allocations to measures seeking to reduce recreational pressure within the nearby European sites. This includes provision of bespoke Suitable Alternative Greenspace (SANG; a term originating from the Dorset Heaths) on allocations themselves, or enhancing existing nearby natural greenspace to deliver improved capacity and functionality. However, this is considered difficult in Wirral (and other highly urbanised authorities of the Merseyside region) for several reasons. Firstly, the largest potential housing sites with capacities of 2,700 and 1,777 residential dwellings respectively, lie in Birkenhead, not far from the Mersey Narrows component of the SPA and Ramsar. Given the highly urbanised nature of this area, there is insufficient space for the provision of an adequately sized SANG. Furthermore, as for most areas of Wirral, appealing estuarine sites lie close to residents' homes. Therefore, it is considered that SANGs are likely to have a more limited effectiveness in Wirral (as opposed to other authorities that are in a different geographic setting). It seems most likely that on-site Strategic Access Management and Monitoring (SAMM) mitigation will be the more important (and effective) element for Wirral. Despite this, provision of on-site avoidance measures embedded into developments, improvements to existing greenspaces and exploration of SANG provision must continue to be considered positive, as it is likely to attract at least some new residents in Wirral.
- 5.48 Given the likely limited effectiveness of SANGs in Wirral, SAMM initiatives within European sites are the most promising approach and should be pursued foremost. These would be informed by a visitor survey and then tailored to the specific circumstances of respective sites. Any package of measures in the emerging Strategy should include site-specific considerations, such as the qualifying features, accessibility to the site and the recreation activities undertaken. For example, for the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, accessibility of the site is an important factor, because large areas are inaccessible due to commercial and land-ownership considerations (e.g. no public access) or due to physical barriers and health and safety considerations (e.g. high dock walls and unsafe mud and saltmarsh). Some examples of deployable SAMM measures include:
- Formalising the currently voluntary wardening that is in place at the Dee Estuary SPA and Ramsar, and extending it to other relevant European sites on the Wirral peninsula
 - Providing additional professional wardening posts, or increasing wardening hours, covering recreation hotspots; giving wardens a specific public liaison role to increase public awareness of the sensitivities of the sites and specifically address problematic activity
 - Improving and unifying signage across the European sites, including information boards, waymarkers and dog-on-lead notices; a particular focus should be on communicating why measures are put into place, as this is known to increase compliance

- Develop a partnership for the most prevalent user groups, establishing Codes of Conduct and a coordinating employment post
- Undertaking standardised visitor surveys at all European sites sensitive to recreational pressure in the LCR region to establish an improved evidence base
- Funding of academic research studies as identified useful / necessary by Natural England / Natural Resources Wales, for example an investigation into the impact of recreational fishing on feeding waders¹¹⁹
- Exploring regulatory measures to reduce the impact of recreation on waders, such as temporary footpath or access closures during sensitive periods, rerouting of footpaths and dog exclusion zones, as well as potentially tighter management of areas currently zoned for activities such as kite-surfing, if necessary.

Interim Mitigation Approach

5.49 However, given the threat to nature conservation and that the RMA is yet to be finalised, Natural England are requesting the relevant authorities to adopt formal interim approaches, setting out how disturbance will be mitigated for in the short-term. Several neighbouring authorities have now published Statements of Common Ground (SoCG) with Natural England, which cover matters that have been mutually agreed by both parties; in this instance recognition of the recreational pressure issue and how this is adequately addressed through Local Plan policy. In a consultation letter dated March 2020, Natural England advises that until the RMA is implemented, a strategic commitment by relevant councils in the form of an interim Information Note (IN) or a Supplementary Planning Document (SPD) will be required. It is understood that Wirral Borough Council is currently developing a strategic interim approach. AECOM advises that this should require the maximisation of accessible natural greenspace in large housing sites and identify access management measures. For example, a primary access management measure would be to formalise several wardening / ranger posts to cover the most vulnerable / sensitive foraging and roosting sites in the coastal SPAs and Ramsars. Financial contributions towards access management could be determined by the number of bedrooms per dwelling and S106 agreements.

5.50 An extensive list of measures could be explored for taking forward as part of an interim approach. Natural England's Site Improvement Plan for the north-west coastal SPAs and Ramsars provides a useful reference point. For example, developer contributions could be used to identify potential target locations for regulatory measures with the aim to reduce adverse impacts from public access and disturbance. Furthermore, funding could be employed to investigate the impact of recreational fishing on foraging wading birds, while promoting responsible fishing. However, a permanent establishment of a wardening scheme to raise awareness and mitigate disturbance impacts at key access points to Wirral's coastline, promises to deliver the highest conservation benefits. Developer-funded wardening roles could focus on the following key sites:

- Hoylake – highest proportion of major bird flights compared to minor flights
- Leasowe Breakwater – highest rate of minor and major flights (6.6) per hour
- West Kirby – second highest flight rate per hour

5.51 Wirral Borough Council is developing an Interim Approach (IA) to mitigating recreational pressure in its coastal European sites. The IA is projected to be in place until the adoption of the RMA, which is likely to be the case within the first five years of the Plan period. This IA covers a 5km buffer zone surrounding Wirral's European sites, which effectively means that 100% of Wirral's administrative area falls within the mitigation zone. Only a small area of Wirral lies beyond 5km from designated site boundaries, but no residential sites are allocated in this zone. The principal focus of the IA is on enhanced greenspace and SAMM provision. For example, the Council's approach will be to increase the capacity and functionality of the Borough's existing green and open spaces, create a more integrated network of such spaces by better linkage and enhance

¹¹⁹ This is identified as important research in Natural England's Site Improvement Plan with an estimated cost of £15,000. Available at: <http://publications.naturalengland.org.uk/publication/6579320399069184> [Accessed on the 30/11/2020]

accessibility, awareness and promotion of these alternative recreational spaces. SAMM mitigation measures will comprise some of the following:

- Communications, marketing and education initiatives (e.g. targeted awareness projects for specific user groups, such as dog walkers and drone pilots)
- Increased staffing hours for rangers with the aim to raise public awareness and reduce disturbance / damage to overwintering and breeding birds
- Installation of signage to alternative greenspaces as a means to promoting less disturbing dog walking, cycling and walking routes
- Provision of information packs to new households for educational purposes and promoting a Responsible Coast User Code
- Infrastructure management to enhance path management and potential fencing to disperse visitor pressure and 'enforce' desire routes
- Monitoring measures to create data on recreational use (e.g. automatic visitor counters) and evaluate effectiveness of interventions

5.52 Wirral Borough Council will encourage planning applicants to 'opt in' to the IA approach, which would mean that direct payments towards the costs of mitigation measures are made through legally binding planning obligations. It is noted that developers who chose not to adopt the IA will still need to provide avoidance and mitigation measures individually, which will be assessed in a project-level HRA. Overall, AECOM considers that Wirral's IA represents a sound and holistic framework, which will ensure that the integrity of coastal sites is protected until the time that the RMA is in place. Wirral Borough Council is currently engaging with Natural England to ensure that the content of the IA is sufficiently robust.

5.53 By definition of the term, a requirement for mitigating recreational pressure would also extend to functionally linked habitats. It is noted that most such habitats lie relatively far from the main regeneration area (e.g. Gilroy Pond and Hoylake Langfields are situated approx. 6.1km from the Birkenhead areas). However, a review of Ordnance Survey mapping¹²⁰ indicates that many functionally linked habitats have good accessibility and may have relatively strong draws on visitors, particularly wildlife enthusiasts. A complementary mitigation approach could be to deploy wardens to eastern Wirral, covering the extensive areas identified as being functionally linked to the SPA and Ramsar network.

5.54 Several sites that are allocated in Birkenhead adjoin the Birkenhead Docks, specifically the East Float, including RES-RA2.1 (Land at Birkenhead Road, Seacombe), RES-RA6.2 (Wirral Waters – Vittoria Studios and Sky City), RES-RA6.3 (Wirral Waters – Northbank East Urban Splash), RES-RA6.4 (Wirral Waters – Northbank West Urban Splash), RES-RA6.5 (Wirral Waters – Northbank East Tower Road), RES-RA6.6 (Wirral Waters – Northbank West Legacy) and RES-RA6.7 (Wirral Waters – Belong). A field study report, published by TEP in August 2015¹²¹, assessed the usage of dock habitats by SPA and Ramsar birds within the wider north-west England, undertaking repeated bird counts and vantage point surveys. The report concludes that the Birkenhead Docks (both the West and East Float) are functionally linked to the Mersey Estuary SPA and Ramsar, and the Mersey Narrows & North Wirral Foreshore SPA and Ramsar. For example, the Birkenhead Docks support roughly 4.7% of the Mersey Narrows and North Wirral Foreshore SPA and Ramsar cormorant population. Furthermore, approx. 50% of the Mersey Estuary SPA and Ramsar great-crested grebe population have been observed using the East Float at the docks. Both species are not listed as individual qualifying species, but form part of the protected overwintering bird assemblage in these European sites.

5.55 The footpaths associated with the aforementioned large allocations will all lead within close proximity of the docks, posing a risk of visual and noise disturbance to SPA and Ramsar birds

¹²⁰ Available by subscription on outdooractive.com [Accessed on the 05/10/2021].

¹²¹ The Environment Partnership (TEP). (August 2015). Assessment of supporting habitat (docks) for use by qualifying features of Natura 2000 sites in the Liverpool City Region – Ornithology Report. Published report for the Merseyside Environmental Advisory Service. 330pp. Available at: <http://www.meas.org.uk/media/5279/4157005-assessment-of-supporting-habitat-liverpool-docks-excl-drawings-aug-2015.pdf> [Accessed on the 06/10/2021].

using these habitats. While it is unlikely that local residents will be permitted to undertake water-based activities in the docks, these development schemes will result in greater activity levels on paths / future greenspaces in immediate proximity of the East Float, in particular. A bespoke mitigation scheme for these residential developments will need to be produced by developers to minimise any disturbance arising from the net local population growth. Similar to the arrangements for the RMAS, the funding could be via S106 agreements, imposing a surcharge on the residential developments in close proximity to the East Float. The scheme could involve some of the measures / schemes already coming forward under the RMAS, adapted to the specific circumstances of the docks:

- Provision for a part-time wardening post that covers the parts of the docks that are most vulnerable to recreational disturbance (e.g. the East Float)
- Installation of information boards and / or dog-on-lead notices to increase public awareness of the sensitivity of qualifying bird species using the docks
- Circulation of flyers to residents of Wirral Waters, providing information on the ecological importance of the docks to the integrity of Wirral's European sites
- Restriction of access directly onto the docks by planning the path network accordingly (i.e. using a precautionary buffer distance)
- As a last resort, partial path closure during sensitive periods

5.56 It is noted that recreational disturbance measures are being put in place for development falling within the boundary of the East Float outline planning permission, which comprises functionally linked habitat for SPA and Ramsar bird species. For example, for Wirral Waters a SPA Bird Mitigation Strategy¹²² has been developed, which focuses on habitat provision, management and monitoring. The existing tern nesting platform in the Birkenhead Docks has been modified to increase its capacity for nesting terns, which currently stand at 33 breeding pairs. Furthermore, the strategy identifies that additional pontoon / raft structures will be installed across the docks to provide further capacity for nesting common terns as well as roosting habitat for cormorants during the non-breeding season. Importantly, a buffer zone will prohibit boat mooring and transit within 100m of the nesting pontoons in the period between 15th April to 15th September each year, minimising disturbance to breeding common terns. The Wirral Waters SPA Bird Mitigation Strategy specifies that the mitigation measures will be maintained in perpetuity and alternative mitigation plans are in place should the mitigation approach at Wirral Waters be unsuccessful.

5.57 Furthermore, residential developments in Wirral Waters are also contributing to a 5-year mitigation framework¹²³, addressing diffuse recreational pressure impacts on European sites and functionally linked habitats surrounding the Birkenhead Docks. This proposes a range of mitigation measures, including a per-unit tariff towards the cost of ranger provisioning at key disturbance-sensitive locations, signage improvements and enhancements to recreation infrastructure in the River Birkett Parklands. These proposals have been developed in consultation with Natural England and with reference to other coastal mitigation strategies in place across England (e.g. Bird Aware Solent). For example, the per-unit ranger tariff (specifically tailored to mitigate recreational impacts of the Legacy development) has been calculated taking the specific likely profile of future residents into account, specifically low dog ownership and a young age profile, meaning residents are likely to be in employment, with recreational disturbance effects likely being more prominent issues on the weekend. The strategy for ranger provisioning also comprises a detailed breakdown of payments, payment schedule and administration of payments. However, in a recent consultation (dated 3 February 2022), Natural England has advised that a separate mitigation scheme for residential developments in the Birkenhead Docks will not be required once Wirral's IA has been adopted, which forms an adequate strategic framework to provide mitigation across the entire borough, including the area around the Birkenhead Docks.

¹²² TEP. (October 2018). Wirral Waters Birkenhead – SPA Bird Mitigation Strategy. 58pp.

¹²³ TEP. (October 2018). Wirral Waters – Habitats Regulations Assessment. Framework for Addressing Diffuse Recreational Pressure on Coastal Natura 2000 Sites. 33pp.

Mitigation Contained in the Local Plan

- 5.58 The Wirral Local Plan contains a package of policies that mitigate against the impacts of recreational pressure. For example, **Policy WS5.5 (Mitigating Recreational Disturbance on International Sites for Nature Conservation)** is a strategic policy that addresses this impact pathway. It states that *'N. Following screening, developments that are deemed likely to have a significant adverse effect (either individually or in combination with other developments) on European Designated Sites must satisfy the requirements of the Habitats Regulations...'* The policy goes on to stipulate that *'...contributions from developments will be secured towards mitigation measures identified in the LCR Recreational disturbance Avoidance and Mitigation Strategy (RMS) which will be completed during the early part of the plan period.'* The final section of the policy highlights that *'P. Prior to the completion of the RMS, the Council will seek contributions as set out in the Wirral recreational Management Interim Approach document, where appropriate, from residential proposals of 10 or more dwellings...'* Importantly, the Wirral Local Plan refers to the emerging strategic mitigation approach in the Liverpool City Region, while also recognising the importance of the period until this strategy is adopted. Natural England recommend that Wirral Borough Council implement their IA prior to the formal adoption of the Local Plan. This would provide an effective solution for developers and streamline the planning process for applications that come forward in the intervening period.
- 5.59 The policy that mitigates recreational pressure in European sites directly links to **Policy WS5.2 (Open Space Provision)**. This identifies that *'D. New residential development will be required to contribute to the improvement and enhancement of open space... based on the following standards: 1. The provision of 37 square metres of publicly accessible open space per person... 2. That all new dwellings should be within 720 metres safe walking distance of a publicly accessible open space...'* As identified in Statements of Common Ground (SoCGs) with authorities adjoining Wirral, Natural England regards the maximisation of on-site greenspace provision as a priority mitigation measure for residential development in north-west England. AECOM considers that Policy WS5.2 is in line with this requirement, obliging developers of residential developments to deliver high amounts of on-site greenspace. Positively, the Council identifies that where on-site provision is not achievable, an equivalent financial contribution will be sought to deliver improvements to existing local facilities within the catchment of the development. The council sets out that *'...appropriate provision for play in line with clause F above must be made on a site (or sites) of no less than 0.40 hectares.'* This is positive because larger, contiguous greenspaces are more likely to attract local residents than small, fragmented greenspace parcels.

Conclusions and Recommendations

- 5.60 Provided that an appropriate mitigation package for the major residential developments surrounding the docks and an Interim Approach (accepted by Natural England) are delivered, it is concluded that the Wirral Local Plan will not lead to adverse effects on the borough's European sites and functionally linked habitats regarding recreational pressure. No additional policy recommendations are made.

Loss of Functionally Linked Habitat

- 5.61 Wirral is surrounded by three European sites, all of which are designated for their waterfowl species and overall waterbird assemblages. All these species are mobile and few solely depend on tidal habitats in estuarine and marine sites. Depending on prey availability and season, many of these species frequently move beyond the boundary of European sites, foraging and roosting in freshwater habitats, grassland and farmland. Many parcels of such functionally linked habitat can be located many kilometres inland, where greenfield sites might be used by significant flocks of these qualifying species. Because Wirral is adjacent to several European sites with similar qualifying species that might all use greenfield sites allocated in the emerging Reg.19 Local Plan, the following Appropriate Assessment combines the discussion of the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, the Dee Estuary SPA and Ramsar, the Mersey Estuary SPA and Ramsar and the Ribble and Alt Estuaries SPA and Ramsar. Combining these sections also avoids unnecessary replication of analysis.

Mersey Narrows and North Wirral Foreshore SPA and Ramsar, Dee Estuary SPA and Ramsar, Mersey Estuary SPA and Ramsar and Ribble and Alt Estuaries SPA and Ramsar

Dependence of Qualifying Species on Functionally Linked Habitats

- 5.62 Table 6 summarises the qualifying waterfowl species in the three European sites and their likelihood of using functionally linked habitat. This information was collated using several information sources, including the Cheshire and Wirral Bird Atlas, and information from the RSPB and BTO websites. The data indicate that 14 of the 23 qualifying species are known to regularly forage, roost or rest on habitats outside of designated sites in winter, including freshwater, grassland and farmland. The following paragraphs discuss some of these mobile species.
- 5.63 For example, **golden plover**, qualifying species of the Mersey Estuary SPA and Ramsar, breed in upland areas of Britain, but are found on lowland coastal marshes, estuaries, wetland and farmland during winter, where they eat worms, beetles and insects. Golden plovers also often form large flocks with **lapwing**, qualifying species of the Dee Estuary SPA and Ramsar. There is no specific information regarding the distance inland that these species forage or roost during the winter, but anecdotal evidence suggests that significant congregations can be found 5km from designated sites. **Curlew**, qualifying species of the Dee Estuary SPA and Ramsar, move to estuaries and adjoining habitats in winter, feeding on a variety of worms, crabs and molluscs. The Cheshire and Wirral Bird Atlas highlights that most of the tetrads in which curlew were found were farmland (56%), although the largest flocks occurred in tidal areas. Evidence presented by Scottish Natural Heritage¹²⁴ suggests that this species generally remains within 2-3km of associated SPAs in winter. RSPB's Land Management for Wildlife Advice suggests that farmland is important to curlew as feeding habitat¹²⁵, particularly with regard to earthworms and other soil invertebrates. **Wigeon** are grazers, more like geese than other duck species, that predominantly feed on estuarine saltmarsh, particularly the grass *Puccinellia maritima*. However, they have also been found in at least 14 improved grassland tetrads. Most inland records are from freshwater bodies, but according to the authors of the Bird Atlas this is most likely due to the ducks resting on water during the day and feeding in grassland at night.
- 5.64 The Ribble and Alt Estuaries SPA and Ramsar is designated for several goose and swan species, notably **Bewick's swan**, **whooper swan** and **pink-footed goose**. These species are much more regularly seen foraging on winter stubble and are considered to be much more closely linked with dry, off-site habitats than the likes of wigeon. Natural England's Supplementary Advice Note¹²⁶ states that Bewick's swans '*feed in the inner estuary and on arable land outside of the SPA boundary*'. Regarding pink-footed geese the note states that '*this species has complex flyways and movements between roosting and feeding areas within the SPA and outwith - particularly agricultural land in the wider region*'. Pink-footed geese can travel between 15-20km from their roosting sites to forage inland (in contrast to Bewick and whooper swan that will usually remain within 5km)¹²⁷. However, the Cheshire and Wirral Bird Atlas documents few, if any, records of these species in inland tetrads in Wirral. One explanation for this is that the birds are likely to undertake the shortest possible trips to reach suitable inland roosting and foraging habitats. The Ribble and Alt Estuaries SPA and Ramsar lies on the Sefton coast and therefore much closer to arable land in Sefton and West Lancashire. To reach greenfield sites in Wirral, birds would have to cross the Mersey Narrows and navigate over the highly urbanised north-eastern part of Wirral.

Table 6: Summary of qualifying waterfowl and wader species of the coastal and estuarine sites and their likelihood of using functionally linked habitat. Note that species marked with * are components of the overall qualifying waterbird assemblage for the respective European site. Some species are qualifying features of multiple European sites, but are only listed for the site

¹²⁴ <https://www.nature.scot/sites/default/files/2018-08/Assessing%20connectivity%20with%20special%20protection%20areas.pdf> [Accessed on the 14/12/2020]

¹²⁵ <https://www.rspb.org.uk/globalassets/downloads/documents/conservation--sustainability/land-management-for-wildlife/land-management-for-wildlife---curlew.pdf> [Accessed on the 14/12/2020]

¹²⁶ <https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9005103&SiteName=ribble&SiteNameDisplay=Ribble+and+Alt+Estuaries+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAAArea=&NumMarineSeasonality=20> [Accessed on the 14/12/2020]

¹²⁷ <https://www.nature.scot/sites/default/files/2018-08/Assessing%20connectivity%20with%20special%20protection%20areas.pdf> [Accessed on the 14/12/2020]

in relation to which they first appear (e.g. redshank is a qualifying species of all three sites, but is only listed for the Mersey Narrows and North Wirral Foreshore SPA and Ramsar).

European site	Species	Present Winter	Inland	Potential for Loss of Functionally Habitat
Mersey Narrows and North Wirral Foreshore SPA and Ramsar	Bar-tailed godwit (<i>Limosa lapponica</i>)	No (This species is rarely found away from tidal areas in winter, with the last such record dating back to 1996)		NA
	Little gull (<i>Hydrocoloeus minutus</i>)	No (This species is only rarely found inland and usually in small numbers)		NA
	Knot (<i>Calidris canutus</i>)	No (The Cheshire and Wirral Bird Atlas notes that knot is a rare species inland, with only one record of one bird from 2004)		NA
	Common tern (<i>Sterna hirundo</i>)	No		NA
	Redshank* (<i>Tringa totanus</i>)	Yes		Unlikely, as the Plan focuses on urban regeneration
	Grey plover* (<i>Pluvialis squatarola</i>)	No (Grey plover is a habitat specialist that is very rarely found away from tidal areas. Its main habitat is estuaries, open shores and saltmarsh)		NA
	Oystercatcher* (<i>Haematopus ostralegus</i>)	Yes		Unlikely, as the Plan focuses on urban regeneration
	Cormorant* (<i>Phalacrocorax carbo</i>)	Yes		Potential
	Sanderling* (<i>Calidris alba</i>)	No (This species is very loyal to feeding grounds and roost sites which are generally near the tidal areas)		NA
	Dunlin (<i>Calidris alpina</i>)	No (Dunlin are primarily associated with estuarine overwintering habitats and only rarely found at inland sites)		NA
	Red knot (<i>Calidris canutus</i>)	No (Knot are tightly associated with intertidal habitats and are only		NA

	extremely rarely found in inland habitats)		
Dee Estuary SPA and Ramsar	Little tern (<i>Sterna albifrons</i>)	No	NA
	Sandwich tern (<i>Sterna sandvicensis</i>)	No	NA
	Curlew (<i>Numenius arquata</i>)	Yes	Unlikely, as the Plan focuses on urban regeneration
	Pintail (<i>Anas acuta</i>)	Yes	Potential
	Shelduck (<i>Tadorna tadorna</i>)	Yes	Unlikely, as the Plan focuses on urban regeneration
	Teal (<i>Anas crecca</i>)	Yes	Potential
	Black-tailed godwit (<i>Limosa limosa islandica</i>)	Yes	Unlikely, as the Plan focuses on urban regeneration
	Mallard* (<i>Anas platyrhynchos</i>)	Yes	Potential
	Lapwing* (<i>Vanellus vanellus</i>)	Yes	Unlikely, as the Plan focuses on urban regeneration
	Wigeon* (<i>Anas penelope</i>)	Yes	Unlikely, as the Plan focuses on urban regeneration
Mersey Estuary SPA and Ramsar	Golden plover (<i>Pluvialis apricaria</i>)	Yes	Unlikely, as the Plan focuses on urban regeneration
	Ringed plover* (<i>Charadrius hiaticula</i>)	No (This species forages primarily at the tidal edge, foraging for marine worms, crustaceans and molluscs. It is rarely found inland)	NA
	Great-crested grebe* (<i>Podiceps cristatus</i>)	Yes	Potential
Ribble and Alt Estuaries SPA and Ramsar	Ruff (<i>Philomachus pugnax</i>)	No (No records in inland areas of Wirral)	NA
	Bewick's swan (<i>Cygnus columbianus bewickii</i>)	Yes (As a precautionary measure. The Cheshire and Wirral Bird Atlas shows no records in Wirral, but Bewick's swans are known to forage in agricultural land)	Unlikely, as the Plan focuses on urban regeneration

Whooper swan (<i>Cygnus cygnus</i>)	Yes (As a precautionary measure. The Cheshire and Wirral Bird Atlas shows few records inland in Wirral, but whooper swans are known to forage on winter cereals and grass)	Unlikely, as the Plan focuses on urban regeneration
Lesser black-backed gull (<i>Larus fuscus</i>)	Yes	Unlikely, as the Plan focuses on urban regeneration
Pink-footed goose (<i>Anser brachyrhynchus</i>)	Yes (As a precautionary measure. The Cheshire and Wirral Bird Atlas shows only one record inland in Wirral, but pink-footed geese are well known to forage on winter cereals and grass)	Unlikely, as the Plan focuses on urban regeneration
Common scoter* (<i>Melanitta nigra</i>)	No (This is a species of the shallow open water; there are no inland records for Wirral)	NA
Scaup (<i>Aythya marila</i>)	No (This is a specialist marine diving duck species, very small aggregations may be found on inland waterbodies)	NA
Whimbrel (<i>Numenius phaeopus</i>)	No (Whimbrel tend to aggregate in coastal areas in the passage period, and are unlikely to be found at inland sites)	NA

5.65 Natural England has recently completed a project on better understanding how qualifying bird species use existing supporting habitats in coastal areas of north-west England¹²⁸. The most important deliverable of the project is a map showing identified functionally linked habitats, ranging from 'negligible potential' to 'high potential'. These off-site habitats are crucial in supporting the integrity and reproduction of SPA / Ramsar bird populations, and thus to achieve the Conservation Objectives of coastal sites. Natural England stipulates that the outcomes of this study are to inform planning proposals and ensure that important bird habitats are safeguarded. The map highlights that the most important functionally linked habitats (i.e. those of high and moderate potential) lie in the more rural western parts of the borough. However, it cannot be excluded that SPA and Ramsar birds may use pockets of suitable habitat outside of areas identified in the study. It is to be noted that Natural England has commissioned further survey work, focussing on the northern and western coastal hinterland in Wirral. This work is set to be completed in April 2022 and its results will inform the HRA of emerging planning applications where relevant.

¹²⁸ Bowland Ecology. (2021). Identification of Functionally Linked Land supporting SPA waterbirds in the North West of England. NERC361. Report commissioned by Natural England. Available at: <http://publications.naturalengland.org.uk/publication/6303434392469504> [Accessed on the 17/12/2021]

- 5.66 The Local Plan proposed by Wirral Borough Council focusses on urban regeneration, which significantly lowers the risk of functionally linked habitat loss. Most allocations, in addition to being relatively small, are existing brownfield sites in the highly developed / urbanised setting of Birkenhead. Generally, it is considered that more urban sites are less suitable in providing foraging or resting habitat due to their disturbed context (although as evidenced in the case of Wirral Waters, this is not always the case). Particularly, few site allocations lie in the more open and less developed western parts of Wirral (e.g. near Heswall, Thurstaston, West Kirby and Hoylake) that have been identified as important in Natural England's study.
- 5.67 Most species that are marked as likely to be using inland habitats in Table 6, are unlikely to be impacted by Wirral's urban regeneration approach. However, some waterfowl species (e.g. cormorant, pintail, teal, mallard and great-crested grebe) may be associated with freshwater bodies, such as ponds, lakes and reservoirs. While the Plan does not appear to allocate greenfield sites with freshwater habitats, it does allocate sites directly adjacent to waterbodies that are functionally linked to SPAs and Ramsars.

Site Allocation Assessment

- 5.68 All site allocations included in the Wirral Local Plan were assessed for their likelihood to provide functionally linked habitat to SPA and Ramsar waterfowl and waders (see Table 7). Typically, site allocations below 2ha are not considered to be functionally linked to European sites, because they are unlikely to provide sufficient space or resources to realistically support 1% of the qualifying population of SPAs and Ramsars. However, as a precautionary measure, the table assesses all residential and employment allocations regardless of size. Generally, a site allocation has been identified as being at risk for functionally linked habitat loss where potentially suitable habitat is present (i.e. greenfield sites), the site is close to or larger than 2ha in size, it lies within reasonable flight distances and unobstructed flightlines from SPAs and Ramsars. However, determining flightlines is inherently difficult and birds may even traverse built-up areas, such that some site allocations with obstructed flightlines are also highlighted as potential sites at risk.

Table 7: Housing and employment sites allocated in the emerging Wirral Local Plan, detailing parameters that are important in evaluating their potential significance as functionally linked habitats, such as habitat, size (ha), distance to the nearest SPA and Ramsar (m) and nature of the flightline to / from that site.

Area	Site Reference	Site Name	Habitat	Size (ha)	Distance to nearest SPA / Ramsar	Flightline
Scotts Quay Regeneration Area	RES-RA2.1	Land East of Birkenhead Road, Seacombe (North)	Brownfield site with a very small area of grassland / shrub	1.64	140.5m	Obstructed by development; highly disturbed / urban context
	RES-RA2.2	Land East of Birkenhead Road, Seacombe (South)	Brownfield site with a very small area of grassland / shrub	1.8	138.4	Obstructed by development; highly disturbed / urban context
Waterfront Regeneration Area	RES-RA3.4	Rose Brae, Church Street, Woodside	Short grassland, some shrubs	1.96	9m	Unobstructed flightline
	EMP-RA3.1	Twelve Quays, South of Morpeth Wharf, Birkenhead	Short grassland, some shrubs	1.36	9.6m	Unobstructed flightline
Central Birkenhead Regeneration Area	RES-RA4.1	WGC Town Centre, Plot E, Birkenhead	Brownfield site with buildings and parking lot	1.38	917m	Obstructed by development
	RES-RA4.2	WGC Town Centre, Plot G, Birkenhead	Brownfield site with large buildings	1.24	804m	Obstructed by development

	RES-RA4.3	WGC Town Centre, Plots I and J, Birkenhead	Brownfield site (asphalted parking lot)	1.43	667m	Obstructed by development
Wirral Waters Regeneration Area	RES-RA6.2	Wirral Waters – Vittoria Studios and Sky City	Brownfield site (existing industrial buildings)	12.3	912m	Unobstructed via East and West Floats
	RES-RA6.3	Wirral Waters – Northbank East (Urban Splash)	Brownfield site (adjacent to former mill residential site, groundworks underway)	2.3	617m	Unobstructed via East Float
	RES-RA6.5	Wirral Waters – Northbank East (Tower Road)	Brownfield site (groundworks underway)	0.5	421m	Unobstructed via East Float
	RES-RA6.6	Wirral Waters – Northbank West (Legacy)	Brownfield site (groundworks underway)	2.16	1.1km	Unobstructed via East Float
	RES-RA6.7	Wirral Waters – Northbank East (Belong)	Brownfield site (groundworks underway)	0.5	528m	Unobstructed via East Float
	EMP-RA6.1	MEA Park West, Beaufort Road, Birkenhead	Brownfield site (existing industrial buildings)	1.6	2.6km	Unobstructed via East and West Floats
	EMP-RA6.2	MEA Park West, Wallasey Bridge Road, Birkenhead	Brownfield site (remediated cleared site)	9.36	2.4km	Unobstructed via East and West Floats
	EMP-RA6.3	MEA Park East,	Brownfield site (remediated cleared site)	14.17	2.1km	Unobstructed via East and West Floats
	EMP-RA6.4	MEA Park Phase 2, Beaufort Road, Birkenhead	Brownfield site (remediated cleared site)	1.76	2.1km	Unobstructed via East and West Floats
	EMP-RA6.5	Former Hydraulic Tower, Tower Road, Seacombe	Brownfield site (remediated cleared site)	0.95	441m	Unobstructed flightline
Hamilton Park Regeneration Area	EMP-RA7.1	Kern's Warehouse, Cleveland Street, Birkenhead	Brownfield site (buildings, asphalt and concrete slab)	0.97	1.6km	Obstructed by development
Northside Regeneration Area	EMP-RA8.1	Northside West, Dock Road, Poulton	Part brownfield site with low quality grassland, shrubs and trees	6.28	1.6km	Obstructed by development
	EMP-RA8.2	SMM Business Park, Dock Road, Seacombe	Brownfield site (industrial buildings)	6.83	1.1km	Obstructed by development
Liscard Regeneration Area	RES-RA9.1	Former Liscard Municipal, Seaview Road, Liscard	Brownfield site comprising buildings and parking lot	0.48	1km	Obstructed by development
New Brighton Regeneration Area	RES-RA10.1	Former Grand Hotel, Marine Promenade	Part brownfield site with low quality grassland	0.15	170m	Unobstructed flightline
	RES-RA10.2	Egerton Street Playground, New Brighton	Brownfield site (buildings)	0.13	401m	Obstructed by development
	RES-RA10.3	New Palace Amusements	Brownfield site (amusement park)	0.53	70m	Unobstructed flightline

New Ferry Regeneration Area	RES-RA11.1	43 Bebington Street, New Ferry	Brownfield site (buildings and asphalt)	0.09	704m	Obstructed by development
	RES-RA11.2	Woodhead Street Car Park, New Ferry	Brownfield site (asphalted car park)	0.77	575m	Obstructed by development
	RES-RA11.3	Land Grove Street and Bebington Road	Brownfield site (asphalted car park)	0.29	687m	Obstructed by development
	RES-RA11.4	Site of 78, 78A and 82 Bebington Road, New Ferry	Brownfield site (buildings and asphalt)	0.06	778m	Obstructed by development
	RES-RA11.5	100 New Chester Road, New Ferry	Brownfield site (building)	0.26	570m	Obstructed by development
Wallasey Residential Sites	RES-SA1.1	Rear of The Lighthouse PH, Wallasey Village	Part brownfield site (dwellings) and low- quality grassland	0.24	901m	Obstructed by development
	RES-SA1.2	Gibson House, Seabank Road, Egremont	Part brownfield site (buildings) and amenity grassland	0.72	50m	Unobstructed flightline
	RES-SA1.3	Rear of Gibson House, Maddock Road, Egremont	Greenfield site (amenity grassland)	0.42	13m	Unobstructed flightline
	RES-SA1.4	Cleared Site, Oakdale Road, Seacombe	Greenfield site (amenity grassland and scattered trees)	0.16	571m	Obstructed by development
	RES-SA1.5	Old Manor Club, Withens Lane, Liscard	Brownfield site (rubble)	0.18	720m	Obstructed by development
Birkenhead Commercial Core	EMP-SA2.1	Cammell Laird South, Campbeltown Road, Birkenhead	Brownfield site (rubble, concrete slab)	5.52	53m	Unobstructed flightline
	EMP-SA2.2	Twelve Quays, north of Tower Wharf, Birkenhead	Greenfield site (low- quality grassland and shrubs in an industrial setting)	0.91	468m	Unobstructed flightline
Suburban Birkenhead	RES-SA3.1	Former Gladstone Liberals, Dial Road, Tranmere	Part brownfield site (buildings) and some amenity grassland	0.29	1.3km	Obstructed by development
	RES-SA3.2	Redcourt, 7 Devonshire Place, Birkenhead	Brownfield site (Buildings and parking lot)	0.48	2.6km	Obstructed by development
	RES-SA3.3	Sevenoaks Phase 2, Chatham Road, Rock Ferry	Part brownfield site (buildings) and low- quality grassland	0.76	389m	Obstructed by development
	RES-SA3.4	Atherton Hall, Westbourne Road, Birkenhead	Brownfield site (buildings)	0.09	1.7km	Obstructed by development
	RES-SA3.7	4 Dingle Road, Tranmere	Brownfield site (buildings with some adjacent trees)	0.07	1.7km	Obstructed by development
	RES-SA3.8	Park Cottage, 130 Eleanor Road, Bidston	Brownfield site (buildings) and some trees	0.14	2.6km	Obstructed by development
	RES-SA3.9	Former Christ Church, Park Road South, Birkenhead	Part brownfield site and shrubs	0.06	1.7km	Obstructed by development

	EMP-SA3.1	Land west of Prenton Way, North Cheshire Trading Estate, Prenton	Thin strip of grassland, shrubs and trees	0.43	4.5km	Obstructed by development
Bebington, Bromborough and Eastham	RES-SA4.1	Land at Civic Way, Lower Bebington	Part brownfield site (asphalted car park) and some amenity grassland	0.84	1.6km	Obstructed by development
	RES-SA4.2	Former MOD, Old Hall Road, Wirral International Business Park, Bromborough	Part brownfield site (remediated), some low-quality grassland	8.01	684m	Unobstructed flightline
	RES-SA4.3	Riverside Park, Southwood Road, Bromborough	Part brownfield site (industrial buildings), some low-quality grassland	6.5	493m	Unobstructed flightline
	RES-SA4.5	Eastham Youth Centre, Lyndale Avenue	Brownfield site (sports pitches), some amenity grassland	0.41	1.6km	Obstructed by development
	RES-SA4.6	Former Croda, Prices Way, Bromborough Pool	Brownfield site (quarry)	4.31	412m	Unobstructed flightline
	RES-SA4.7	Former D1 Oils, Dock Road, South Bromborough	Part brownfield site (quarry), area of grassland and shrubs	22.86	14m	Unobstructed flightline
	RES-SA4.10	Maple Grove, Bromborough	Brownfield site (structures)	0.14	2.1km	Obstructed by development
	RES-SA4.11	Unilever Research, Quarry Road East, Port Sunlight	Brownfield site (industrial buildings), some trees	3.39	1.7km	Obstructed by development
	RES-SA4.16	Methodist Church, Lower bebington	Brownfield site (church building)	0.07	1.5km	Obstructed by development
	RES-SA4.17	79 Dewent Road, Higher Bebington	Brownfield site (buildings)	0.02	2.9km	Obstructed by development
	RES-SA4.18	45 Palatine Road, Bromborough	Greenfield site (amenity grassland)	0.04	2km	Obstructed by development
	EMP-SA4.1	Land south of Riverbank Road, Bromborough	Grassland and shrubs (adjacent to industrial development and a major road)	0.98	87.81m	Unobstructed flightline
	EMP-SA4.2	Sun Valley Expansion, Commercial Road, Bromborough	Brownfield site (former industrial development)	1.01	441.62m	Unobstructed flightline
	EMP-SA4.3	Land north of Caldbeck Road, east of Welton Road, Bromborough	Grassland	2.33	872.93m	Obstructed by development
	EMP-SA4.4	Tulip Expansion, Plantation Road, Bromborough	Grassland, shrubs and trees	2.08	152.69m	Unobstructed flightline
	EMP-SA4.5	North Road Business Park, North Road, Eastham	Thin strip of grassland, shrubs and trees	8.38	155.33m	Unobstructed flightline

Leasowe, Moreton, Upton, Greasby and Woodchurch	RES-SA5.1	Moreton Family Centre, Pasture Road	Part brownfield site (industrial buildings) and amenity grassland	0.46	1.4km	Obstructed by development
	RES-SA5.2	Moreton Municipal Building, Knutsford Road	Part brownfield site (asphalted car park), some low-quality grassland	0.17	1.6km	Obstructed by development
	RES-SA5.3	East of Typhoo, Reeds Lane, Leasowe	Semi-improved grassland (next to industrial development and a major road)	5.01	1.1km	Obstructed by development
	RES-SA5.4	Former Foxfield School, Douglas Drive, Moreton	Part brownfield site (asphalt), some low-quality grassland	1.44	1.7km	Obstructed by development
	RES-SA5.5	Former Stirrup, Arrowe Park Road, Woodchurch	Brownfield site (asphalt)	0.37	4.8km	Obstructed by development
	RES-SA5.7	Land at Knutsford Road, Moreton	Part brownfield site (asphalt), some low-quality grassland	1.01	1.4km	Obstructed by development
	RES-SA5.8	Former Dodds Builders Merchants, Moreton	Brownfield site (buildings, asphalted car park)	0.09	1.8km	Obstructed by development
	RES-SA5.9	Former Arrowe Hill Primary School, Woodchurch	Part brownfield site (buildings and car park), some trees	0.32	4.7km	Obstructed by development
	RES-SA5.11	25 Church Road, Upton	Part brownfield site (asphalt), some low-quality grassland	0.04	3.7km	Obstructed by development
	RES-SA5.12	30 Salacre Crescent, Upton	Part brownfield site (asphalt), some low-quality grassland	0.08	4.1km	Obstructed by development
	RES-SA5.13	Pinetree Cottage, 50 Moreton Road, Upton	Part brownfield site (buildings), some low-quality grassland	0.16	3.2km	Obstructed by development
	RES-SA5.14	2 Hendon Walk, Greasby	Part brownfield site (building), some low-quality grassland	0.02	3.7km	Obstructed by development
	EMP-SA5.1	Peninsula Business Park, Reeds Lane, Moreton	Low-quality grassland, some trees	1.13	1.14km	Obstructed by development
	EMP-SA5.2	Land north of Premier / Typhoo Access Road, Reeds Lane, Moreton	Amenity grassland	1.46	1.03km	Obstructed by development
	EMP-SA5.3	Land south of Premier / Typhoo Access Road, Reeds Lane, Moreton	Amenity grassland	1.93	1.15km	Obstructed by development
	EMP-SA5.4	Land south of Tarran Way North, Moreton	Low-quality grassland, some shrubs	0.24	629.41m	Obstructed by development
West Kirby and Hoylake	RES-SA6.4	Land at Grange Hill Farm, West Kirby	Part brownfield site (buildings) and	0.77	1km	Obstructed by development

			amenity grassland (garden)			
	RES-SA6.5	Adjacent 1 Cholmondeley Road, West Kirby	Part brownfield site (buildings) and amenity grassland	0.06	847m	Obstructed by development
	RES-SA6.6	Rear of Majestic Wine, Column Road, West Kirby	Brownfield site (building and parking lot)	0.13	1.1km	Obstructed by development
	RES-SA6.7	2 Sherwood Grove, Meols	Part brownfield site (buildings) and some gardens	0.05	1.2km	Obstructed by development
	RES-SA6.8	Ridge Rowans, 25 Wetstone Lane, West Kirby	Greenfield site (amenity grassland and trees)	0.04	749m	Obstructed by development
	RES-SA6.9	Sundial, 61 Caldý Road, Caldý	Brownfield site	0.21	395m	Obstructed by development
	RES-SA6.10	174 Birkenhead Road, Meols	Part brownfield site (building) and some amenity grassland	0.23	405m	Obstructed by development
	RES-SA6.11	7 Caldý Road, West Kirby	Part brownfield site (building) and some amenity grassland	0.14	413m	Obstructed by development
Irby, Thingwall, Pensby, Heswall and Gayton	RES-SA7.2	Former Gospel Hall, Pensby Road, Heswall	Brownfield site (buildings)	0.2	1.7km	Obstructed by development
	RES-SA7.3	Clan Mo., 11 Buffs Lane, Barnston	Greenfield site (amenity grassland)	0.03	2.1km	Obstructed by development
	RES-SA7.4	Rear Ashbourne House, Mount Avenue, Heswall	Greenfield site (dense tree cluster)	0.05	1.1km	Obstructed by development
	RES-SA7.5	Willowbank, 33 Oldfield Road, Heswall	Part brownfield site (buildings); some trees and grassland	0.76	1km	Obstructed by development
	RES-SA7.6	Strathcraig, Phillips Way, Heswall	Part brownfield site (buildings); some amenity grassland	0.18	802m	Obstructed by development
	RES-SA7.9	5 Thurstaston Road, Irby	Part brownfield site (buildings); some amenity grassland	0.09	2.1km	Obstructed by development

5.69 The data presented in Table 7 indicate that most sites allocated in the WLP are unlikely to represent a risk regarding the loss of functionally linked habitat. All brownfield sites are screened out because they do not comprise suitable foraging or roosting habitats. The land parcels that do provide amenity grassland are generally too small and lie in highly urbanised parts of Wirral, such that any risks associated with their development are likely to be minimal. Habitats that are surrounded by high or continuous frontages of housing and industrial development, are unlikely to be used by bird species as these generally prefer habitats with clear sight- and flightlines for easier navigation and predator detection.

5.70 However, potential concerns over some of the allocated sites remain, including but not limited to:

- EMP-SA4.5 (North Road Business Park, North Road, Eastham; 8.38ha and approx. 155.3m from the Mersey Estuary SPA and Ramsar) – this is a relatively large greenfield site comprising grassland and shrubby areas with an unobstructed flightline to the SPA and Ramsar
- EMP-SA5.2 (Land north of Premier / Typhoo Access Road, Reeds Lane, Moreton; 1.46ha and approx. 1.03km from the Mersey Estuary SPA and Ramsar) and EMP-SA5.3 (Land

south of Premier / Typhoo Access Road, Reeds Lane, Moreton; 1.93ha and approx. 1.2km from the Mersey Estuary SPA and Ramsar) – both are closely located greenfield sites comprising amenity grassland, which may act as one functionally linked habitat location

- RES-SA5.3 (East of Typhoo, Reeds Lane, Leasowe; 5.01ha and 1.1km from the Mersey Narrows and North Wirral Foreshore SPA and Ramsar) – while flightlines to the site are interrupted by development, the amenity grassland within the allocation may be suitable for SPA and Ramsar birds (particularly in conjunction with adjoining allocations (e.g. the Premier Brands sites) that also comprise amenity grassland
- 5.71 While it is noted that the above sites lie in disturbed settings, likely to reduce their potential for functional linkage, this is not necessarily the case. SPA and Ramsar species are known to depend on supporting habitats in close proximity to urban surroundings in other geographic areas (e.g. the Solent), such as near motorways, busy dock areas or major residential development. In assessing the allocated sites, AECOM has therefore opted to take a precautionary approach.

Mitigation Contained in the Local Plan

- 5.72 A review of the Wirral Local Plan policy framework indicates that it currently does not encompass wording that specifically protects against the loss of functionally linked habitat. However, the Plan comprises wording that ensures a general protection of European sites. **Policy WD3 (Biodiversity and Geodiversity)** specifies that ‘*A. Development which may result in a likely significant effect on an internationally important site must be accompanied by sufficient evidence to enable the Council to make a Habitats Regulations Assessment. Adverse effects should be avoided and/or mitigated to ensure that the integrity of internationally important sites is protected [unless there are no alternative solutions or there are imperative reasons of overriding public interest]... This also applies to functionally linked land i.e. sites and habitats outside the designated boundaries that support species listed as being important in the designations of the internationally important sites.*’ While the potential for functionally linked habitat loss as a result of the Wirral Local Plan is relatively low, it is considered that more specific policy wording in the Plan is required to remove residual risks in relation to the allocations identified above and potential windfall developments, the location of which is unknown.

Conclusions and Recommendations

- 5.73 Although the potential for the loss of functionally linked habitats associated with the Wirral Local Plan is low, residual risks regarding some site allocations remain. In order to mitigate uncertainties, it is recommended that additional policy wording requiring wintering bird surveys is included in the Plan. It is to be noted that such surveys do not represent an additional burden on developers beyond that already imposed by other environmental legislation. AECOM recommends that the following text should be added to the supporting text of Policy WD3 as a precautionary measure:
- 5.74 ***‘To be compliant with the Habitats and Species Regulations 2017 (as amended), applicants are required to provide evidence that their development will not result in adverse effects on the integrity of nearby European sites regarding the loss of functionally linked habitat. To demonstrate this, a survey will be required to determine whether the habitats in a land parcel are likely to be suitable for supporting designated bird species. Where this is found to be the case, non-breeding bird surveys covering autumn, winter and spring (typically constituting at least two survey seasons) will be required to determine if the site and / or neighbouring land support more than 1% of the qualifying population of a species. If habitat is shown to be functionally linked to a European site, mitigation and avoidance measures will be required as part of project-level Habitats Regulations Assessments to ensure that developments do not result in adverse effects on site integrity.’***
- 5.75 Provided that the above text is included in the WLP, it is concluded that it will not result in adverse effects on the integrity of the Mersey Estuary SPA and Ramsar, Dee Estuary SPA and Ramsar, and the Mersey Narrows and North Wirral Foreshore SPA and Ramsar regarding the loss of functionally linked habitat.

Water Quality

5.76 Water pollution is a significant threat to the Conservation Objectives of Wirral's estuarine and coastal European sites, including the Dee Estuary SPA and Ramsar, Mersey Narrows and North Wirral Foreshore SPA and Ramsar, Mersey Estuary SPA and Ramsar, and Liverpool Bay SPA. Natural England's Site Improvement Plan covering the sites, identifies nutrient enrichment (both in terms of nitrogen and phosphorus concentrations) as a problem in the wider area around Wirral. Phosphorus is the main limiting nutrient in freshwater ecosystems, whereas nitrogen is growth-limiting in the marine environment. Estuarine systems comprise a wide salinity gradient and both nutrients may therefore be important. Treated sewage effluent from Wastewater Treatment Works (WwTWs) is the main pathway through which Local Plans impact water quality, which primarily determines phosphorus and, to a lesser extent, nitrogen loadings in aquatic habitats. However, runoff from impermeable urban surfaces may also impact water quality, particularly where such development occurs in close proximity to designated waterbodies.

Sensitivity of the Dee Estuary SAC / Dee Estuary SPA and Ramsar

- 5.77 Large portions of the Dee Estuary SAC and the Dee Estuary SPA and Ramsar overlap to the west of Wirral, with the Dee Estuary SAC extending further north and also running along the northern shore of Wirral. Furthermore, the two sites are also ecologically linked in that the SAC provides the supporting habitats for the SPA and Ramsar birds. Given this geographic and ecological linkage, this section combines the Appropriate Assessment for the impact pathway water quality regarding both the Dee Estuary SAC and the Dee Estuary SPA and Ramsar.
- 5.78 TOLSE of the Dee Estuary SPA and Ramsar indicated that the site is highly sensitive to changes in water quality, such as its organic and inorganic nutrient loading. Nutrient enrichment is most likely to affect the SPA and Ramsar birds indirectly by altering food availability. A higher concentration of nutrients can lead to an increase in benthic populations of opportunistic marine worms, from which some birds might benefit. However, enrichment also tends to be associated with reduced species diversity, which might negatively affect the more specialised birds.
- 5.79 Very high nutrient loadings can have a profound effect upon the estuary, and sand- and mudflats of the Dee Estuary SAC, primarily by leading to eutrophication, which is associated with excessive algal blooms of opportunist algae, such as gutweed *Enteromorpha* species and sea lettuce *Ulva lactuca*. Algal growth is often associated with deoxygenation of water and sediments, leading to the death of invertebrate species. Aerobic bacteria that break down organic matter are more active under high nutrient regimes, thereby contributing to oxygen depletion. Oxygen depletion also increases the biological oxygen demand of aquatic species, which fuels both ammonia and hydrogen sulphide release that is toxic for aquatic life.
- 5.80 Natural England's and Natural Resources Wales' Conservation Advice for the Dee Estuary SPA and Ramsar and the Dee Estuary SAC highlights that the nutrient enrichment is caused by various factors, including river input and direct discharge. Discharge from WwTWs is particularly mentioned regarding the Chester and Queensferry works, both of which lie near the mouth of the River Dee and contribute the highest nutrient loadings to the estuary. The high nutrient loadings in the Dee Estuary SPA and Ramsar led to the site being designated as a Sensitive Area to Eutrophication under the Waste Water Treatment Directive, based on biological and chemical water quality parameters. This has led to WwTWs being 'secondary treated' to remove some of the organic matter that is being discharged into the estuary. However, recent analyses have determined that the faunal communities near WwTWs are still unbalanced and considered as polluted. Nutrient loading is a particular issue in the lower canalised section of the River Dee (where it enters the estuary), due to limited freshwater input and a relatively low dilution factor.
- 5.81 It is noted that in contrast to the estuarine sites in the Solent (where warmer water, low suspended sediment loading and low wave action all promote the formation of macroalgal mats), the waters around Wirral are colder, have a much higher suspended sediment loading and stronger wave action. This generally slows down macroalgal growth and breaks up any large mats that do occur. Notwithstanding this, attention needs to be given to appropriate wastewater treatment infrastructure because nutrient enrichment from treated sewage effluent is still a potential issue,

especially for the saltmarshes of the Dee Estuary SAC (in the Heswall Beach area) because this could stimulate growth of more competitive species.

Sensitivity of the Mersey Estuary SPA and Ramsar

- 5.82 The Mersey Estuary SPA and Ramsar extends from the mouth of the River Mersey northward, alongside the heavily urbanised eastern part of Wirral. It is likely that eastern Wirral contributes a high nutrient and pollutant load to the SPA and Ramsar already. The site comprises several species of waterfowl that are sensitive to changes in nutrient loading, primarily indirectly via changes to their food resources.
- 5.83 Review of online information indicates that there are two Wastewater Treatment Works (WwTWs, Birkenhead WwTW, Bromborough WwTW) in eastern Wirral that directly discharge to the Mersey Estuary SPA and Ramsar. The Wirral Local Plan proposes most of its growth in Birkenhead, which would add to the existing nutrient load in the SPA and Ramsar site. In principle, this could deteriorate the water quality and lead to cascading effects on its qualifying waterfowl species.
- 5.84 Natural England's Supplementary Advice Note for the SPA and Ramsar acknowledges a potential impact of eutrophication on the qualifying species. However, it also clearly states that the risk of eutrophication across the site has been assessed as low using the Environment Agency's Weight of Evidence approach, taking into account Water Framework Directive targets for opportunistic macroalgae and phytoplankton quality. The regulations stipulate that algae should be limited to under 15% in cover and low biomass ($<500 \text{ g/m}^2$) in the intertidal habitat and the area affected by opportunistic macroalgae should also be limited to under 15%.
- 5.85 Research studies¹²⁹ have confirmed that combined pollution pressure from run-off and wastewater discharge to the catchment of the Mersey Estuary SPA and Ramsar has been a significant historic pressure. However, a study of the water quality in the Mersey showed that due to a clean-up scheme in the 1970's, significant improvements in water quality have been achieved (e.g. significant reductions in biological oxygen demand and total nutrient loads). These have been most important in the reaches above the tidal limit, where the dilution factor is much lower. In 2011 a Water Cycle Study (WCS) for the mid-Mersey identified that tidal influences within the lower reaches of the Mersey Estuary SPA and Ramsar help reduce potential impacts from treated sewage effluent by increasing dilution. Due to the low sensitivity of the SPA and Ramsar to eutrophication and significant improvements in the water quality of the Mersey, it is considered that the Wirral Local Plan is unlikely to result in adverse effects on site integrity alone. Notwithstanding this, a residual risk for eutrophication of the Mersey Estuary SPA and Ramsar remains, particularly when considering Wirral's growth in-combination with that of nearby authorities.

Sensitivity of the Mersey Narrows and North Wirral Foreshore SPA and Ramsar

- 5.86 The Mersey Narrows and North Wirral Foreshore SPA and Ramsar is sensitive to changes in water quality. because high nutrient concentrations can cause eutrophication and may have a negative impact on the foraging resources of qualifying birds. Natural England's Supplementary Advice Note highlights that any further deterioration in water quality should be avoided. In order to achieve this, algal cover should be limited to below 15% and a low biomass ($< 500 \text{ g/m}^2$)¹³⁰. Furthermore, the note highlights dissolved oxygen as one of the most important water quality components that is directly linked to nutrient loading. Low dissolved oxygen levels can result in lethal or sublethal effects on fish, infauna and epifauna communities of marine sites.
- 5.87 In terms of the site's ecological interest, the most important wader feeding grounds and roosting sites lie along the North Wirral Foreshore, particularly to the north of Hoylake and Moreton. This

¹²⁹ Langston, W.J., Chesman, B.S. and Burt, G.R. (2006). *Characterisation of European Marine Site: the Mersey Estuary Special Protection Area*, Marine Biological Association Occasional Publication No18.

¹³⁰

<https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9020287&SiteName=mersey+narrows&SiteNameDisplay=Mersey+Narrows+and+North+Wirral+Foreshore+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAAraea=&NumMarineSeasonality=5> [Accessed on the 14/12/2020]

is a relatively rural area and the Wirral Local Plan allocates relatively little development here. As such, the additional wastewater discharge into the Mersey Narrows and North Wirral Foreshore SPA and Ramsar as a result of the Plan will be relatively small. A review of online information shows that Meols WWTW discharges off the North Wirral coast via a long sea outfall pipe. While the North Wirral Foreshore is the component of the SPA and Ramsar that is most sensitive to eutrophication, the additional amount of urban growth along the foreshore is relatively small.

- 5.88 It is noted that in contrast to the estuarine sites in the Solent (where warmer water, low suspended sediment loading and low wave action all promote the formation of macroalgal mats), the waters around Wirral are colder, have higher suspended sediment loading and stronger wave action. This generally slows down macroalgal growth and breaks up any large mats that start forming. Supporting this, Natural England's Supplementary Site Conservation Advice Note highlights the site's risk of eutrophication to be low. Evidence from surveys and / or monitoring shows the qualifying bird species to be in good condition (relating to both nutrient and dissolved oxygen levels) and currently unimpacted by anthropogenic activities.

Sensitivity of the Liverpool Bay SPA

- 5.89 The Liverpool Bay SPA is sensitive to changes in water quality, primarily due to the increased risk of high nutrient loadings and eutrophication associated with treated sewage effluent. Changes in water quality typically affect the basal elements of the marine food chain, potentially changing the composition of the fish community. Furthermore, low dissolved oxygen concentrations might also have direct lethal or sub-lethal effects on fish. Red-throated diver and common scoter both rely on supplies of fish as their primary foraging resources.
- 5.90 The Liverpool Bay SPA is a marine site that commences beyond the North Wirral Foreshore and extends both westward past the coast of Flintshire and eastward part the Sefton coast. A part of the site also extends southward into the Mersey Estuary. Therefore, any WWTWs within Wirral discharging to the Mersey Narrows and North Wirral Foreshore SPA and Ramsar and Mersey Estuary SPA and Ramsar, are considered to contribute to the nutrient load in the SPA. Furthermore, due to its large size and unique geographic setting, the Liverpool Bay SPA is also likely to be subject to water quality pressures from development in several other authorities (e.g. Flintshire and Sefton) and hydrologically connected waterbodies (e.g. the Dee Estuary SPA and Ramsar and SAC). As such, the potential for adverse water quality effects in-combination with other authorities may be increased.
- 5.91 Natural England's Supplementary Advice was also consulted. Notably, the Site Improvement Plan for the SPA and Ramsar mentions water quality only in relation to oil spills arising from marine traffic¹³¹. One of the reasons why water quality is not considered to be a major threat to the SPA is likely the dilution effect. Firstly, any non-toxic pollutants (e.g. nitrogen) entering a large body of water will be instantly diluted. Furthermore, a large proportion of the site (and its qualifying waterbirds) is relatively far offshore and any nutrients will also be greatly diluted with distance from the coastline (see also ¹³²). Given that water quality is not highlighted as a pressure on the SPA by Natural England and the dilution factor discussed above, it is concluded that the Wirral Local Plan will not result in adverse effects on site integrity, both alone and in-combination with other plans, even in the absence of mitigation.

Sensitivity of the Ribble and Alt Estuaries SPA and Ramsar

- 5.92 Changes in water quality might alter the plant and invertebrate communities of the sand- and mudflats of the SPA and Ramsar, ultimately limiting the type and abundance of foraging resources available to qualifying birds. Natural England's Supplementary Conservation Advice highlights that nutrient loading should be limited (to avoid algal blooms) and dissolved oxygen concentrations should be maintained at 5.7 mg/l¹³³. While the Borough of Wirral is approx. 1.5km

¹³¹ <http://publications.naturalengland.org.uk/publication/5296526586806272> [Accessed on the 14/12/2020]

¹³² Natural England Conservation Advice for the Liverpool Bay SPA mentions nutrient dilution as a major mitigating factor for the site. <http://archive.jncc.gov.uk/default.aspx?page=7507> [Accessed on the 14/12/2020]

¹³³ <https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9005103&SiteName=ribble&SiteNameDisplay=Ribble+and+Alt+Estuaries+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAAArea=&NumMarineSeasonality=20> [Accessed on the 14/12/2020]

to the south-west of the SPA and Ramsar, there is likely to be hydrological connectivity with the estuarine sites adjoining Wirral, such as the Mersey Narrows and North Wirral Foreshore SPA and Ramsar. As such, a deterioration in water quality is likely to arise as an in-combination effect with water quality changes in the River Mersey.

- 5.93 It is worth considering that any treated sewage effluent discharged by WwTWs in Wirral will be initially entering the Mersey Estuary SPA and Ramsar or the Mersey Narrows. Any discharge locations will therefore be several kilometres from the Ribble and Alt Estuaries SPA and Ramsar. Water pollutants are attenuated with increasing distance from their source, meaning that any nutrients will be broken down into other products. There will also be a dilution effect, especially as nutrients enter the more open waters beyond the Mersey Narrows. Therefore, it is concluded that there will be no in-combination effect of the Wirral Local Plan on the integrity of this SPA and Ramsar regarding water quality.

In-Combination Assessment

- 5.94 The Environment Agency Catchment Data Explorer shows that several component waterbodies of the relevant SPAs and Ramsars fail to achieve good water quality status. For example, the 'Mersey Mouth', which includes the geographic area covered by the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, attains an overall classification of 'Moderate Ecological Status', partly due to a 'Moderate' classification for dissolved inorganic nitrogen. The 'Mersey' waterbody, effectively analogous with the Mersey Estuary SPA and Ramsar, was also classified as having an overall 'Moderate Ecological Status' with a 'Moderate' score for nitrogen levels. These data highlight that water pollution is a significant concern across Wirral's European sites and must be duly considered in the HRA process.
- 5.95 The magnitude of water quality impacts of treated sewage effluent is determined both by the volume of discharge and the final concentrations of pollutants (toxic and non-toxic) in the effluent. Both factors are covered by the Environment Agency's Review of Consents (RoS) process, which periodically revisits the processing capacities of and pollutant concentrations discharged from WwTWs, taking the Conservation Objectives of water-dependent European sites into account. As such, by definition, remaining within consent limits ensures that no adverse effect on site integrity will occur.
- 5.96 Avoiding adverse effects regarding water quality is largely the responsibility of water companies (by investing in future sewage treatment infrastructure) and the Environment Agency (by consenting effluent discharges that take consideration of qualifying features of European sites). Local authorities need to contribute to this process by ensuring that there is enough headroom in the existing wastewater treatment infrastructure to accommodate new development, prior to this being consented.
- 5.97 In 2019, Wirral Borough Council undertook an Infrastructure Delivery Plan Baseline Report¹³⁴ (IDP) that assessed a wide range of projected future infrastructure requirements for the borough, including potable water provision and wastewater treatment. Importantly, this assessment included the period covered by the Wirral Local Plan and all residential / employment development allocated therein. The IDP identified that wastewater treatment in Wirral Borough is managed by United Utilities (UU) and Dwr Cymru Welsh Water (DCWW), with WwTWs located at Birkenhead, Bromborough, Meols and Heswall. However, it has been confirmed that none of the site allocations will be coming forward in the catchment of DCWW's Heswall WwTW.
- 5.98 United Utilities, responsible for wastewater treatment across large parts of Wirral Borough (including the urban eastern regeneration areas), must adequately respond to meeting the needs of the borough's growth aspirations. The development allocated in the Wirral Local Plan is spread over several of the company's Asset Management Periods (AMPs) and appropriate infrastructure / capacity improvement investments will be directed to relevant assets over the various AMPs, in line with the distribution of growth and associated wastewater treatment requirements.

¹³⁴ Wirral Borough Council. (January 2020). Wirral Local Plan 2020-2035: Infrastructure Delivery Plan – Draft Stage 1: Evidence and Capacity Study. 121pp. Available at: <https://www.wirral.gov.uk/sites/default/files/all/planning%20and%20building/Local%20plans%20and%20planning%20policy/Local%20Planning%20Evidence%20Base%20and%20Research/Wirral%20Documents/Reg%2018%20Issues%20and%20Options%202020/People%20and%20Places/IDP%202020/PP2.1%20Wirral%20Infrastructure%20Delivery%20Plan%20Baseline%20Report%202020.pdf> [Accessed on the 06/10/2021]

Importantly, it is to be noted that United Utilities have not identified any conflicts with accommodating development outlined in the Plan and their duty to protect the water quality in Wirral's European sites. As such, it is considered that the company's approach to wastewater treatment and meeting the requirements of the Water Framework Directive (WFD) is adequate to prevent adverse effects on water quality in coastal sites.

- 5.99 Any potential water quality impacts of the Wirral Local Plan, particularly in the Birkenhead Regeneration Area, requires assessment in the context of growth in adjoining authorities such as Liverpool, Halton and Flintshire. Given that WwTWs within these authorities will discharge into freshwater bodies and coastal waters that might also be in hydrological connectivity with the European sites discussed here, this could result in a cumulative water quality impact. However, each authority is legally bound to ensure that allocated growth can be accommodated within the existing wastewater treatment infrastructure (e.g. headroom at WwTWs) and the Environment Agency's discharge consents. This effectively ensures that no adverse in-combination effect can arise.

Mitigation Contained in the Local Plan

- 5.100 The policy framework in the Wirral Local Plan ensures that development will only be permitted to come forward if sufficient capacity in the relevant WwTWs exists, thereby keeping growth in line with the RoC process. **Strategic Policy WS10.1 (Provision of Infrastructure)** states that '*B. Proposals must demonstrate that there is sufficient appropriate infrastructure capacity to support the development or that such capacity will be delivered by the proposed development. C. Developers will be expected to provide on-site provision where essential to the acceptable delivery of the development, or where appropriate a financial contribution towards either off-site provision or the enhancement of existing off-site facilities to mitigate the impact of development.*' Furthermore, the policy also sets the framework for a phased delivery of developments in keeping with wastewater treatment capacity, which is particularly important for large residential sites: '*F. Where necessary, proposals should demonstrate how development and supporting infrastructure will be phased... through an appropriate planning condition and / or legal agreement. Mitigation measures may require the implementation of development proposals to be phased in order to prevent significant harm to the environment or other interests of acknowledged importance.*'
- 5.101 Further safeguarding against water pollution is enshrined in **Policy WD14 (Pollution and Risk)**, which stipulates that '*A. Development proposals that will result in an unacceptable increase in the risk to human health and the environment... will not be permitted. C. Development must: 1. include satisfactory arrangements for the disposal of foul sewage, trade effluent or contaminated surface water; 2. where appropriate, demonstrate that it will not have a detrimental impact on the quality of bathing and coastal waters; 3. not exacerbate existing problems such as premature or increased frequency of discharges through storm sewer overflows due to inadequate infrastructure or lack of sewer capacity; and 4. where appropriate, demonstrate that it will not lead to spillage or leakage of stored oils or chemicals or other potentially polluting substances. D. Development that would adversely affect the quality or quantity of water in any watercourse, or of groundwater, or cause deterioration in a water body or element classification levels defined in the Water Framework Directive... will not be permitted. Any planning application that could (without effective mitigation) cause such harm must be accompanied by a Construction Management Plan [CMP] that sets out how the water environment will be protected during the construction process.*'
- 5.102 AECOM considers that Policy WD14 in particular, is essential for the effective protection of Wirral's European sites. This policy extends the protection of coastal waters to impacts arising from surface runoff, storm sewer overflows and construction processes. Many allocated sites (especially in eastern Wirral) lie very close to designated sites (or waterbodies connected to such sites), such that polluted surface runoff poses a threat both during and post-construction of development. The requirement for CMPs is an accepted approach to mitigate potential adverse effects on European sites.

Conclusions and Recommendations

- 5.103 Overall, it is concluded that the Wirral Local Plan contains a robust policy framework ensuring that the water quality in estuarine and marine European sites adjoining Wirral is maintained.

Notwithstanding this, it is recommended that the following text (or similar) is inserted into **Strategic Policy WS10.1 (Provision of Infrastructure)** or its supporting text: ***'The Council will liaise with United Utilities and Dwr Cymru Welsh Water to confirm that there is sufficient headroom in the existing discharge consent to accommodate the growth planned for Wirral over the entire Plan period. If constraints are identified, housing delivery will need to be phased to keep in line with the available wastewater treatment infrastructure.'*** Overall, with this added safeguard in place, AECOM concludes that the WLP will not result in adverse effects on the Mersey Narrows & North Wirral Foreshore SPA and Ramsar, Mersey Estuary SPA and Ramsar, and Dee Estuary SPA and Ramsar and SAC in relation to water quality.

Water Quantity, Level and Flow

- 5.104 United Utilities (UU) is the main licensed water company in north-west England, providing potable water to over 7 million customers including 3 million households and approx. 200,000 businesses. Given the criticality of ensuring sufficient but sustainable water supply to meeting the demands of society, the preparation of Water Resources Management Plans (WRMPs) is a statutory requirement with multi-stakeholder involvement. UU's WRMP sets out the company's proposed strategy for water resources and demand management for the period between 2020 and 2045¹³⁵, ensuring that there are adequate water supplies for customers and that the environment is protected. This HRA assesses the implications of the WRMP for Wirral's European sites, and designated sites further afield from Wirral Borough that may be impacted by the borough's increasing water demand due to implementation of the Local Plan.
- 5.105 The WRMP states that UU operates over 100 water supply reservoirs, river and stream intakes, lake abstractions and groundwater sources. Approx. 90% of the company's water is derived from rivers and reservoirs, with the remainder being obtained from groundwater. UU's supply area encompasses four Water Resource Zones (WRZs), regions within which water resources are effectively shared, including the Carlisle WRZ, North Eden WRZ, New Strategic WRZ and Former West Cumbria WRZ (to be integrated to the New Strategic WRZ upon completion of Thirlmere Reservoir at the end of March 2022). Wirral Borough is situated in the New Strategic WRZ, which balances water demand through the strategic utilisation of resources and supplies approx. 1,697 million litres of potable water per day.
- 5.106 A primary tool for assessing any potential implications of WRMPs for the water quantity, level and flow in European sites is consideration of the projected supply-demand balance over the period covered by the document. Water Available For Use in the New Strategic WRZ is expected to reduce by about 46 MI/d due to the accumulating impacts of climate change. Furthermore, the integration of the West Cumbria WRZ anticipated for 2022 will create an additional water demand of approx. 43 MI/d. While the supply-demand balance remains in a surplus of 38 MI/d in 2025/26, a small baseline deficit for the New Strategic WRZ of 3 MI/d is forecast towards the end of the WRMP period. Effectively this means that UU needed to consider options (both supply and demand management) to address the projected shortage in water supply.
- 5.107 Overall, 350 potential solutions were appraised by UU in collaboration with relevant statutory stakeholders, including Natural England, Natural Resources Wales and the Environment Agency. The options appraisal process initially considers all potential options (the 'Unconstrained Options' list), which are then reduced to a 'Feasible Options' list by implementing primary screening criteria. All feasible options then undergo secondary screening (which importantly includes environmental screening), which is the stage at which nature conservation interests, including HRA features, are considered. Considering the findings of the HRA at this stage typically means that options with the potential to cause adverse effects on European sites are excluded early in the WRMP process. UU's preferred WRMP includes the following strategic options to address the supply-demand baseline deficit:
- Baseline demand activities, including an annual saving of 1 litre per property per day and the installation of approx. 180,000 water meters between 2020 and 2025

¹³⁵ United Utilities. (2019). Final Water Resources Management Plan 2019. 191pp. Available at: https://www.unitedutilities.com/globalassets/z_corporate-site/about-us-pdfs/wrmp-2019---2045/final-water-resources-management-plan-2019.pdf [Accessed on the 06/10/2021]

- Enhanced leakage reduction comprising a saving of 190 MI/d over the planning period (a reduction of 40% from the baseline position)
- Improve level of service for drought permits and orders to augment supply from 1 in 20 years to 1 in 40 years
- Increasing resilience to other hazards of the regional aqueduct system associated with the Manchester and Pennines area by completing Solution D (rebuilding of all single line sections of the aqueduct)

5.108 UU concludes that the implementation of these measures will move the baseline supply-demand balance into surplus for the entirety of the WRMP period. Importantly from an HRA perspective, none of these options involve exploitation of new water resources or increases to existing abstraction consents, implying that there is no potential for the WRMP to affect the water quantity or flow in European sites.

Mitigation Contained in the Local Plan

5.109 Several policies in the Wirral Local Plan encompass policy wording that protects the water level and flow within European sites. For example, as referred to in a previous chapter, **Policy WD3 (Biodiversity and Geodiversity)** contains generic wording that preserves the integrity of internationally important sites. For example, it states that *'A... Adverse effects should be avoided and / or mitigated to ensure that the integrity of internationally important sites is protected. Development which may adversely affect the integrity of internationally important sites will only be permitted where there are no alternative solutions, there are imperative reasons of overriding public interest, suitable mitigation is in place and compensatory provision is secured.'* This statement would include any potential impacts of development on water quantity, level and flow in Wirral's coastal and estuarine European sites. Furthermore, **Policy WS10.1 (Provision of Infrastructure)** also provides indirect safeguarding against adverse water levels: *'E. Planning permission will normally be granted unless: 1. existing or proposed infrastructure would not be capable of supporting the scale or nature of the development proposed without significant environmental or other harm assessed in consultation with utilities or other infrastructure providers and any relevant statutory agencies...'* Insufficient or inadequate water supply (i.e. going beyond existing abstraction consents) qualifies as such environmental harm and is therefore protected against in the Wirral Local Plan.

5.110 Overall, given the available evidence, AECOM concludes that the WLP will not result in adverse effects on water-dependent European sites regarding the impact pathway water quantity, level and flow. No additional policy recommendations are made.

Visual and Noise Disturbance from Construction Works

5.111 Wirral's coastal and estuarine SPAs and Ramsar sites are all designated for overwintering waterfowl, waders and seabirds, which are all sensitive to visual and noise disturbance from construction works. ToLSE identified that LSEs on the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, the Mersey Estuary SPA and Ramsar and the Liverpool Bay SPA regarding this impact pathway cannot be excluded. Disturbance may result from both visual and aural stimuli, although it is well recognised that there is a paucity of response data particularly in relation to avifaunal responses to construction noise. In recent years, for the noisiest construction methods (e.g. piling, which generates 120 dB at source) and considering an acceptable noise level of 70 dB at birds, a 200m threshold distance has been identified for noise disturbance. This was based on field observations of bird responses to noise disturbance events and utilising the standard distance decay rates for noise (across open areas). However, both the source of noise and bird species involved are important considerations in identifying potential noise disturbance impacts. For example, sudden irregular noise events may evoke bird responses at lower thresholds (approx. 60 dB) than more prolonged noise events.

5.112 An alternative approach to using absolute noise disturbance thresholds has been developed in recent years and is now formally accepted by Natural England on some development projects.

Most bird species show a degree of habituation to disturbance stimuli as a result of repeated exposure in their natural habitats. This has potentially important implications as some noise levels may cause little to no disturbance in areas with existing loud soundscapes. As such, using absolute noise thresholds may greatly overestimate the threat that construction noise poses in some areas and place undue burdens on developers. Consequently, frequently the absolute change in noise levels between the pre-construction and construction periods is now used to assess potential impacts of noise disturbance. This comparison is enabled by undertaking pre-construction baseline noise measurements at receptor locations and contrasting these with noise models informed by construction parameters (e.g. location, type and duration of construction methods). This comparative noise impact assessment provides a valuable alternative and, potentially, more meaningful approach to evaluating construction impacts on SPA and Ramsar birds.

5.113 In contrast, visual disturbance on birds has been more frequently studied. Visual stimuli will typically create a disturbance effect before associated noise begins to have an impact. For example, Cutts et al. (2013) report that most species will show a flight response when approached to within 100-150m in intertidal sand- or mudflats. Generally, disturbance associated with visual stimuli will be highest where workers operate outside of equipment, large plant is involved, and works are undertaken at high speeds and close to birds. Visual disturbance is not necessarily easily predictive or intuitive due to other factors, such as conspicuousness and visibility to birds. For example, a lone worker in open habitat may trigger a major flight response at further distances than the operation of large plant. It is now commonly accepted that there are likely to be minimal visual disturbance impacts beyond 300m distance to source, although species-specific variation has been documented.

5.114 Overall, AECOM considers that a precautionary 300m buffer captures all allocations that represent a concern regarding visual and noise disturbance from construction works. Table 8 lists all residential and employment allocations within 300m of Wirral's SPAs and Ramsar sites. It also details the qualifying species in each SPA and Ramsar that are likely to be most sensitive to construction disturbance. While the data indicate that red-throated divers (qualifying species of the Liverpool Bay SPA) may respond to most distant stimuli, it should be noted that this species is a specialist of open water habitats that is unlikely to be frequently encountered in the part of the SPA that encompasses the River Mersey. Furthermore, the response distance for this species listed in Table 8 was observed during the breeding season, when birds are likely to be more reactive to disturbance. Highly sensitive bird species are also found in the Mersey Estuary SPA and Ramsar (shelduck, redshank) and the Mersey Narrows and North Wirral Foreshore SPA and Ramsar (knot, redshank). AECOM advises that mitigation measures will be required to protect the bird populations in these SPAs and Ramsar from adverse visual and noise disturbance impacts.

Table 8: Site allocations within 300m of a SPA and Ramsar, showing the most sensitive qualifying species in each site.

Site Reference	Site Name	Nearest SPA and Ramsar	Distance to SPA and Ramsar (m)	Most Sensitive Qualifying Species
RES-RA3.4	Rose Brae, Woodside, Birkenhead	Liverpool Bay	6.4	Red-throated diver (responds to disturbance events up to 750m away) ¹³⁶
RES-SA1.3	Rear of Gibson House, Maddock Road, Egremont	Mersey Narrows & North Wirral Foreshore	13.5	Knot (up to 200m distance to noisy works, more tolerant to visual stimuli), redshank (up to 200m for noisy works, more tolerant to visual stimuli)
RES-SA4.7	Former D1 Oils, Dock Road	Mersey Estuary	14.2	Shelduck (up to 500m for visual stimuli and 300m for noise stimuli),

¹³⁶ Data for red-throated diver were obtained from: Ruddock M. & Whitfield D.P. (2007). A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage. 181pp. Available at: <https://www.nature.scot/sites/default/files/2018-05/A%20Review%20of%20Disturbance%20Distances%20in%20Selected%20Bird%20Species%20-%20Natural%20Research%20Ltd%20-%202007.pdf> [Accessed on the 07/10/2021]

	South, Bromborough			redshank (up to 200m for noisy works, more tolerant to visual stimuli) ¹³⁷
RES-SA1.2	Gibson House, Seabank Road, Egremont	Mersey Narrows & North Wirral Foreshore	49.7	Knot (up to 200m distance to noisy works, more tolerant to visual stimuli), redshank (up to 200m for noisy works, more tolerant to visual stimuli)
RES-RA10.3	New Palace Amusements	Mersey Narrows & North Wirral Foreshore	70.3	Knot (up to 200m distance to noisy works, more tolerant to visual stimuli), redshank (up to 200m for noisy works, more tolerant to visual stimuli)
RES-RA2.1	Land East of Birkenhead Road, Seacombe (North)	Liverpool Bay	140.5	Red-throated diver (responds to disturbance events up to 750m away)
RES-RA2.2	Land East of Birkenhead Road, Seacombe (South)	Liverpool Bay	138.4	Red-throated diver (responds to disturbance events up to 750m away)
RES-RA10.1	Former Grand Hotel, Marine Promenade	Mersey Narrows & North Wirral Foreshore	170.1	Knot (up to 200m distance to noisy works, more tolerant to visual stimuli), redshank (up to 200m for noisy works, more tolerant to visual stimuli)
EMP-RA3.1	Twelve Quays, South of Morpeth Wharf, Birkenhead	Liverpool Bay	9.6	Red-throated diver (responds to disturbance events up to 750m away)
EMP-SA2.1	Cammell Laird South, Campbeltown Road, Birkenhead	Liverpool Bay	53	Red-throated diver (responds to disturbance events up to 750m away)
EMP-SA4.1	Land south of Riverbank Road, Bromborough	Mersey Estuary	87.8	Shelduck (up to 500m for visual stimuli and 300m for noise stimuli), redshank (up to 200m for noisy works, more tolerant to visual disturbance)
EMP-SA4.4	Tulip Expansion, Plantation Road, Bromborough	Mersey Estuary	152.7	Shelduck (up to 500m for visual stimuli and 300m for noise stimuli), redshank (up to 200m for noisy works, more tolerant to visual disturbance)
EMP-SA4.5	North Road Business Park, North Road, Eastham	Mersey Estuary	155.3	Shelduck (up to 500m for visual stimuli and 300m for noise stimuli), redshank (up to 200m for noisy works, more tolerant to visual disturbance)

5.115 Functionally linked habitats are so named because they provide critical resting, roosting or foraging resources for a significant proportion of SPA and Ramsar bird populations. As such, a

¹³⁷ Data for remaining waterfowl were obtained from: Cutts N., Hemingway K. & Spencer J. (March 2013). Waterbird Disturbance Mitigation Toolkit – Informing estuarine planning & construction projects. Produced by the Institute of Estuarine & Coastal Studies (IECS), University of Hull. 36pp. Available at: https://gat04-live-1517c8a4486c41609369c68f30c8-aa81074.divio-media.org/filer_public/8f/bd/8fbd7e9-ea6f-4474-869f-ec1e68a9c809/11367.pdf [Accessed on the 07/10/2021]

requirement to protect against negative construction disturbance impacts also extends to such sites. Table 9 provides a summary of all residential and employment allocations within the 300m buffer zone surrounding the Birkenhead Docks. While a degree of disturbance may be mitigated by intervening development for allocations that lie some distance from the docks (e.g. RES-RA2.1, EMP-RA6.1, EMP-RA7.1, EMP-RA7.2 and EMP-RA8.1), visual and noise stimuli emanating from construction sites immediately adjoining the docks will, in the absence of mitigation measures, reach ecological receptors uninterrupted. Overall, AECOM advises that mitigation measures will be required to protect the bird populations in the SPAs and Ramsar, and functionally linked habitats, from adverse visual and noise disturbance impacts.

Table 9: Residential and employment allocations within 300m of the Birkenhead Docks (the West and East Float), a dock system identified as being functionally linked to Wirral's coastal / estuarine European sites.

Site Reference	Site Name	Distance to the closest part of the Birkenhead Docks (West and East Floats)
RES-RA2.1	Land East of Birkenhead Road, Seacombe (North)	95.1
RES-RA2.2	Land East of Birkenhead Road, Seacombe (South)	75.2
RES-RA6.2	Wirral Waters - Vittoria Studios and Sky City	Adjoining
RES-RA6.3	Wirral Waters - Northbank East 1 (Urban Splash)	Adjoining
RES-RA6.4	Wirral Waters - Northbank West 2 (Urban Splash)	Adjoining
RES-RA6.5	Wirral Waters - Northbank East 3 (Tower Road)	Adjoining
RES-RA6.6	Wirral Waters – Northbank West 1 (Legacy)	Adjoining
RES-RA6.7	Wirral Waters – Northbank East 2 (Belong)	Adjoining
EMP-RA6.1	MEA Park West, Beaufort Road, Birkenhead	98.1
EMP-RA6.2	MEA Park West, Wallasey Bridge Road, Birkenhead	Adjoining
EMP-RA6.3	MEA Park East, Beaufort Road, Birkenhead	Adjoining
EMP-RA6.4	MEA Park Phase 2, Beaufort Road, Birkenhead	Adjoining
EMP-RA6.5	Former Hydraulic Tower, Tower Road, Seacombe	Adjoining
EMP-RA7.1	Kern's Warehouse, Cleveland Street, Birkenhead	176.3
EMP-RA8.1	Northside West, Dock Road, Poulton	95.3
EMP-RA8.2	SMM Business Park, Dock Road, Seacombe	98.2
EMP-SA2.2	Twelve Quays, north of Tower Wharf, Birkenhead	84.2

Conclusions and Recommendations

5.116 Overall, several recommendations regarding visual and noise disturbance from construction works are made to guide development proposed in the WLP. Given Wirral's unique situation

amidst several European sites designated for sensitive bird species, the advice regarding visual and noise disturbance is the following:

- **To minimise the effect of visual and noise disturbance, it is recommended that any construction work (and associated road infrastructure) within 300m of the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, the Dee Estuary SPA and Ramsar and the Mersey Estuary SPA and Ramsar is undertaken during periods when bird populations in these sites are low (i.e. in the summer months).**
- **Furthermore, given the presence of highly sensitive bird species on functionally linked habitat near development allocations, it is advised that such a distance is also maintained regarding functionally linked habitat. Construction within 300m of the SPAs / Ramsars, or functionally linked habitat parcels, should be carried out between April and August, when most qualifying species are unlikely to be present in great numbers. This particularly applies to construction processes associated with high noise levels (e.g. impact piling).**
- **If construction cannot be timed to avoid the winter and passage periods, then an impact assessment will need to be undertaken to confirm that noise levels will remain at acceptable noise levels (agreed upon with Natural England) near qualifying bird assemblages. This may encompass the comparison of modelled construction noise levels to pre-construction baseline noise measurements. Mitigation of noise impacts may be required, including the provision of screens, selection of less noisy equipment or techniques, damping and noise shielding of equipment or avoidance of lighting in sensitive locations. Noise mitigation may also be required well into April / May, because significant proportions of the populations of some non-breeding species may linger in coastal areas of north-west England beyond March.**
- **Construction sites within 300m of known bird roosts in the SPAs and Ramsars or functionally linked habitats should have appropriate screening in place to minimise visual disturbance.**

5.117 Given the length of this recommendation, AECOM advises that the above paragraphs are included in the supporting text of, or in condensed form within, an appropriate policy of the WLP. Provided that the above addition to the policy framework of the Wirral Local Plan is made, it is concluded that the Plan will not result in adverse effects on Wirral's European sites (or functionally linked habitats) regarding visual and noise disturbance from construction works.

Coastal Squeeze

5.118 Climate change is causing rising sea levels, which in turn inundate designated habitats, including intertidal sand- and mudflats and dune habitats. Where urban development is proposed immediately adjoining such designated habitats, this prevents their landward migration and is likely to result in their long-term loss. Any loss of SPA and Ramsar, or functionally linked habitat, due to coastal squeeze would threaten the Conservation Objectives of European sites and should be prevented.

5.119 The Local Plan developed by Wirral Borough Council primarily focuses on urban regeneration and proposes (re)development in existing built-up areas such as Birkenhead. Avoiding greenfield areas adjacent to Wirral's coastline inherently minimises the risk of coastal squeeze. Notwithstanding this, there are pockets of undefended greenfield areas within developed parts of Wirral Borough, such as adjoining the Mersey Estuary SPA and Ramsar. Allocated sites within these areas require adequate appraisal to ensure that potential impacts of coastal squeeze are not exacerbated. Shoreline Management Plans (SMPs) covering specific sections of coastline are important tools in assessing coastal squeeze impacts, because they identify existing sea defences and proposed long-term management approaches of coastal areas while considering the requirement of natural processes in European sites. SMPs are non-statutory documents but are subject to HRAs, thereby providing a good indication for potential adverse impacts on designated sites. The SMP for Wirral that has been consulted in the following analysis is

published by the North West & North Wales Coastline Partnership¹³⁸ and covers the Dee Estuary, North Wirral and Mersey Estuary.

- 5.120 A review of the sites allocated in the Wirral Local Plan indicates that few allocations are proposed in the immediate vicinity of SPAs and Ramsars. The only area of risk is situated adjacent to the Mersey Estuary SPA and Ramsar between Riverwood Road and Eastham Ferry, for which the SMP proposes an approach of 'No Active Intervention' (NAI) over the next 100 years¹³⁹. This stretch of coastline should therefore not be subject to a net increase in impermeable urban development. A review of Wirral's site allocations on a Geographic Information System (GIS) indicates that one residential allocation (RES-SA4.3, Land at Riverside Park, Southwood Road, Bromborough) lies approx. 345m from the Mersey Estuary. However, AECOM considers this to be sufficiently distant to not interfere the adopted approach of NAI for this part of the coastline. Even the most erosive habitats (e.g. sand dunes) do not diminish by more than one metre per year, meaning that the residential site lies well beyond the Zone of Influence (Zoi) of any realistic sea level rise over the next 100 years.

Mitigation Contained in the Local Plan

- 5.121 The current draft Local Plan already encompasses some policy wording that mitigates against coastal squeeze. **Policy WD4.1 (Coastal Defence and Erosion)** states that the following: '*A. Proposals for new coastal protection and sea defence works in line with the adopted Shoreline Management Plan and Wirral Coastal Strategy will be permitted where it is demonstrated that there will be no adverse effects on coastal processes, designated biodiversity... and water quality.*' While this paragraph does not explicitly refer to residential / employment allocations, it does effectively specify that coastal developments need to abide by the adopted SMP for Wirral. AECOM recommends that the above policy wording is expanded to include residential and employment development adjoining Wirral's coastline. The following amendment to Policy WD4 would mitigate against coastal squeeze from all types of development: '***Proposals for new coastal protection and sea defence works in line with the adopted Shoreline Management Plan, and development allocations (both housing and employment, as well as windfall developments)***...'.

5.122 Provided that this proposed amendment is incorporated, it is concluded that the Wirral Local Plan will not result in adverse effects on coastal and estuarine European sites regarding the impact pathway coastal squeeze.

Atmospheric Pollution

Dee Estuary SAC, SPA and Ramsar

- 5.123 The ToLSE section identified that LSEs of the Wirral Local Plan on the Dee Estuary SAC regarding atmospheric pollution cannot be excluded, with qualifying dune habitats being most sensitive to atmospheric pollution. However, these habitat components are situated near the outer edge of the SAC, on the sea-ward coastlines of Wirral and Flintshire. Importantly, the dune segments in Wirral that form part of the SAC lie beyond 200m from the A540, the closest major road, and therefore beyond the commonly accepted threshold distance for atmospheric pollution impacts. However, there are sensitive SAC habitats (e.g. saltmarsh, intertidal sand- and mudflats) within 200m of the A548 in Flintshire, which may experience an increase in commuter journeys as a result of development allocated in the Wirral Local Plan.

Geographic Setting and Commuter Traffic

- 5.124 The Dee Estuary SAC is sandwiched between the authorities of Wirral (England) and Flintshire (Wales) and thus could be affected by commuter traffic between these authorities. This could particularly be the case for car-based journeys along the A548 involving potential commuters between the settlements of Connah's Quay, Flint and Holywell (all in Flintshire) and Wirral.

¹³⁸ The website and Shoreline Management Plans considered in this HRA is available at: <https://www.mycoastline.org.uk/shoreline-management-plans/> [Accessed on the 05/10/2021].

¹³⁹ The Shoreline Management Plan (SMP) for the Mersey Estuary can be accessed and downloaded via the following link: <https://onedrive.live.com/?cid=E5153484C5971E2D&id=E5153484C5971E2D%21122&parId=E5153484C5971E2D%21109&o=OneUp> [Accessed on the 05/10/2021].

According to road traffic statistics by the Department for Transport, the A548 is a relatively busy A road. At traffic count point 99645¹⁴⁰, an Annual Average Daily Traffic flow of 10,249 cars, 2,211 light goods vehicles and 1,308 heavy goods vehicles was observed.

- 5.125 Data from the 2011 Census shows that Flintshire is the third most popular destination for Wirral residents, with 2,828 (6.3% of the 45,025 total outward trips¹⁴¹) daily outward journeys. However, it is to be noted that both Liverpool (18,094 journeys; 40.2%), and Cheshire West and Chester (10,189 journeys; 22.6%) are significantly more popular destinations, accounting for by far the largest proportion of commuter traffic. Therefore, Flintshire contributes relatively little to Wirral's overall traffic footprint. There is slightly less inward movement on this trajectory with only 991 journeys (5.7% of the 17,291 inbound car journeys) into Wirral from Flintshire.
- 5.126 It is to be noted that a large proportion of out-commuters from Wirral are likely to work in the Deeside Business Park, which lies in the eastern part of Flintshire close to the Wirral boundary. Commuters accessing employment in the business park will have turned off the A548 before reaching the Flintshire Bridge, and the sensitive area of saltmarsh identified above. Overall, due to the relatively small number of commuter journeys into Flintshire and the low likelihood that commuters will traverse the Flintshire Bridge, it is concluded that the Wirral Local Plan will not result in adverse effects on the Dee Estuary SAC regarding the impact pathway atmospheric pollution. No additional policy recommendations are made.

¹⁴⁰ <https://roadtraffic.dft.gov.uk/manualcountpoints/99645> [Accessed on the 25/11/2020]

¹⁴¹ Wirral Employment land and Premises Study – Final Report.

6. Summary of Conclusions & Recommendations

6.1 The Wirral Local Plan covers the years between 2021 and 2037 and allocates a minimum of 13,360 net new residential dwellings and 65.6ha of employment land. While seeking to protect Wirral's natural assets at the same time. Wirral Borough Council (WBC) has elected to deliver the required growth through urban regeneration, generally a positive approach that is likely to help reduce potential impacts on the borough's European sites. This HRA assessed the potential of the WLP to impact on European sites. The following impact pathways were identified:

- Recreational pressure (both in European sites and in functionally linked habitat)
- Loss of functionally linked habitat
- Water quality
- Water quantity, level and flow
- Visual and noise disturbance arising from construction works (both in European sites and in functionally linked habitat)
- Coastal squeeze
- Atmospheric pollution

Recreational Pressure

6.2 Regarding recreational pressure, the HRA determined that, due to the projected growth of 13,360 dwellings and the concomitant increased demand for recreational space, the WLP has the potential to result in adverse effects on the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, Dee Estuary SPA and Ramsar, Liverpool Bay SPA and Mersey Estuary SPA and Ramsar, both alone and in-combination with Plans of adjoining authorities. Furthermore, in-combination effects on the Sefton Coast SAC and the Ribble and Alt Estuaries SPA and Ramsar may also occur. AECOM considers that mitigation measures are required to safeguard the integrity of the designated overwintering bird populations in the borough.

6.3 Research into the recreation patterns within the north-west coastal European sites has confirmed that the core recreational catchment (i.e. defined as 75th percentile of all visitors) encompasses housing within 5.2km of the nature conservation sites. This places most housing sites allocated in Wirral Borough (especially those in the urban regeneration areas of Birkenhead and Wallasey) within the Zone of Influence of the coastline. Current data trends indicate that the bird populations in SPAs and Ramsars are showing geographic redistributions and overall declines, and recreational disturbance is thought to be a major contributing factor. In response to this significant threat, Wirral Borough Council and other Merseyside authorities are developing a Liverpool City Region Recreation Mitigation and Avoidance Strategy (RMAS) in collaboration with MEAS, Natural England and Natural Resources Wales, which is to be adopted and implemented by 2023. The RMAS is set out to help major residential developments to mitigate recreational pressure impacts on coastal SPAs and Ramsars, and remain in compliance with the Habitats and Species Regulations 2017 (as amended). All residential allocations of 10 dwellings or more within 5km of designated sites, are to make financial contributions towards mitigation and avoidance schemes in the LCR.

6.4 However, given the threat to nature conservation and that the RMAS is yet to be finalised, Natural England are requesting the relevant authorities to adopt formal interim approaches, setting out how disturbance will be mitigated for in the short-term. Several neighbouring authorities have now published Statements of Common Ground (SoCG) with Natural England, which cover matters that have been mutually agreed by both parties; in this instance recognition of the recreational pressure issue and how this is adequately addressed through Local Plan policy. In

a consultation letter dated March 2020, Natural England advises that until the RMA is implemented, a strategic commitment by relevant councils in the form of an interim Information Note (IN) or a Supplementary Planning Document (SPD) will be required. Wirral Borough Council is currently developing a strategic interim approach in consultation with Natural England. **Policy WS5.5 (Mitigating Recreational Disturbance on International Sites for Nature Conservation)** formally requires residential developments to be in keeping with both the RMA and Wirral's IA.

- 6.5 Overall, WBC is developing an adequate IA to mitigation of recreational pressure and is a signatory to the future RMA (and these are both included in Plan policy). Therefore, AECOM concludes that adverse effects on Wirral's estuarine and coastal European sites regarding recreational pressure can be excluded. No additional policy recommendations are made.

Recreational Pressure in Functionally Linked Habitat

- 6.6 Several sites that are allocated in Birkenhead adjoin the Birkenhead Docks, specifically the East Float, including RES-RA2.1 (Land at Birkenhead Road, Seacombe), RES-RA6.2 (Wirral Waters – Vittoria Studios and Sky City), RES-RA6.3 (Wirral Waters – Northbank East Urban Splash), RES-RA6.4 (Wirral Waters – Northbank West Urban Splash), RES-RA6.5 (Wirral Waters – Northbank East Tower Road), RES-RA6.6 (Wirral Waters – Northbank West Legacy) and RES-RA6.7 (Wirral Waters – Belong). A field study report, published by TEP in August 2015, assessed the usage of dock habitats by SPA and Ramsar birds within the wider north-west England, undertaking repeated bird counts and vantage point surveys. The report concludes that the Birkenhead Docks (both the West and East Float) are functionally linked to the Mersey Estuary SPA and Ramsar, and the Mersey Narrows & North Wirral Foreshore SPA and Ramsar. For example, the Birkenhead Docks support roughly 4.7% of the Mersey Narrows and North Wirral Foreshore SPA and Ramsar cormorant population. Furthermore, approx. 50% of the Mersey Estuary SPA and Ramsar great-crested grebe population have been observed using the East Float at the docks. Both species are not listed as individual qualifying species, but form part of the protected overwintering bird assemblage in these European sites.
- 6.7 It is noted that recreational disturbance measures have already been put in place for developments falling within the boundary of the East Float outline planning permission. For example, for Wirral Waters a SPA Bird Mitigation Strategy has been developed, which focuses on habitat provision, management and monitoring. The existing tern nesting platform in the Birkenhead Docks has been modified to increase its capacity for nesting terns, which currently stand at 33 breeding pairs. Furthermore, the strategy identifies that additional pontoon / raft structures will be installed across the docks to provide further capacity for nesting common terns as well as roosting habitat for cormorants during the non-breeding season. Importantly, a buffer zone will prohibit boat mooring and transit within 100m of the nesting pontoons in the period between 15th April to 15th September each year, minimising disturbance to breeding common terns. The Wirral Waters SPA Bird Mitigation Strategy specifies that the mitigation measures will be maintained in perpetuity and alternative mitigation plans are in place should the mitigation approach at Wirral Waters be unsuccessful.
- 6.8 Furthermore, the East Float development is also in the process of calculating a per-unit tariff towards the cost of ranger provisioning at key disturbance-sensitive locations along Wirral's coastline. These proposals are being developed in consultation with Natural England and with reference to other coastal mitigation strategies in place across England (e.g. Bird Aware Solent). The per unit tariff (specifically tailored to mitigate recreational impacts of the Legacy development) has been calculated taking the specific likely profile of future Legacy residents into account, specifically low dog ownership and a young age profile, meaning residents are likely to be in employment, with recreational disturbance effects likely being more prominent issues on the weekend. The strategy for ranger provisioning also comprises a detailed breakdown of payments, payment schedule and administration of payments.
- 6.9 Overall, provided that Natural England continues to be involved and in agreement with the mitigation strategy for residential developments adjoining the East Float, AECOM concludes that sufficient interventions are in place to safeguard the role of the Birkenhead Docks as functionally linked habitats. No additional policy recommendations are made.

Loss of Functionally Linked Habitat

- 6.10 Given that the WLP focuses on urban regeneration (thus allocating much of the growth in the urban fabric, on previously developed sites), the potential for the loss of functionally linked habitats is low. However, residual risks regarding some site allocations remain. In order to mitigate uncertainties, it is recommended that additional policy wording requiring wintering bird surveys is included in the Plan. It is to be noted that such surveys do not represent an additional burden on developers beyond that already imposed by other environmental legislation. AECOM recommends that the following text should be added to the supporting text of **Policy WD3 (Biodiversity and Geodiversity)** as a precautionary measure:
- 6.11 ***'To be compliant with the Habitats and Species Regulations 2017 (as amended), applicants are required to provide evidence that their development will not result in adverse effects on the integrity of nearby European sites regarding the loss of functionally linked habitat. To demonstrate this, a survey will be required to determine whether the habitats in a land parcel are likely to be suitable for supporting designated bird species. Where this is found to be the case, non-breeding bird surveys covering autumn, winter and spring (typically constituting at least two survey seasons) will be required to determine if the site and / or neighbouring land support more than 1% of the qualifying population of a species. If habitat is shown to be functionally linked to a European site, mitigation and avoidance measures will be required as part of project-level Habitats Regulations Assessments to ensure that developments do not result in adverse effects on site integrity.'***
- 6.12 Provided that the above text is included, AECOM concludes that the WLP will not result in adverse effects on the integrity of the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, Dee Estuary SPA and Ramsar, Mersey Estuary SPA and Ramsar, Liverpool Bay SPA and Ribble and Alt Estuaries SPA and Ramsar regarding the loss of functionally linked habitat.

Water Quality

- 6.13 Regarding water quality in the estuarine and coastal European sites immediately surrounding Wirral, it was shown that the WLP may result in adverse effects on site integrity, unless appropriate policy wording is inserted into the next iteration of the Local Plan. Negative water quality changes are a threat to the Mersey Narrows and the North Wirral Foreshore SPA and Ramsar, the Dee Estuary SPA and Ramsar, the Mersey Estuary SPA and Ramsar and Liverpool Bay SPA, particularly in-combination with development in the wider Merseyside region.
- 6.14 Therefore, it is recommended that the following text (or similar) is inserted into **Strategic Policy WS10.1 (Provision of Infrastructure)**: ***'The Council will liaise with United Utilities and Dwr Cymru Welsh Water to confirm there is sufficient headroom in the existing discharge consent to accommodate the growth planned for Wirral over the entire Plan period. If constraints are identified, housing delivery will need to be phased to keep in line with the available wastewater treatment infrastructure.'***
- 6.15 Given that the permitted headroom considers the qualifying features of European sites, and that the Plans of adjoining authorities would have had to ensure this compliance as well, it is concluded that there are no adverse in-combination effects of the WLP on European sites that are sensitive to changes in water quality.

Water Quantity, Level and Flow

- 6.16 The coastal and estuarine European sites surrounding Wirral Borough are sensitive to changes in water quantity, level and flow, primarily as a result of increased potable water abstraction and potential concomitant reductions in freshwater input. The United Utilities (UU) Water Resources Management Plan (WRMP) indicates that, while the supply-demand balance remains in a surplus of 38 Ml/d in 2025/26, a small baseline deficit for the New Strategic WRZ of 3 Ml/d is forecast towards the end of the WRMP period. Effectively this means that UU need to consider options (both supply and demand management) to address the projected shortage in water supply.

- 6.17 Overall, 350 potential solutions were appraised by UU in collaboration with relevant statutory stakeholders, including Natural England, Natural Resources Wales and the Environment Agency. The strategic options taken forward include baseline demand activities (e.g. water saving measures), leakage reductions and improvements to resilience. The WRMP demonstrates that the implementation of these measures will move the baseline supply-demand balance into surplus for the entirety of the WRMP period. Importantly from an HRA perspective, none of these options involve exploitation of new water resources or increases to existing abstraction consents, implying that there is no potential for the WRMP to affect the water quantity or flow in European sites.
- 6.18 Overall, given the available evidence, AECOM concludes that the WLP will not result in adverse effects on water-dependent European sites regarding the impact pathway water quantity, level and flow. No additional policy recommendations are made.

Visual and Noise Disturbance from Construction (both in European sites and in functionally linked habitat)

- 6.19 Overall, AECOM considers that a precautionary 300m buffer captures the site allocations that represent the biggest threat regarding visual and noise disturbance from construction works. The WLP allocates several sites that lie within this screening distance and have the potential to result in visual and noise disturbance in the construction period. Furthermore, all employment sites (adjoining the West Float) and residential allocations (adjoining the East Float) are associated with disturbance risks to functionally linked habitat.
- 6.20 To avoid adverse effects on the populations of qualifying birds, both within European sites and in functionally linked habitat, detailed recommendations are made to guide development proposed in WLP. Given Wirral Borough's proximity to several European sites designated for their bird interest, this text should be included in the supporting text of, or, in condensed form, within an appropriate policy of the WLP. AECOM provides the following advice regarding visual and noise disturbance from construction works:

- To minimise the effect of visual and noise disturbance, it is recommended that any construction work (and associated road infrastructure) within 300m of the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, the Dee Estuary SPA and Ramsar and the Mersey Estuary SPA and Ramsar is undertaken during periods when bird populations in these sites are low (i.e. in the summer months).***
- Furthermore, given the presence of highly sensitive bird species on functionally linked habitat near development allocations, it is advised that such a distance is also maintained regarding functionally linked habitat. Construction within 300m of the SPAs / Ramsars, or functionally linked habitat parcels, should be carried out between April and August, when most qualifying species are unlikely to be present in great numbers. This particularly applies to construction processes associated with high noise levels (e.g. impact piling).***
- If construction cannot be timed to avoid the winter and passage periods, then an impact assessment will need to be undertaken to confirm that noise levels will remain at acceptable noise levels (agreed upon with Natural England) near qualifying bird assemblages. This may encompass the comparison of modelled construction noise levels to pre-construction baseline noise measurements. Mitigation of noise impacts may be required, including the provision of screens, selection of less noisy equipment or techniques, damping and noise shielding of equipment or avoidance of lighting in sensitive locations. Noise mitigation may also be required well into April / May, because significant proportions of the populations of some non-breeding species may linger in coastal areas of north-west England beyond March.***

- ***Construction sites within 300m of known bird roosts in the SPAs and Ramsars or functionally linked habitats should have appropriate screening in place to minimise visual disturbance.***

6.21 Provided that the above recommendations are included in the WLP, it is concluded that the Plan will not result in adverse effects on Wirral's estuarine and coastal European sites regarding visual and noise disturbance from construction works.

Coastal Squeeze

6.22 Fuelled by climate change and rising sea levels, the impact pathway coastal squeeze represents an increasing threat to coastal sites around the UK. It is principally an issue where development occurs on greenfield sites in close proximity to the coastline, in geographic areas for which the relevant Shoreline Management Plan (SMP) identifies an approach of 'No Active Intervention'. A review of the sites allocated in the WLP indicated that few allocations are proposed on greenfield sites in the immediate vicinity of SPAs and Ramsars. The only area at risk is situated adjacent to the Mersey Estuary SPA and Ramsar between Riverwood Road and Eastham Ferry, for which the SMP proposes an approach of 'No Active Intervention' (NAI) over the next 100 years. This stretch of coastline should therefore not be subject to a net increase in impermeable urban development. One residential allocation (RES-SA4.3, Land at Riverside Park, Southwood Road, Bromborough) is proposed in this area, located approx. 345m from the Mersey Estuary. While AECOM considers this to be sufficiently distant to not interfere with the adopted approach of NAI for this part of the coastline, it is recommended that additional policy wording is inserted to **Policy WD4.1 (Coastal Defence and Erosion)**, primarily to mitigate risks associated with any unplanned windfall developments coming forward in eastern Wirral.

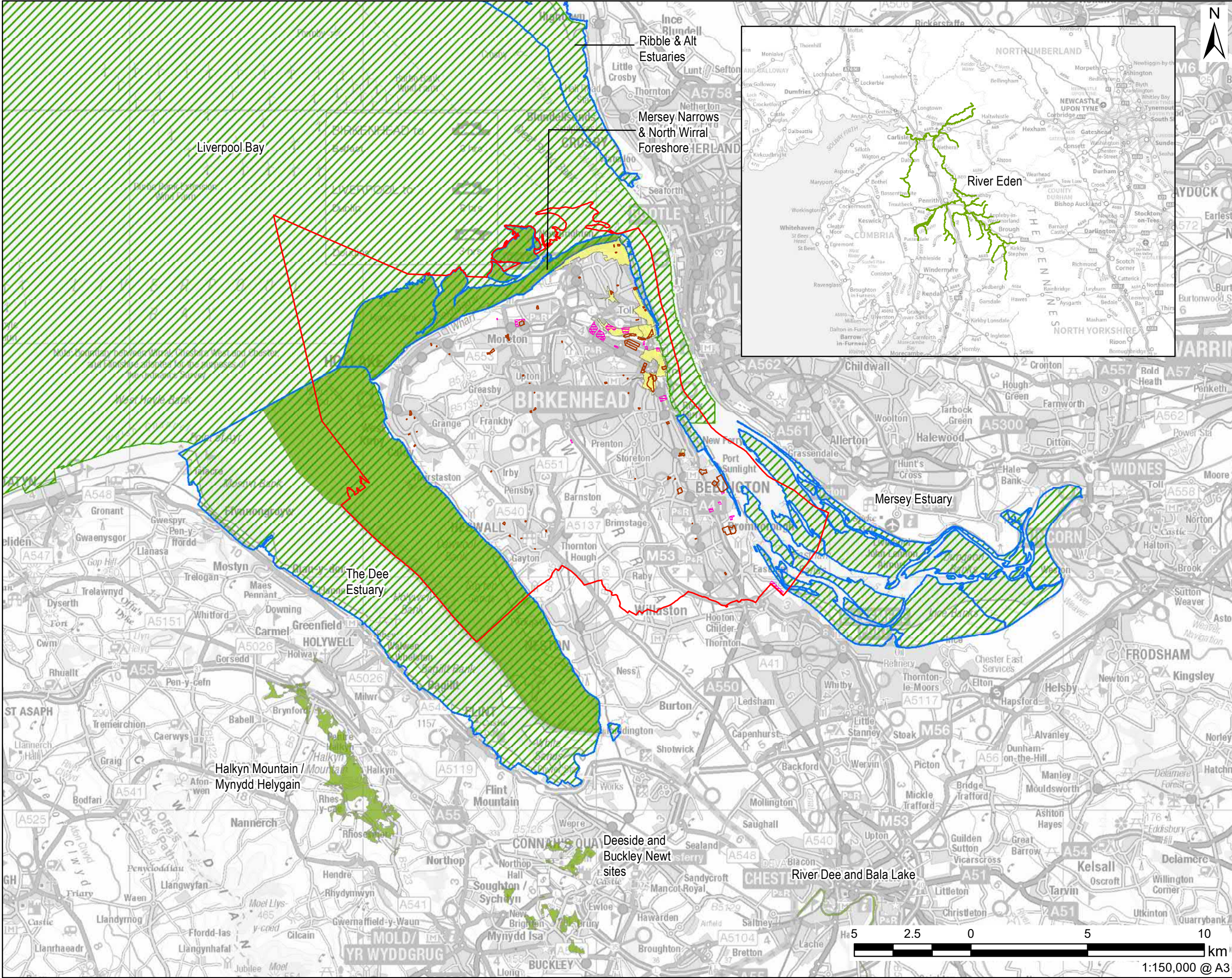
6.23 The following amendment to Policy WD4.1 would mitigate against coastal squeeze from all types of development: ***'Proposals for new coastal protection and sea defence works in line with the adopted Shoreline Management Plan, and development allocations (both housing and employment, as well as windfall developments)...***Provided that this amendment is incorporated, it is concluded that the WLP will not result in adverse effects on coastal and estuarine European sites regarding the impact pathway coastal squeeze.

Atmospheric Pollution

6.24 Regarding atmospheric pollution, AECOM determined that the only European site requiring Appropriate Assessment was the Dee Estuary SAC (and the overlapping Dee Estuary SPA and Ramsar). Atlantic saltmarsh, a qualifying habitat of the SAC that is also used by bird species in the SPA and Ramsar, is located within 200m (approx. 50m) of the A548 to the east of the Flintshire Bridge. While the HRA established that Wirral is a destination and source of commuters to / from Flintshire, it was also shown that the number of car-based journeys to this authority is relatively small and that a large proportion of out-commuters is likely to work in the Deeside Business Park and would not cross the Flintshire Bridge (which would bring them within 200m of sensitive saltmarsh). Therefore, AECOM concludes that the WLP will not result in adverse effects on the Dee Estuary SAC and Dee Estuary SPA and Ramsar in relation to atmospheric pollution.

Appendix A Maps

Appendix 1: Map showing Regeneration Areas, employment and residential sites allocated in the Wirral Local Plan and the European sites within 10km of Wirral Borough.



This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as signed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.



PROJECT
HABITATS REGULATIONS
ASSESSMENT OF THE
REG.19 WIRRAL LOCAL PLAN

CLIENT
WIRRAL BOROUGH
COUNCIL

CONSULTANT
AECOM Limited
4th Floor Portwell Place
Portwell Lane
Bristol, BS1 6NA
T: +444-20-7061-7000
www.aecom.com

- LEGEND**
- Wirral Borough Boundary
 - Regeneration Areas
 - Housing Allocations
 - Employment Allocations
 - RAMSAR
 - Special Protection Areas
 - Special Areas of Conservation

NOTES

Contains Ordnance Survey Data
© Crown Copyright and database
right 2022

© Natural England copyright.
Contains Ordnance Survey data
© Crown copyright and database
right [2022].

Contains Natural Resources Wales
information © Natural Resources
Wales and Database Right. All rights
Reserved. Contains Ordnance Survey
Data. Ordnance Survey Licence
number 100019741. Crown Copyright
and Database Right.

ISSUE PURPOSE
DRAFT

PROJECT NUMBER
60470919

SHEET TITLE
European sites relevant to Wirral Borough
and the residential, employment and
Regeneration Area sites allocated in
the Wirral Local Plan

SHEET NUMBER
Appendix 1



Appendix B Relevant European sites

Mersey Narrows & North Wirral Foreshore SPA and Ramsar

Introduction

The SPA sits on the north-west coast of England and is fed by the Mersey and Dee estuaries. The site mainly comprises intertidal habitat at the Egremont foreshore, man-made lagoons at the Seaforth Nature Reserve and extensive intertidal flats at the North Wirral Foreshore. Both Egremont Foreshore and the North Wirral Foreshore are important as feeding habitat for waders at low tide and the latter additionally includes important high-tide roost sites. Seaforth Nature Reserve is primarily important as a high-tide roost site. Perhaps the most notable feature of the SPA is the high density of non-breeding turnstone *Arenaria interpres*. Birds from the Mersey Narrows & North Wirral Foreshore SPA and Ramsar also regularly move to the Dee Estuary SPA, the Ribble and Alt Estuaries SPA and, to a lesser extent, the Mersey Estuary SPA.

SPA Qualifying Features¹⁴²

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

- Bar-tailed godwit *Limosa lapponica* (non-breeding)
- Common tern *Sterna hirundo* (breeding / non-breeding)
- Knot *Calidris canutus* (non-breeding)
- Little gull *Hydrocoloeus minutus* (non-breeding)

In the non-breeding season, the area regularly supports 32,366 individual waterbirds (5 year peak mean 2004/05 - 2008/09), comprised of 2,414 wildfowl and 29,952 waders including: cormorant *Phalacrocorax carbo*, oystercatcher *Haematopus ostralegus*, grey plover *Pluvialis squatarola*, sanderling *Calidris alba*, knot *Calidris canutus*, dunlin *Calidris alpina alpina*, bar-tailed godwit *Limosa lapponica* and redshank *Tringa totanus*.

Ramsar Qualifying Features¹⁴³

The Mersey Narrows and North Wirral Foreshore is designated a **Ramsar** site under the following criteria:

Criterion 4:

- Regularly supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions. During 2004/05 - 2008/09 the Mersey Narrows and North Wirral Foreshore Ramsar site supported important numbers of non-breeding little gulls and common terns.

Criterion 5:

- Regularly supports 20,000 or more waterbirds: During the winters 2004/05 - 2008/09, the Mersey Narrows and North Wirral Foreshore Ramsar site supported an average peak of 32,402 individual waterbirds.

Criterion 6:

¹⁴²

<https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9020287&SiteName=mersey%20narrows&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&HasCA=1&NumMarineSeasonality=5&SiteNameDisplay=Mersey%20Narrows%20and%20North%20Wirral%20Foreshore%20SPA> [Accessed on the 14/12/2020]

¹⁴³ <https://jncc.gov.uk/jncc-assets/RIS/UK11042.pdf> [Accessed on the 14/12/2020]

- During winter the site regularly supports at least 1% of the individuals in the populations of the following species or subspecies of waterbird:

Bar-tailed godwit *Limosa lapponica*;

Black-tailed godwit *Limosa limosa islandica*;

Knot *Calidris canutus*;

Conservation Objectives¹⁴⁴

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

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

Threats / Pressures to Site Integrity¹⁴⁵

The following threats and pressures to the site integrity of the Mersey Narrows and North Wirral SPA have been identified in Natural England's Site Improvement Plan:

- Public access / disturbance
- Changes in species distributions
- Invasive species
- Climate change
- Coastal squeeze
- Inappropriate scrub control
- Water pollution
- Fisheries: Commercial marine and estuarine
- Inappropriate coastal management
- Overgrazing
- Direct impact from third party
- Marine litter
- Predation
- Planning permission: General
- Marine consents and permits
- Wildfire / arson
- Air pollution: Impact of atmospheric nitrogen deposition
- Transportation and service corridors

¹⁴⁴ <http://publications.naturalengland.org.uk/publication/6521906232557568> [Accessed on the 14/12/2020]

¹⁴⁵ <http://publications.naturalengland.org.uk/publication/6579320399069184> [Accessed on the 14/12/2020]

- Physical modification

Dee Estuary SPA and Ramsar

Introduction

The Dee Estuary SPA and Ramsar lies on the north-west coast of Britain between England and Wales. It is the sixth largest estuary in the UK, which is shaped like a funnel and is sheltered. It comprises extensive areas of intertidal sandflats, mudflats and saltmarsh. Where little land has been converted for agricultural use, there is gradation of saltmarsh into transitional brackish and swamp vegetation inland. Furthermore, the SPA and Ramsar also includes three sandstone islands of Hilbre with important cliff vegetation and maritime heathland. The two shorelines of the estuary illustrate a significant difference in usage from the industrial nature in coastal Wales to the recreational and residential usage in western England.

Most notably, the Dee Estuary SPA and Ramsar is of major importance for waterbirds. In winter, the intertidal sand- and mudflats, and the saltmarshes provide both feeding and roosting sites for significant populations of ducks and wading birds. Additionally, in summer the SPA and Ramsar acts as the breeding ground for two tern species, occurring at levels of European importance. The site also provides a crucial stopover point for numerous migratory birds, which resupply energy reserves on their long journeys from non-breeding to breeding grounds.

SPA Qualifying Features¹⁴⁶

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

During the breeding season

- Common tern *Sterna hirundo*; 277 pairs representing at least 2.3% of the breeding population in Great Britain (5 year mean 1991-95)
- Little tern *Sterna albifrons*, 56 pairs representing at least 2.3% of the breeding population in Great Britain (RSPB, 5 year mean 1991-95)

On passage

- Sandwich tern *Sterna sandvicensis*, 818 individuals representing at least 5.8% of the population in Great Britain (5 year mean 1991-95)
- Knot *Calidris canutus* (non-breeding)
- Little gull *Hydrocoloeus minutus* (non-breeding)

Over winter

- Bar-tailed godwit *Limosa lapponica*, 1,013 individuals representing at least 1.9% of the wintering population in Great Britain (5 year peak mean 1991/2-1995/6)

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

On passage

- Redshank *Tringa tetanus*, 8,451 individuals representing at least 4.8% of the Eastern Atlantic wintering population (5 year peak mean 1991/2-1995/6)

Over winter

- Black-tailed godwit *Limosa limosa islandica*, 1,739 individuals representing at least 2.5% of the wintering Iceland breeding population (5 year peak mean 1991/2-1995/6)

¹⁴⁶ <http://archive.jncc.gov.uk/default.aspx?page=2053> [Accessed on the 14/12/2020]

- Curlew *Numenius arquata*, 4,028 individuals representing at least 1.2% of the wintering Europe breeding population (5 year peak mean 1991/2-1995/6)
- Dunlin *Calidris alpina alpina*, 22,479 individuals representing at least 1.6% of the wintering Northern Siberia / Europe / Western Africa population (5 year peak mean 1991/2-1995/6)
- Grey plover *Pluvialis squatarola*, 2,193 individuals representing at least 1.5% of the wintering Eastern Atlantic population (5 year peak mean 1991/2-1995/6)
- Knot *Calidris canutus*, 21,553 individuals representing at least 6.2% of the wintering Northeastern Canada / Greenland / Iceland / Northwestern Europe population (5 year peak mean 1991/2-1995/6)
- Oystercatcher *Haematopus ostralegus*, 28,434 individuals representing at least 3.2% of the wintering Europe & Northern / Western Africa population (5 year peak mean 1991/2-1995/6)
- Pintail *Anas acuta*, 6,498 individuals representing at least 10.8% of the wintering Northwestern Europe population (5 year peak mean 1991/2-1995/6)
- Redshank *Tringa totanus*, 6,382 individuals representing at least 4.3% of the wintering Eastern Atlantic population (5 year peak mean 1991/2-1995/6)
- Shelduck *Tadorna tadorna*, 6,827 individuals representing at least 2.3% of the wintering Northwestern Europe population (5 year peak mean 1991/2-1995/6)
- Teal *Anas crecca*, 5,918 individuals representing at least 1.5% of the wintering Northwestern Europe population (5 year peak mean 1991/2-1995/6)

Assemblage qualification: A wetland of international importance

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

Over winter, the area regularly supports 130,408 individual waterfowl (5 year peak mean 1991/2 - 1995/6) including: Black-tailed godwit *Limosa limosa islandica*, shelduck *Tadorna tadorna*, teal *Anas crecca*, pintail *Anas acuta*, oystercatcher *Haematopus ostralegus*, grey plover *Pluvialis squatarola*, bar-tailed godwit *Limosa lapponica*, dunlin *Calidris alpina alpina*, sanderling *Calidris alba*, curlew *Numenius arquata*, redshank *Tringa totanus*, cormorant *Phalacrocorax carbo*, wigeon *Anas penelope*, mallard *Anas platyrhynchos*, lapwing *Vanellus vanellus*, knot *Calidris canutus*.

Ramsar Qualifying Features¹⁴⁷

The Dee Estuary is designated a **Ramsar** site under the following criteria:

Criterion 1:

- Contains extensive intertidal mud and sand flats (20km by 9km) with large expanses of saltmarsh towards the head of the estuary. Habitats Directive I features present on the pSAC include estuaries, mudflats and sandflats not covered by seawater at low tide, annual vegetation of drift lines, vegetated sea cliffs of the Atlantic and Baltic coasts, *Salicornia* and other annual colonising mud and sand, Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*), embryonic shifting dunes, shifting dunes along the shoreline with *Ammophila arenaria* (white dunes), fixed dunes with herbaceous vegetation (grey dunes) and humid dune slacks

Criterion 2:

- Supports breeding colonies of the vulnerable Natterjack Toad, *Epidalea calamita*.

Criterion 5: Assemblages of international importance of species with peak counts in winter

¹⁴⁷ <https://jncc.gov.uk/jncc-assets/RIS/UK11082.pdf> [Accessed on the 14/12/2020]

- 120,726 individual waterbirds (5 year peak mean 1994/5 – 1998/9).

Criterion 6: Species/populations occurring at levels of international importance.

Species with peak counts in spring / autumn:

- Redshank *Tringa tetanus*; 8,795 individuals representing an average of 5.9% of the Eastern Atlantic population (5 year peak mean 1994/95-1998/99)

Species with peak counts in winter:

- Redshank *Tringa totanus*; 5,293 individuals representing an average of 3.5% of the Eastern Atlantic population (5 year peak mean 1994/95-1998/99)
- Bar-tailed godwit *Limosa lapponica*; 1,150 individuals representing an average of 1.2% of the Europe population (5 year peak mean 1994/95-1998/99)
- Black-tailed godwit *Limosa limosa islandica*; 1,747 individuals representing an average of 2.5% of the Icelandic population (5 year peak mean 1994/95-1998/99)
- Curlew *Numenius arquata*; 3,899 individuals representing an average of 1.1% of the Europe and NW Africa population (5 year peak mean 1994/95-1998/99)
- Dunlin *Calidris alpina alpina*; 27,769 individuals representing an average of 2% of the Europe population (5 year peak mean 1994/95-1998/99)
- Grey plover *Pluvialis squatarola*; 1,643 individuals representing an average of 1.1% of the GB population (5 year peak mean 1994/95-1998/99)
- Knot *Calidris canutus*; 12,394 individuals representing an average of 3.5% of the GB population (5 year peak mean 1994/95-1998/99)
- Oystercatcher *Haematopus ostralegus*; 22,677 individuals representing an average of 2.5% of the Europe and W Africa population (5 year peak mean 1994/95-1998/99)
- Pintail *Anas acuta*; 5,407 individuals representing an average of 9% of the NW Europe population (5 year peak mean 1994/95-1998/99)
- Shelduck *Tadorna tadorna*; 7,725 individuals representing an average of 2.6% of the NW Europe population (5 year peak mean 1994/95-1998/99)
- Teal *Anas crecca*; 5,251 individuals representing an average of 1.3% of the NW Europe population (5 year peak mean 1994/95-1998/99)

SPA Conservation Objectives¹⁴⁸

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

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

¹⁴⁸ <http://publications.naturalengland.org.uk/publication/6557770283220992> [Accessed on the 14/12/2020]

Threats / Pressures to Site Integrity¹⁴⁹

The following threats and pressures to the site integrity of the Dee Estuary SPA have been identified in Natural England's Site Improvement Plan:

- Public access / disturbance
- Changes in species distributions
- Invasive species
- Climate change
- Coastal squeeze
- Inappropriate scrub control
- Water pollution
- Fisheries: Commercial marine and estuarine
- Inappropriate coastal management
- Overgrazing
- Direct impact from 3rd party
- Marine litter
- Predation
- Planning permission: General
- Marine consents and permits
- Wildfire / arson
- Air pollution: Impact of atmospheric nitrogen deposition
- Transportation and service corridors
- Physical modification

Dee Estuary SAC

Introduction

The Dee Estuary SAC is a 15,805.27ha maritime site comprising a wide variety of habitats, including tidal rivers, estuaries, mudflats and sandflats (81.8%), salt marshes and steppes (16.1%), coastal sand dunes (0.5%), shingle and sea cliffs (0.5%), and bogs and marshes (0.4%). While the SAC covers a similar area to the SPA and Ramsar, and is therefore also important for waterbirds, its main features are the habitats and their associated plant species. For example, the Dee Estuary is designated for its pioneer glasswort *Salicornia* spp. saltmarsh. The *Salicornia* saltmarsh forms extensive stands in the Dee, particularly on the sandy muds with reduced tidal surges. It occurs primarily on the seaward fringes as a pioneer and forms landward transitions to common saltmarsh-grass *Puccinellia maritima* saltmarsh.

Furthermore, the SAC represents Atlantic salt meadows in the north-west of the UK. It forms the most extensive saltmarsh in the Dee and has displaced large tracts of non-native common cord-grass *Spartina anglica* since the 1980s. The current high abundance of saltmarsh in turn favours further development of this type of vegetation. The Atlantic salt meadows are regularly covered by the sea and harbour salt-tolerant species, such as saltmarsh-grass *Puccinellia maritima*, sea aster *Aster tripolium* and sea arrowgrass *Triglochin maritima*.

¹⁴⁹ <http://publications.naturalengland.org.uk/publication/6579320399069184> [Accessed on the 14/12/2020]

Qualifying Features¹⁵⁰

Annex I habitats that are a primary reason for selection of this site:

- Mudflats and sandflats not covered by seawater at low tide
- *Salicornia* and other annuals colonising mud and sand
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:

- Estuaries
- Annual vegetation of drift lines
- Vegetated sea cliffs of the Atlantic and Baltic coasts
- Embryonic shifting dunes
- Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes')
- Fixed coastal dunes with herbaceous vegetation ('grey dunes')
- Humid dune slacks

Annex II species present as a qualifying feature, but not a primary reason for site selection:

- Petalwort *Petalophyllum ralfsii*;
- River lamprey *Lampetra fluviatilis*;
- Sea lamprey *Petromyzon marinus*

Conservation Objectives¹⁵¹

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

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 and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Threats / Pressures to Site Integrity¹⁵²

The following threats and pressures to the site integrity of the Dee Estuary SAC have been identified in Natural England's Site Improvement Plan:

- Public access / disturbance
- Changes in species distributions
- Invasive species
- Climate change

¹⁵⁰ <https://sac.jncc.gov.uk/site/UK0030131> [Accessed on the 14/12/2020]

¹⁵¹ <http://publications.naturalengland.org.uk/publication/6124489284780032> [Accessed on the 14/12/2020]

¹⁵² <http://publications.naturalengland.org.uk/publication/6579320399069184> [Accessed on the 14/12/2020]

- Coastal squeeze
- Inappropriate scrub control
- Water pollution
- Fisheries: Commercial marine and estuarine
- Inappropriate coastal management
- Overgrazing
- Direct impact from 3rd party
- Marine litter
- Predation
- Planning permission: General
- Marine consents and permits
- Wildfire / arson
- Air pollution: Impact of atmospheric nitrogen deposition
- Transportation and service corridors
- Physical modification

Mersey Estuary SPA and Ramsar

Introduction

The Mersey Estuary is a 5,033.14ha maritime site that is located on the Irish Sea coast in north-west England. It is a large sheltered estuary that comprises areas of saltmarsh and extensive intertidal sandflats and mudflats. There is also some limited brackish marsh, rocky shoreline and boulder cliffs. The SPA and Ramsar is set within a largely rural and industrial environment. The site receives drainage from a catchment area of approx. 5,000km² encompassing the conurbations of Liverpool and Manchester, and including the River Mersey, the River Bollin and their tributaries in Cheshire and Merseyside.

The intertidal sand- and mudflats within the site provide feeding and roosting ground for a large assemblage of waterbirds. Especially in winter, the site is of major importance for ducks and waders. However, it is also of importance as a stopover point in the spring and autumn migration periods, particularly for wader populations that move along the western coast of Britain.

SPA Qualifying Features¹⁵³

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

Over winter

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

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

On passage

- Redshank *Tringa tetanus*; 3,516 individuals representing at least 2% of the Eastern Atlantic wintering population (5 year peak mean, 1987-1991)

¹⁵³ <http://archive.jncc.gov.uk/default.aspx?page=1986> [Accessed on the 14/12/2020]

- Ringed plover *Charadrius hiaticula*; 1,453 individuals representing at least 2.9% of the Europe / Northern Africa wintering population (Count as at 1989)

Over winter

- Dunlin *Calidris alpina*; 44,300 individuals representing at least 3.2% of the wintering Northern Siberia / Europe / Western Africa population
- Pintail *Anas acuta*; 2,744 individuals representing at least 4.6% of the wintering Northwestern Europe population
- Redshank *Tringa totanus*; 4,689 individuals representing at least 3.1% of the wintering Eastern Atlantic population
- Shelduck *Tadorna tadorna*; 5,039 individuals representing at least 1.7% of the wintering Northwestern Europe population
- Teal *Anas crecca*; 11,667 individuals representing at least 2.9% of the wintering Northwestern Europe population

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

The area regularly supports 99,467 individual waterfowl (5 year peak mean 1991/2 - 1995/6) including: curlew *Numenius arquata*, black-tailed godwit *Limosa limosa islandica*, lapwing *Vanellus vanellus*, grey plover *Pluvialis squatarola*, wigeon *Anas penelope*, great-crested grebe *Podiceps cristatus*, redshank *Tringa totanus*, dunlin *Calidris alpina alpina*, pintail *Anas acuta*, teal *Anas crecca*, shelduck *Tadorna tadorna*, golden plover *Pluvialis apricaria*.

Ramsar Qualifying Features¹⁵⁴

The Mersey Estuary is designated a **Ramsar** site under the following criteria:

Criterion 5: Assemblages of international importance of species with peak counts in winter

- 89,576 individual waterbirds (5 year peak mean 1998/99 – 2002/2003).

Criterion 6: Species/populations occurring at levels of international importance.

Species with peak counts in spring / autumn

- Common shelduck *Tadorna tadorna*; 12,676 individuals representing an average of 4.2% of the Europe population (5 year peak mean 1998/99-2002/03)
- Black-tailed godwit *Limosa limosa islandica*; 2,011 individuals representing an average of 5.7% of the Iceland and Western Europe population (5 year peak mean 1998/99-2002/03)
- Redshank *Tringa totanus*; 6,651 individuals representing an average of 2.6% of the population (5 year peak mean 1998/99-2002/03)

Species with peak counts in winter

- Eurasian teal *Anas crecca*; 10,613 individuals representing an average of 2.6% of the NW Europe population (5 year peak mean 1998/99-2002/03)
- Northern pintail *Anas acuta*; 565 individuals representing an average of 2% of the GB population (5 year peak mean 1998/99-2002/03)

¹⁵⁴ <http://archive.jncc.gov.uk/pdf/RIS/UK11041.pdf> [Accessed on the 14/12/2020]

- Dunlin *Calidris alpina alpina*; 48,364 individuals representing an average of 3.6% of the W Siberia and W Europe population (5 year peak mean 1998/99-2002/03)

SPA Conservation Objectives¹⁵⁵

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

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

Threats / Pressures to Site Integrity¹⁵⁶

The following threats and pressures to the site integrity of the Mersey Estuary SPA have been identified in Natural England's Site Improvement Plan:

- Changes in species distributions
- Invasive species
- Public access / disturbance

Liverpool Bay SPA

Introduction

The Liverpool Bay SPA is a maritime site that is approx. 252,800ha in size and lies in the east of the Irish Sea, bordering northern England and north Wales. The site comprises exposed mudflats and sandbanks in places, but extends up to 20km from the shoreline. Most of this distant area from the coast is relatively shallow water up to 20m deep. The SPA and Ramsar is contiguous with several other European sites, including the Ribble and Alt Estuaries SPA and Ramsar, the Mersey Narrows and North Wirral Foreshore SPA and Ramsar, and the Mersey Estuary SPA and Ramsar. It is primarily classified for the protection of red-throated diver, common scoter and little gull outside the breeding season and for breeding common tern and little tern. Furthermore, the SPA and Ramsar harbours a waterbird assemblage of European importance.

The proposal for the Liverpool Bay SPA Extension is to extend the SPA to support internationally important populations of common tern, little tern and little gull. The area proposed for extension is particularly important for the terns as much of the sea around their breeding colonies is the ideal habitat for plunge diving for food. The proposal is also to add cormorant and red-breasted merganser to the waterbird assemblage as named species.

Qualifying Features¹⁵⁷

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

During the breeding season

- Little tern *Sterna albifrons*, at least 6.8% of the GB population

¹⁵⁵ <http://publications.naturalengland.org.uk/publication/5790848037945344> [Accessed on the 14/12/2020]

¹⁵⁶ <http://publications.naturalengland.org.uk/publication/6273450410770432> [Accessed on the 14/12/2020]

¹⁵⁷ <http://archive.incc.gov.uk/default.aspx?page=7507> [Accessed on the 14/12/2020]

- Common tern *Sterna hirundo*, at least 1.8% of the GB population

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

Over winter

- Red-throated diver *Gavia stellata*, at least 6.9% of the GB population
- Little gull *Hydrocoloeus minutus*, count not available
- Common scoter *Melanitta nigra*, at least 10.3% of the NW Europe population

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

On passage

- Redshank *Tringa tetanus*; 3,516 individuals representing at least 2% of the Eastern Atlantic wintering population (5 year peak mean, 1987-1991)

Designated as a **SPA** for its:

Non-breeding:

- Red-throated diver *Gavia stellata*
- Little gull *Larus minutus*
- Common scoter *Melanitta nigra*

Foraging areas for breeding colonies:

- Common tern *Sterna hirundo*
- Little tern *Sterna albifrons*

Assemblage qualification: A wetland of international importance

In the non-breeding season, the site regularly supports at least 555,597 individual waterbirds (2001/02–2002/03), including red-throated diver and common scoter.

Conservation Objectives¹⁵⁸

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

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

Threats / Pressure to Site Integrity¹⁵⁹

- Fisheries: Commercial marine and estuarine

¹⁵⁸ <http://publications.naturalengland.org.uk/publication/5089733892898816?cache=1571828814.29> [Accessed on the 14/12/2020]

¹⁵⁹ <http://publications.naturalengland.org.uk/publication/5296526586806272> [Accessed on the 14/12/2020]

- Transportation and service corridors
- Fisheries: Recreational marine and estuarine
- Extraction: Non-living resources
- Siltation
- Water pollution

Ribble & Alt Estuaries SPA and Ramsar

Introduction

The Ribble and Alt Estuaries SPA and Ramsar is approximately 12,361ha in size, and is located in north-west England. It comprises two estuaries with the Ribble Estuary being the much larger one of the two. It forms part of a system of marine European sites along the western coastline of the UK, which provides a migratory route for non-breeding birds. There is significant movement of birds between these sites and it is therefore important to maintain this functional network of sites.

The site comprises extensive sand- and mudflats and, particularly in the Ribble Estuary, large areas of saltmarsh. There are also areas of coastal grazing marsh located behind the sea embankments. The saltmarshes, coastal grazing marshes, and intertidal sand- and mudflats all support high densities of grazing wildfowl and are used as high-tide roosts. Important populations of waterbirds occur in winter, including swans, geese, ducks and waders. The highest densities of feeding birds are on the muddier substrates of the Ribble.

The SPA is also of major importance during the spring and autumn migration periods, especially for wader populations moving along the west coast of Britain. The saltmarsh and areas of coastal grazing marsh support breeding birds during the summer, including large numbers of gulls and terns. These seabirds feed both offshore and inland, outside of the SPA site boundary. Several species, most notably pink-footed goose *Anser brachyrhynchus*, utilise feeding areas on functionally linked land.

SPA Qualifying Features¹⁶⁰

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

During the breeding season

- Common tern *Sterna hirundo*, 182 pairs representing at least 1.5% of the breeding population in Great Britain (Count as at 1996)
- Ruff *Philomachus pugnax*, 1 pair representing at least 9.1% of the breeding population in Great Britain (Count as at late 1980's)

Over winter

- Bar-tailed godwit *Limosa lapponica*, 18,958 individuals representing at least 35.8% of the wintering population in Great Britain (5 year peak mean 1991/2 - 1995/6)
- Bewick's swan *Cygnus columbianus bewickii*, 229 individuals representing at least 3.3% of the wintering population in Great Britain (5 year peak mean 1991/2 - 1995/6)
- Golden plover *Pluvialis apricaria*, 4,277 individuals representing at least 1.7% of the wintering population in Great Britain (5 year peak mean 1991/2 - 1995/6)
- Whooper swan *Cygnus cygnus*, 159 individuals representing at least 2.9% of the wintering population in Great Britain (5 year peak mean 1991/2 - 1995/6)

¹⁶⁰ <http://archive.jncc.gov.uk/default.aspx?page=1984> [Accessed on the 14/12/2020]

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

During the breeding season

- Lesser black-backed Gull *Larus fuscus*, 1,800 pairs representing at least 1.5% of the breeding Western Europe/Mediterranean/Western Africa population (Count, as at 1993)

On passage

- Ringed plover *Charadrius hiaticula*, 995 individuals representing at least 2.0% of the Europe/Northern Africa - wintering population (5 year peak mean 1991/2 - 1995/6)
- Sanderling *Calidris alba*, 6,172 individuals representing at least 6.2% of the Eastern Atlantic/Western & Southern Africa - wintering population (3 year mean May 1993 - 1995)

Over winter

- Black-tailed godwit *Limosa limosa islandica*, 819 individuals representing at least 1.2% of the wintering Iceland - breeding population (5 year peak mean 1991/2 - 1995/6)
- Dunlin *Calidris alpina alpina*, 39,952 individuals representing at least 2.9% of the wintering Northern Siberia/Europe/Western Africa population (5 year peak mean 1991/2 - 1995/6)
- Grey plover *Pluvialis squatarola*, 6,073 individuals representing at least 4.0% of the wintering Eastern Atlantic - wintering population (5 year peak mean 1991/2 - 1995/6)
- Knot *Calidris canutus*, 57,865 individuals representing at least 16.5% of the wintering Northeastern Canada/Greenland/Iceland/Northwestern Europe population (5 year peak mean 1991/2 - 1995/6)
- Oystercatcher *Haematopus ostralegus*, 16,159 individuals representing at least 1.8% of the wintering Europe & Northern/Western Africa population (5 year peak mean 1991/2 - 1995/6)
- Pink-footed goose *Anser brachyrhynchus*, 23,860 individuals representing at least 10.6% of the wintering Eastern Greenland/Iceland/UK population (5 year peak mean 1991/2 - 1995/6)
- Pintail *Anas acuta*, 3,333 individuals representing at least 5.6% of the wintering Northwestern Europe population (5 year peak mean 1991/2 - 1995/6)
- Redshank *Tringa totanus*, 2,708 individuals representing at least 1.8% of the wintering Eastern Atlantic - wintering population (5 year peak mean 1991/2 - 1995/6)
- Sanderling *Calidris alba*, 2,859 individuals representing at least 2.9% of the wintering Eastern Atlantic/Western & Southern Africa - wintering population (5 year peak mean 1991/2 - 1995/6)
- Shelduck *Tadorna tadorna*, 4,103 individuals representing at least 1.4% of the wintering Northwestern Europe population (5 year peak mean 1991/2 - 1995/6)
- Teal *Anas crecca*, 7,641 individuals representing at least 1.9% of the wintering Northwestern Europe population (5 year peak mean 1991/2 - 1995/6)
- Wigeon *Anas penelope*, 84,699 individuals representing at least 6.8% of the wintering Western Siberia/Northwestern/Northeastern Europe population (5 year peak mean 1991/2 - 1995/6)

Assemblage qualification: A wetland of international importance

The area qualifies under **Article 4.2** of the Directive (79/409/EEC) by regularly supporting at least 20,000 seabirds.

During the breeding season, the area regularly supports 29,236 individual seabirds including: Black-headed gull *Larus ridibundus*, lesser black-backed gull *Larus fuscus*, common tern *Sterna hirundo*.

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 301,449 individual waterfowl (5 year peak mean 1991/2 - 1995/6) including: Grey plover *Pluvialis squatarola*, whooper swan *Cygnus cygnus*, golden plover *Pluvialis apricaria*, bar-tailed godwit *Limosa lapponica*, pink-footed goose *Anser brachyrhynchus*, shelduck *Tadorna tadorna*, wigeon *Anas penelope*, teal *Anas crecca*, Bewick's swan *Cygnus columbianus bewickii*, oystercatcher *Haematopus ostralegus*, curlew *Numenius arquata*, knot *Calidris canutus*, sanderling *Calidris alba*, dunlin *Calidris alpina alpina*, black-tailed godwit *Limosa limosa islandica*, redshank *Tringa totanus*, cormorant *Phalacrocorax carbo*, common scoter *Melanitta nigra*, lapwing *Vanellus vanellus*, pintail *Anas acuta*.

Ramsar Qualifying Features¹⁶¹

The Ribble & Alt Estuaries is designated as a **Ramsar** site under the following criteria:

Criterion 2:

- The site supports up to 40% of the Great Britain population of natterjack toads *Bufo calamita*

Criterion 5: Assemblages of international importance

- Species with peak counts in winter: 222,038 waterfowl (5 year peak mean 1998/99-2002/03)

Criterion 6: Species / populations occurring at levels of international importance

Species regularly supported during the breeding season

- Lesser black-backed gull *Larus fuscus graellsii*, 4,108 apparently occupied nests, representing an average of 2.7% of the breeding W Europe / Mediterranean / W Africa population (Seabird 2000 Census)

Species with peak counts in spring / autumn

- Ringed plover *Charadrius hiaticula*, 3,761 individuals, representing an average of 5.1% of the Europe / Northwest Africa population (5 year peak mean 1998/9-2002/3 - spring peak)
- Grey plover *Pluvialis squatarola*, 11,021 individuals, representing an average of 4.4% of the E Atlantic / W Africa wintering population (5 year peak mean 1998/9-2002/3 - spring peak)
- Red knot *Calidris canutus islandica*, 42,692 individuals, representing an average of 9.4% of the W & Southern Africa population (5 year peak mean 1998/9-2002/3)
- Sanderling *Calidris alba*, 7,401 individuals, representing an average of 6% of the Eastern Atlantic population (5 year peak mean 1998/9- 2002/3 - spring peak)
- Dunlin *Calidris alpina alpina*, 38,196 individuals, representing an average of 2.8% of the W Siberia / W Europe population (5 year peak mean 1998/9-2002/3 - spring peak)
- Black-tailed godwit *Limosa limosa islandica*, 3,323 individuals, representing an average of 9.4% of the Iceland / W Europe population (5 year peak mean 1998/9-2002/3)
- Common redshank *Tringa totanus totanus*, 4,465 individuals, representing an average of 1.7% of the population (5 year peak mean 1998/9-2002/3)
- Lesser black-backed gull *Larus fuscus graellsii*, 1,747 individuals, representing an average of 2.8% of the GB population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter

¹⁶¹ <https://jncc.gov.uk/jncc-assets/RIS/UK11057.pdf> [Accessed on the 14/12/2020]

- Tundra swan *Cygnus columbianus bewickii*, 230 individuals, representing an average of 2.8% of the NW Europe population (5 year peak mean 1998/9- 2002/3)
- Whooper swan *Cygnus cygnus*, Iceland/UK/Ireland 211 individuals, representing an average of 1% of the Iceland / UK / Ireland population (5 year peak mean 1998/9- 2002/3)
- Pink-footed goose *Anser brachyrhynchus*, 6,552 individuals, representing an average of 2.7% of the Greenland / Iceland / UK population (5 year peak mean 1998/9-2002/3)
- Common shelduck *Tadorna tadorna*, 2,944 individuals, representing an average of 3.7% of the NW Europe population (5 year peak mean 1998/9-2002/3)
- Eurasian wigeon *Anas penelope*, 69,841 individuals, representing an average of 4.6% of the NW Europe population (5 year peak mean 1998/9-2002/3)
- Eurasian teal *Anas crecca*, 5,107 individuals, representing an average of 1.2% of the NW Europe population (5 year peak mean 1998/9-2002/3)
- Northern pintail *Anas acuta*, 1,497 individuals, representing an average of 2.4% of the NW Europe population (5 year peak mean 1998/9-2002/3)
- Eurasian oystercatcher *Haematopus ostralegus ostralegus*, 18,926 individuals, representing an average of 1.8% of the Europe & NW wintering Europe population (5 year peak mean 1998/9-2002/3)
- Bar-tailed godwit *Limosa lapponica lapponica*, 13,935 individuals, representing an average of 11.6% of the W Palearctic population (5 year peak mean 1998/9-2002/3)

SPA Conservation Objectives¹⁶²

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

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

Threats / Pressure to Site Integrity¹⁶³

The following threats and pressures to the site integrity of the Ribble and Alt Estuaries SPA and Ramsar have been identified in Natural England's Site Improvement Plan:

- Coastal squeeze
- Air pollution: Risk of atmospheric nitrogen deposition
- Inappropriate scrub control
- Invasive species
- Hydrological changes
- Public access / disturbance

¹⁶² <http://publications.naturalengland.org.uk/publication/4868920422957056> [Accessed on the 14/12/2020]

¹⁶³ <http://publications.naturalengland.org.uk/publication/6274126599684096> [Accessed on the 14/12/2020]

- Inappropriate coastal management
- Fisheries: Commercial marine and estuarine
- Change to site conditions
- Inappropriate coastal management
- Shooting / scaring
- Invasive species

Sefton Coast SAC

Introduction

The Sefton Coast SAC is approx. 4,592ha in size and comprises tidal rivers and estuaries (50%), coastal sand dunes and beaches (30%), heath and scrub (10%) and coniferous woodland (10%). The SAC is a large sand dune system, stretching from Southport in the north to Crosby in the south. Both rapid erosion and active shifting dunes are present within the site. In the mobile dunes, marram *Ammophila arenaria* is dominant. Where rates of sand deposition are lower, lyme grass *Leymus arenarius*, sea-holly *Eryngium maritimum* and cat's-ear *Hypochaeris radicata* occur. The dunes around Formby Point have been eroding since 1906, which has significantly reduced shifting dunes in this area.

There are also extensive dune slacks, where creeping willow *Salix repens* is dominant. 99ha (43%) of the total English dune slack resource dominated by creeping willow is found here. Creeping willow is also prominent in free-draining grassland. Despite nearby urban and recreational development, these successional processes are active and well conserved. A large population of great-crested newts *Triturus cristatus* lives in pools among the fixed dunes. Furthermore, petalwort *Petalophyllum ralfsii* is abundant, especially on footpaths with a light trampling damage.

Much of the SAC has public access, including to the Ainsdale Sand Dunes and Cabin Hill National Nature Reserves, and the Ainsdale and Birkdale Sandhills Local Nature Reserves. Furthermore, there are five golf courses and a military camp within the SAC. This accessibility and the proximity to the Merseyside conurbation means that there is significant recreational usage and a risk of recreational disturbance. Disturbance of wildlife and habitats by dog walkers is a particularly significant issue for the site.

Qualifying Features¹⁶⁴

Annex I habitats that are a primary reason for selection of this site:

- Embryonic shifting dunes
- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")
- Fixed coastal dunes with herbaceous vegetation ("grey dunes")
- Dunes with *Salix repens* spp. *argentea* (*Salicion arenariae*)
- Humid dunes slacks

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:

- Atlantic decalcified fixed dunes (*Calluno-Ulicetea*)

Annex II species that are a primary reason for selection of this site

- Petalwort *Petalophyllum ralfsii*

Annex II species present as a qualifying feature, but not a primary reason for site selection:

- Great-crested newt *Triturus cristatus*

¹⁶⁴ <https://sac.jncc.gov.uk/site/UK0013076> [Accessed on the 14/12/2020]

Conservation Objectives¹⁶⁵

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

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 and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Threats / Pressures to Site Integrity

The following threats and pressures to the site integrity of the Sefton Coast SAC have been identified in Natural England's Site Improvement Plan:

- Coastal squeeze
- Air pollution: Risk of atmospheric nitrogen deposition
- Inappropriate scrub control
- Invasive species
- Hydrological changes
- Public access / disturbance
- Inappropriate coastal management
- Fisheries: Commercial marine and estuarine
- Change to site conditions
- Inappropriate coastal management
- Shooting / scaring
- Invasive species

River Dee & Bala Lake SAC

Introduction

The source of the River Dee lies in upland Wales (Snowdonia) and includes the tributaries of Ceiriog, Meloch, Tryweryn and Mynach. The SAC's catchment is very broad, including high mountains around Bala, steep woodland valleys and countryside plains. The tidal influence extends up to Farndon with high tides regularly exceeding the Chester weir crest level.

Its aquatic plant community includes Wirtgen's water-crowfoot *Ranunculus x bacchii* and pond water-crowfoot *R. peltatus*. The water crowfoot forms extensive beds along the entire length of the River, where flow conditions are suitable.

The Dee is one of the most important waterbodies in northern Wales for Atlantic salmon, with the Mynach, Meloch and Ceiriog tributaries being the most significant spawning grounds. Other

¹⁶⁵ <http://publications.naturalengland.org.uk/publication/6588974160150528> [Accessed on the 14/12/2020]

anadromous fish using the River Dee include river lamprey *Lampetra fluviatilis* and sea lamprey *Petromyzon marinus*. Non-migratory fish include bullhead *Cottus gobio* and brook lamprey *Lampetra planeri*.

Two SSSIs underpin the SAC divided by national boundaries, which are the Afon Dyfrdwy (River Dee) SSSI and the River Dee SSSI.

Qualifying Features¹⁶⁶

Annex I habitats that are a primary reason for selection of this site:

- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation

Annex II species that are a primary reason for selection of this site

- Atlantic salmon *Salmo salar*
- Floating water-plantain *Luronium natans*

Annex II species present as a qualifying feature, but not a primary reason for site selection:

- Sea lamprey *Petromyzon marinus*
- Brook lamprey *Lampetra planeri*
- River lamprey *Lampetra fluviatilis*
- Bullhead *Cottus gobio*
- Otter *Lutra lutra*

Conservation Objectives¹⁶⁷

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

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 and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Threats / Pressures to Site Integrity¹⁶⁸

There is no Site Improvement Plan for the River Dee and Bala Lake SAC. The following issues have been derived from Natural Resources Wales' Core Management Plan:

- Sedimentation
- Water quality
- Fishing: Recreational

¹⁶⁶ <https://sac.jncc.gov.uk/site/UK0030252> [Accessed on the 14/12/2020]

¹⁶⁷ <http://publications.naturalengland.org.uk/publication/4660149109129216> [Accessed on the 14/12/2020]

¹⁶⁸ https://naturalresources.wales/media/673374/River_De_Bala_Lake_32_Plan.pdf [Accessed on the 14/12/2020]

- Public access / disturbance
- Bankside habitat management
- Dredging
- Invasive species
- Habitat connectivity

Halkyn Mountain SAC

Introduction

The Halkyn Mountain SAC is approx. 604ha in size and comprises a variety of habitats, such as heath and scrub (42%), dry grassland and steppes (28.1%), improved grassland (21.7%), and mines and industrial sites (2.6%).

Most of the site is located in north-eastern Wales, 4km north-west of Mold in Flintshire. It mostly comprises common land that is situated on an elongated plateau of Lower Carboniferous Limestone. The SAC contains many former mineral workings, such as metalliferous mine spoil tips and limestone quarries. Two small outlying component sites near the town of Holywell support calaminarian grassland over old lead workings.

The Halkyn Mountain SAC supports a mosaic of calcareous grassland, bracken and dry heath with heavy metal tolerant vegetation, which occurs locally. Areas with impeded drainage comprise rush pasture, wet heath, marshy grassland and fen communities. The various pools and pits in disused quarries support one of the largest known great-crested newt populations in Wales.

Qualifying Features¹⁶⁹

Annex I habitats that are a primary reason for selection of this site:

- Calaminarian grasslands of the *Violetalia calaminariae*

Annex II species present as a qualifying feature, but not a primary reason for site selection:

- European dry heaths
- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*; important orchid sites)
- *Molinia* meadows on calcareous, peaty or clayey-silt laden soils (*Molinion caeruleae*)

Annex II species that are a primary reason for selection of this site

- Great-crested newt *Triturus cristatus*

Conservation Objectives¹⁷⁰

The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long term survival of its typical species. The conservation status of a natural habitat will be taken as favourable when:

- Its natural range and areas it covers within that range are stable or increasing, and
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- The conservation status of its typical species is favourable.

¹⁶⁹ <https://sac.jncc.gov.uk/site/UK0030163> [Accessed on the 14/12/2020]

¹⁷⁰ https://naturalresources.wales/media/672548/Halkyn%20SAC%20Plan%20_Eng_.pdf [Accessed on the 14/12/2020]

The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' when:

- population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Threats / Pressure to Site Integrity¹⁷¹

There is no Site Improvement Plan for the Halkyn Mountain SAC. The following issues have been derived from Natural Resources Wales' Core Management Plan:

- Appropriate grazing management
- Public access / disturbance
- Nutrient enrichment
- Hydrology
- Water quality

Deeside and Buckley Newt Sites SAC

Introduction

The Deeside and Buckley Newt Sites SAC is a composite site on the coastal slopes of Flintshire, overlooking the Dee Estuary. Waterbodies traversing the site support one of the largest breeding populations of great-crested newts in Great Britain, one of the strongholds of this species in Western Europe.

However, newt habitat is under continuing threat due to agricultural intensification, pond senescence and urban expansion. Other amphibian species that are supported within the site are smooth newt *Triturus vulgaris*, palmate newt *T. helveticus*, common frog *Rana temporaria* and common toad *Bufo bufo*.

Qualifying Features¹⁷²

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:

- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles

Annex II species that are a primary reason for selection of this site:

- Great crested newt *Triturus cristatus*

Conservation Objectives¹⁷³

The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long term survival of its typical species. The conservation status of a natural habitat will be taken as favourable when:

¹⁷¹ https://naturalresources.wales/media/672548/Halkyn%20SAC%20Plan%20Eng_.pdf [Accessed on the 14/12/2020]

¹⁷² <https://sac.jncc.gov.uk/site/UK0030132> [Accessed on the 14/12/2020]

¹⁷³ https://naturalresources.wales/media/671740/Deeside_and_Buckley_WES32_Plan_English.pdf [Accessed on the 14/12/2020]

- Its natural range and areas it covers within that range are stable or increasing, and
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- The conservation status of its typical species is favourable. The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations.

The conservation status will be taken as 'favourable' when:

- population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Threats / Pressures to Site Integrity¹⁷⁴

There is no Site Improvement Plan for the Deeside and Buckley Newt Sites SAC. The following issues have been derived from Natural Resources Wales' Core Management Plan:

- Water quality
- Woodland and scrub management
- Grassland management
- Invasive species
- Recreational pressure

River Eden SAC

Introduction

The River Eden SAC is a floristically rich river flowing over sandstone and hard limestone. The SAC has a large hydrological catchment, which include headwaters from the Yorkshire Dales, the North Pennines, the eastern fells of the Lake District and Ullswater Lake. The streams contributing to the SAC that derive from limestone are calcareous, while others are more acidic. Overall, the nutrient loading increases towards the mouth of the river.

Owing to its variations in geology and flow, the SAC has a high number of aquatic plant species with over 180 recorded species. The site supports natural riparian habitats of wet woodland and swamp. Regarding animal species, the River Eden is one of the most important locations for Atlantic salmon, bullhead and lamprey in the UK. It also supports an significant population of white-clawed crayfish.

Qualifying Features¹⁷⁵

Annex I habitats that are a primary reason for selection of this site:

- Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and / or the *Isoeto-Nanojuncetea*
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation

¹⁷⁴ https://naturalresources.wales/media/671740/Deeside_and_Buckley_WES32_Plan_English.pdf [Accessed on the 14/12/2020]

¹⁷⁵ <https://sac.jncc.gov.uk/site/UK0012643> [Accessed on the 14/12/2020]

- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

Annex II species that are a primary reason for selection of this site

- White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes*
- Sea lamprey *Petromyzon marinus*
- Brook lamprey *Lampetra planeri*
- River lamprey *Lampetra fluviatilis*
- Atlantic salmon *Salmo salar*
- Bullhead *Cottus gobio*
- Otter *Lutra lutra*

Conservation Objectives¹⁷⁶

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

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 and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Threats / Pressure to Site Integrity¹⁷⁷

The following threats and pressures to the site integrity of the River Eden SAC have been identified in Natural England's Site Improvement Plan:

- Water pollution
- Agricultural management practices
- Physical modification
- Invasive species
- Changes in species distributions
- Forestry and woodland management
- Hydrological changes
- Disease
- Air pollution: Risk of atmospheric nitrogen deposition

¹⁷⁶ <http://publications.naturalengland.org.uk/publication/5935614042046464> [Accessed on the 14/12/2020]

¹⁷⁷ <http://publications.naturalengland.org.uk/publication/5920746052255744> [Accessed on the 14/12/2020]

Appendix C ToLSE of Wirral's Local Plan

This table summarises the ToLSE of the policies contained in the Wirral Local Plan. Where text is shaded green in the 'Test of Likely Significant Effect' column, a policy is deemed not to be relevant to impact pathways linking to European sites and therefore is screened out from Appropriate Assessment. Where text is shaded orange, potential impact pathways linking to European sites cannot be excluded and the policy is screened in for Appropriate Assessment.

Policy	Text	Test of Likely Significant Effect
Policy WS1 – The Development and Regeneration Strategy for Wirral 2021 – 2037		
Policy WS1.1 – Homes	<p>A. Within the period 2021 – 2037 the Local Plan strategy will move the Council toward a zero carbon future with high quality urban regeneration, economic transformation and environmental protection and enhancement. Developments shall support Wirral becoming carbon neutral by 2041 through, where relevant:</p> <ol style="list-style-type: none"> 1. Minimising carbon emissions; 2. Maximising carbon storage and sequestration; and 3. Mitigating and adapting to the impacts of climate change. <p>Homes</p> <p>B. The Local Plan will provide for a minimum of 13,360 net additional dwellings including new affordable dwellings. Dwellings will be delivered through:</p> <ol style="list-style-type: none"> 1. The creation of new neighbourhoods through brownfield development: <ol style="list-style-type: none"> i. as part of the Regeneration Areas across the Borough, including those within Birkenhead identified on Figure 3.1; and ii. through the reuse of land previously used or allocated for employment use, including at Bromborough; and 2. suitable sites within Settlement Areas. <p>C. Net additional dwellings will be provided and distributed spatially across the Borough as shown on the Policies Map, as follows:</p>	<p>Likely Significant Effects of Policy WS1.1 on European sites cannot be excluded.</p> <p>This policy sets out that 13,360 net additional dwellings will be delivered across the Borough in the period up to 2037. Residential development will be achieved through a combination of Regeneration Areas (e.g. Birkenhead), reuse of previously allocated employment land (e.g. at Bromborough), suitable sites in Settlement Areas and additional dwellings spread out across the borough. As such, this policy identifies both a quantum and the geographic distribution of housing development.</p>

	Total	2021/22 – 2025/26	2026/27 – 2030/31	2031/32 – 2036/37	<p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Recreational pressure (both in SPAs and Ramsars, and functionally linked habitat) • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy WS1.1 is screened in for Appropriate Assessment.</p>
Plan Requirement	13,360	5,010	3,795	4,555	
Existing New Build Commitments	1,730	1,692	38	0	
Deliverable and developable sites with extant planning permission at April 2021. Figures for site within designated Neighbourhood Areas are included in Table 3.3. Further information is set out within the accompanying Local Plan Housing Delivery Strategy					
RA1 – Seacombe Corridor	306	0	171	135	
RA2 – Scott's Quay	630	81	225	324	
RA3 – Birkenhead Waterfront	567	0	270	297	
RA4 – Central Birkenhead	1,304	135	590	579	
RA5 – Hind Street & St Werburgh's	1,476	135	563	778	
RA6 – Wirral Waters	2,911	665	851	1,395	

RA7 – Hamilton Park	923	0	383	540
RA8 – North Side	0	0	0	0
RA9 - Liscard	180	18	126	36
RA10 – New Brighton	284	23	126	135
RA11 – New Ferry	98	98	0	0
Allocations in Remaining Settlement Areas	2,425	1,121	899	405
Figures for site within designated Neighbourhood Areas are included in Table 3.3. Further information is set out within the accompanying Wirral Local Plan Housing Delivery Strategy				
Allowance for Net Conversions and Changes of Use	1,600	500	500	600
Allowance for Windfalls	480	150	150	180
Allowance for Return to Use of Empty Homes	1,410	490	440	480

	<p>Total Plan Supply 16,322 5,106 5,332 5,884 (net new dwellings)</p> <p>D. The new dwellings will be delivered by:</p> <ol style="list-style-type: none"> 1. Permitting development proposals where they comply with all other relevant policies of the Local Plan. 2. The development of new neighbourhoods. 3. Making the best use of land by ensuring that development densities are appropriate to the location and size of the site in accordance with Policy WS 3.2 (Housing Density), including higher densities in Regeneration Areas and other suitable accessible locations. 	
Policy WS1.2 – Employment	<p>E. The Local Plan will provide for new jobs to drive forward the economic transformation of the Borough and support the economic competitiveness of the Liverpool City Region. Existing Primarily Employment Areas shown on the Policies Map will be protected. New employment development will be provided on the following types of land:</p> <ol style="list-style-type: none"> 1. Employment Allocations comprising 65.60 ha (identified on the Policies Map and subject to Policy WS 4 Strategy for Economy and Employment); 2. Land within Primarily Employment Areas (identified on the Policies Map and subject to Policy WS 4 Strategy for Economy and Employment); 3. Employment-led development within mixed use areas (identified on the Policies Map); 4. Employment sites with planning permission or currently under construction, for employment uses; 5. Regeneration and remodelling opportunities within existing employment areas; 6. Mixed use developments including as part of the regeneration and creation of new neighbourhoods; and 7. Other suitable sites in Wirral. <p>F. Port and marine related facilities will continue to be promoted at Twelve Quays, West Float, Cammell Lairds and Eastham Dock Estate to reflect their strategic importance for marine engineering, cargo handling and freight movements;</p> <p>G. The employment land allocations as shown on the Policies Map will be distributed as follows:</p>	<p>Likely Significant Effects of Policy WS1.2 on European sites cannot be excluded.</p> <p>This policy sets out that 65.60ha of employment land will be provided across the borough in the period up to 2037. Furthermore, existing Primarily Industrial Areas in Wirral will be protected. Employment land will be primarily situated in the existing developed areas of the borough, such as Wirral Waters and North Side.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Loss of functionally linked habitat • Water quality • Water resources

Location	2021 – 2025	2025 – 2030	2030 – 2037	Total Net Developable Area (ha)	<ul style="list-style-type: none"> Atmospheric pollution Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy WS1.2 is screened in for Appropriate Assessment.</p>
RA1 – Seacombe Corridor	0	0	0	0	
RA2 – Scott's Quay	0	0	0	0	
RA3 – Birkenhead Waterfront	1.58	0	0	1.58	
RA4 – Central Birkenhead	0	0	0	0	
RA5 – Hind Street & St Werburgh's	0	0	0	0	
RA6 – Wirral Waters	6.71	13.86	1.8	22.37	
RA7 – Hamilton Park	0	0	0.98	0.98	
RA8 – North Side	0	9.69	3.42	13.11	
RA9 - Liscard	0	0	0	0	
RA10 – New Brighton	0	0	0	0	
Settlement Area 1 - Wallasey	0	0	0	0	
Settlement Area 2 – Birkenhead Commercial Core	1.06	0	5.52	6.58	

	Settlement Area 3 – Suburban Birkenhead	0.58	0	0	0.58
	Settlement Area 4 – Bebington, Bromborough & Eastham	2.35	5.65	7.66	15.66
	Settlement Area 5 – Leasowe, Moreton, Greasby & Woodchurch	3.64	0	1.10	4.74
	Settlement Area 6 – Hoylake and West Kirby	0	0	0	0
	Settlement Area 7 - Heswall	0	0	0	0
	Settlement Area 8 – Rural Area	0	0	0	0
	Total	15.92	29.20	20.48	65.60
	<p>H. In addition, the Local Plan will:</p> <ol style="list-style-type: none"> 1. Support the regeneration and revitalisation of the Borough's centres. 2. Support growth in the port functions, maritime and logistics, renewable energy, advanced manufacturing, health and life sciences, digital and creative sectors, financial and professional services, tourism and further and higher education. 3. Seek social value added from development that provides for training and skills for local residents to equip them with the skills needed to access future employment opportunities within and outside Wirral. 4. Attract new businesses, encourage start ups and help growing businesses. 				

	5. Conserve heritage assets and their settings as appropriate to their significance and sustain and enhance their significance whilst putting them to viable use consistent with their conservation.	
Policy WS1.3 – Infrastructure	<p>I. The following key infrastructure will be delivered over the Local Plan period:</p> <ol style="list-style-type: none"> 1. Active travel networks for walking and cycling that enable safe access to jobs, leisure and health facilities throughout the Borough. 2. A new mass transit system within Birkenhead connecting new neighbourhoods with one another and existing key locations. 3. A new multi-purpose greenway (the Dock Branch Park) connecting areas within central Birkenhead between Chamberlain Street and Corporation Road (OS-SA2.7) 4. A green and blue infrastructure network providing for people and wildlife, transport and recreation, sustainable drainage and carbon sinks. <p>J. Development proposals will be required to demonstrate that they accord with the full range of infrastructure requirements established through the Infrastructure Delivery Plan and all other policies of the Local Plan.</p>	<p>There are no LSEs of this policy on European sites.</p> <p>Policy WS1.3 is a development management policy, providing for key infrastructure in the Plan period, including active travel networks (walking and cycling) and a mass transit system in Birkenhead. It also provides for a green and blue infrastructure network that focusses on the wellbeing of people and conservation of wildlife. The policy obliges all development proposals to accord with the requirements of the Infrastructure Delivery Plan.</p> <p>Overall, it is considered that this policy is positive for European sites, particularly regarding atmospheric pollution. A switch to active and public transport modes will reduce the volume of vehicular traffic along nitrogen-sensitive European sites.</p> <p>There are no impact pathways present and Policy WS1.3 is screened out from Appropriate Assessment.</p>

<p>Policy WS1.4 – Flooding and drainage</p>	<p>K. Development will avoid areas at risk of flooding from all sources unless there is suitable mitigation or flood protection in place or provided as part of the development and flood risk elsewhere is not increased as a result.</p> <p>L. Development will be required to make provision for foul and surface water drainage in accordance with the drainage hierarchy including using sustainable drainage systems where technically possible and viable.</p>	<p>There are no LSEs of this policy on European sites.</p> <p>Policy WS1.4 is a development management policy that establishes requirements regarding flooding and drainage. In essence, areas at risk of flooding will be avoided and surface water drainage measures (e.g. Sustainable Drainage Systems – SuDS) will be enforced.</p> <p>This is a positive policy for the protection of water quality in European sites adjoining the Wirral Peninsula. SuDS will prevent excessive and polluting direct surface water runoff into intertidal zones and the marine environment.</p> <p>There are no impact pathways present and Policy WS1.4 is screened out from Appropriate Assessment.</p>
<p>Policy WS2 – Social Value</p>	<p>A. Major development will be required to demonstrate that it is located, designed, constructed and operated in a manner that, where appropriate, delivers net social gain in support of the economic, health and cultural wellbeing of the local community.</p> <p>B. Major development proposals will include a social value statement that explains how the development will secure and deliver social benefits that would arise from the proposals over the lifetime of the development including as appropriate:</p>	<p>There are no LSEs of Policy WS2 on European sites.</p> <p>This policy ensures social gain of major development proposals in terms of economic, health and cultural wellbeing. Major developments are required to</p>

	<ol style="list-style-type: none"> 1. Local labour policy for construction and occupation of the development covering skills and training provision including apprenticeships; and 2. Local sourcing of products and materials. <p>C. In respect of major development proposals, where appropriate, the Council will seek to enter into a planning agreement and / or impose conditions relating to the use of local labour and provision of training and skills for local communities using an agreed employment and skills plan.</p>	<p>submit a social value statement, detailing how this will be achieved.</p> <p>Overall, this policy is positive for society, but has no bearing on European sites. Policy WS2 is screened out from Appropriate Assessment.</p>
Housing		
Policy WS3 – Strategy for Housing		
Policy WS3.1 – Housing Design Standards	<p>A. New build dwellings should be built to the following standards:</p> <ol style="list-style-type: none"> 1. Compliance with the nationally-described space standard or any successor standard. 2. Compliance with the higher water efficiency standard of 110 litres/ per person/ per day under Regulation 36(3) of the Building Regulations or any successor standard. 3. Be ‘zero carbon ready by design’ in line with Policy WS 8 Sustainable Construction, Renewable and Low Carbon Energy Strategy. 4. All new build dwellings will be accessible and adaptable in line with Part M4(2) of the Building Regulations or any successor standard, unless site specific factors clearly indicate an alternative design solution is necessary or the following criteria apply: <ol style="list-style-type: none"> i. On developments of 17 or more new build dwellings at least 6% will be ‘wheelchair adaptable’ in line with Part M4(3)(2)(a) of the Building Regulations or any successor standard. ii. If the Council is responsible for allocating or nominating a person for immediate occupation the 6% of dwellings will be ‘wheelchair user’ in line with Part M4(3)(2)(b) of the Building Regulations or any successor standard, unless site specific factors clearly indicate an alternative design solution is necessary. 	<p>There are no LSEs of Policy WS3.1 on European sites.</p> <p>This is a design management policy that sets out housing design standards for Wirral, including space, water efficiency and wheelchair accessibility. However, housing design has no bearing on European sites.</p> <p>There are no linking impact pathways present. Therefore, Policy WS3.1 is screened out from Appropriate Assessment.</p>

<p>Policy WS3.2 – Housing Density</p>	<p>B. New residential development within the Density Zones shown on the Policies Map should be provided at the following minimum densities unless it can be demonstrated that this is not appropriate having regard to site characteristics:</p> <table border="1"> <thead> <tr> <th>Residential Density Zone (as shown on the Policies Map)</th><th>Definition (as shown on the Policies Map)</th><th>Minimum Density (dwellings per hectare)</th></tr> </thead> <tbody> <tr> <td>Waterfront Density Zone (RES-DZ1)</td><td>Sites within identified Regeneration Areas within 800m (10 minute walk) of the Birkenhead Docks and waterfront, with access to high frequency public transport interchanges, including ferry terminals</td><td>70</td></tr> <tr> <td>Urban Core & Town Centres Density Zones (RES-DZ2)</td><td>Sites within 800m (10 minute walk) of Birkenhead town centre or within 400m (5 minute walk) of other designated town centres, which are well served by public transport and other community facilities</td><td>60</td></tr> <tr> <td>Transit Area Density Zones (RES-DZ3)</td><td>Other urban sites within 800m (10 minute walk) of a railway station or high frequency bus route</td><td>50</td></tr> <tr> <td>Suburban Area Density Zone (RES-DZ4)</td><td>Sites within 1200m (20 minute walk) of a railway station, which are also within 400m (5 minute walk) of multiple community services and facilities, including district centres, schools and open spaces</td><td>40</td></tr> </tbody> </table> <p>C. Outside these identified Residential Density Zones, new residential development must achieve efficient use of land having regard to the prevailing character of the area. Sites with an area of 1 hectare or more should achieve a minimum density of 30 dwellings per hectare unless it can be demonstrated that this would not be appropriate having regard to site characteristics.</p>	Residential Density Zone (as shown on the Policies Map)	Definition (as shown on the Policies Map)	Minimum Density (dwellings per hectare)	Waterfront Density Zone (RES-DZ1)	Sites within identified Regeneration Areas within 800m (10 minute walk) of the Birkenhead Docks and waterfront, with access to high frequency public transport interchanges, including ferry terminals	70	Urban Core & Town Centres Density Zones (RES-DZ2)	Sites within 800m (10 minute walk) of Birkenhead town centre or within 400m (5 minute walk) of other designated town centres, which are well served by public transport and other community facilities	60	Transit Area Density Zones (RES-DZ3)	Other urban sites within 800m (10 minute walk) of a railway station or high frequency bus route	50	Suburban Area Density Zone (RES-DZ4)	Sites within 1200m (20 minute walk) of a railway station, which are also within 400m (5 minute walk) of multiple community services and facilities, including district centres, schools and open spaces	40	<p>There are no LSEs of Policy WS3.2 on European sites.</p> <p>This is a development management policy, which sets out the housing density to be achieved in different Density Zones within Wirral.</p> <p>Generally, this is a positive policy for European sites as higher housing densities mean that less land (and potentially fewer greenfield sites) will need to be developed.</p> <p>There are no linking impact pathways present. Therefore, Policy WS3.2 is screened out from Appropriate Assessment.</p>
Residential Density Zone (as shown on the Policies Map)	Definition (as shown on the Policies Map)	Minimum Density (dwellings per hectare)															
Waterfront Density Zone (RES-DZ1)	Sites within identified Regeneration Areas within 800m (10 minute walk) of the Birkenhead Docks and waterfront, with access to high frequency public transport interchanges, including ferry terminals	70															
Urban Core & Town Centres Density Zones (RES-DZ2)	Sites within 800m (10 minute walk) of Birkenhead town centre or within 400m (5 minute walk) of other designated town centres, which are well served by public transport and other community facilities	60															
Transit Area Density Zones (RES-DZ3)	Other urban sites within 800m (10 minute walk) of a railway station or high frequency bus route	50															
Suburban Area Density Zone (RES-DZ4)	Sites within 1200m (20 minute walk) of a railway station, which are also within 400m (5 minute walk) of multiple community services and facilities, including district centres, schools and open spaces	40															

Policy WS3.3 – Affordable Housing Requirements	<p>D. Within the following areas shown on the Policies Map and shown and listed in Appendix 5, proposals for new-build market housing of 10 or more dwellings will be required to provide tenure blind affordable housing within the site at the following rates:</p> <table><tr><td>Viability Zone 1 (VZ-1)</td><td>10%</td></tr><tr><td>Viability Zone 2 (VZ-2)</td><td>10%</td></tr><tr><td>Viability Zone 3 (VZ-3)</td><td>20%</td></tr><tr><td>Viability Zone 4 (VZ-4)</td><td>20%</td></tr></table> <p>E. In Viability Zones 1 and 2 on multiphase schemes, provision may be made via a S106 agreement to meet the full affordable housing requirement of 10% on later phases of development, to permit a greater proportion of market housing to be delivered earlier and to accommodate any future rise in property or land values.</p> <p>F. 25% of the affordable housing provided shall comprise First Homes where this is required by national policy. The remaining affordable housing will be for alternative affordable home ownership products, affordable rent and social rent in line with national policy and the needs identified in the latest Strategic Housing Market Assessment unless this significantly prejudices the provision of dwelling types and tenures required to meet the needs for specific groups. Where relevant, affordable housing for rent should be designed to facilitate transfer to an appropriate Registered Social Landlord or equivalent affordable housing provider.</p> <p>G. Affordable housing, will be secured through an appropriate planning condition or legal agreement. Off-site provision or equivalent payment in lieu of affordable housing will only be considered if it can be demonstrated that on-site provision would not be practicable, the approach can be robustly justified, and the proposal would be more effective for achieving a mixed and balanced community.</p>	Viability Zone 1 (VZ-1)	10%	Viability Zone 2 (VZ-2)	10%	Viability Zone 3 (VZ-3)	20%	Viability Zone 4 (VZ-4)	20%	<p>There are no LSEs of Policy WS3.3 on European sites.</p> <p>This is a development management policy that specifies the affordable housing requirements in Wirral Borough in accordance with different viability zones. However, affordable housing has no bearing on European sites.</p> <p>There are no linking impact pathways present. Therefore, Policy WS3.3 is screened out from Appropriate Assessment.</p>
Viability Zone 1 (VZ-1)	10%									
Viability Zone 2 (VZ-2)	10%									
Viability Zone 3 (VZ-3)	20%									
Viability Zone 4 (VZ-4)	20%									
Policy WS3.4 – Housing Mix	<p>H. All new residential developments must provide homes of an appropriate type, size and tenure to meet the needs of the local community including specialist housing for the older population and other specialist needs where appropriate.</p> <p>I. Outside identified Regeneration Areas, a minimum of 70% of market dwellings will be developed for larger dwellings of three or more bedrooms, within Use Class C3. Within identified Regeneration Areas this should be a minimum of 30%.</p>	<p>There are no LSEs of Policy WS3.4 on European sites.</p> <p>This is a development management policy that sets the housing mix to be provided in Wirral Borough, such as the</p>								

	<p>J. The following criteria will be taken into account when assessing whether sites are capable and suitable of accommodating larger dwellings:</p> <ol style="list-style-type: none"> 1. whether the resulting development will be appropriate to the character of the surrounding area; 2. whether the resulting development would fulfil other identified aspirations of the Council, including the need to support a viable form of development to secure necessary social, economic and environmental benefits; or 3. whether local evidence of housing need and demand indicates that an alternative mix of housing would be more appropriate to secure; or 4. whether alternative provision would meet another aim of the Council, such as provision for elderly persons (including bungalows) or other specialist housing needs and a proportion of the site can still be developed as family housing. 	<p>percentage of dwellings with three or more bedrooms. However, housing mix generally has no bearing on European sites.</p> <p>There are no linking impact pathways present. Therefore, Policy WS3.4 is screened out from Appropriate Assessment.</p>
Policy WS3.5 – Self Build and Custom Build Housing	<p>K. The Council will work with developers on sites of more than 50 dwellings in areas where a need is identified to secure the delivery of serviced plots for custom and self build dwellings.</p> <p>L. Plots to be set aside for self and custom build housing must be available and marketed for at least 12 months. After 12 months, if a plot has not sold, the plot may either remain on the open market as a serviced plot or be offered to a Registered Provider at a fair value, before being built out by the developer.</p>	<p>There are no LSEs of Policy WS3.5 on European sites.</p> <p>This development management policy stipulates parameters regarding the provision of self build and custom build housing across the borough. However, this has no bearing on European sites.</p> <p>There are no linking impact pathways present. Therefore, Policy WS3.5 is screened out from Appropriate Assessment.</p>
Policy WS3.6 – Specialist Housing	<p>M. Specialist housing for older people, or groups with particular housing needs will be supported provided it can be demonstrated that the development is in a sustainable location, with good access to local services and appropriate on-site amenity space; is designed and managed to provide the most appropriate types and levels of support to the proposed occupiers; and adequately caters for the needs of any support staff and associated services including medical support.</p>	<p>There are no LSEs of Policy WS3.6 on European sites.</p> <p>This development management policy supports the provision of</p>

		<p>housing for groups with special housing needs, including older people. However, such provision has no bearing on European sites.</p> <p>There are no linking impact pathways present. Therefore, Policy WS3.6 is screened out from Appropriate Assessment.</p>
Policy WS3.7 – Accommodation for Gypsies, Travellers and Travelling Showpeople	<p>N. Lawful accommodation for Gypsies and Travellers and Travelling Showpeople where an ongoing need has been demonstrated should be replaced before alternative development on the existing site will be permitted.</p> <p>O. Provision for accommodation for Gypsies and Travellers and Travelling Showpeople should be made in accordance with Policy WD 9 Accommodation for Gypsies, Travellers and Travelling Showpeople.</p>	<p>There are no LSEs of Policy WS3.7 on European sites.</p> <p>This development management policy protects against the net loss of current gypsy and traveller sites due to alternative development. However, this has no bearing on European sites.</p> <p>There are no linking impact pathways present. Therefore, Policy WS3.7 is screened out from Appropriate Assessment.</p>
Policy WS4 – Strategy for Economy and Employment		
Policy WS4.1 – Meeting the Strategy	<p>A. The employment needs of the Borough will be met by helping to deliver the objectives of the Council's economic strategy through:</p> <ol style="list-style-type: none"> 1. the allocation of 65.60 hectares of land for main employment uses for delivery of sufficient employment land and premises of the necessary range and quality to meet the identified requirements, compatible with the spatial strategy; and 2. meeting the land and premises needs of existing businesses in the Borough through grant of planning permission in line with policies in this Local Plan; and 	<p>Likely Significant Effects of Policy WS4.1 on European sites cannot be excluded.</p> <p>This policy sets out that 65.60ha of land for main employment uses will be provided across Wirral Borough. Furthermore, the policy also retains and</p>

	<ol style="list-style-type: none"> 3. the retention and enhancement of the Primarily Employment Areas shown on the Policies Map, for their existing uses or for wider employment generating uses; and 4. the provision of new or net additional employment floorspace on sites allocated for employment uses including those in regeneration areas; and 5. supporting the Town, District and Local Centres shown on the Policies Map, as locations for employment and business; and 6. supporting tourism and the visitor economy; and 7. supporting the improvement of the Borough's employment related infrastructure; and 8. supporting local employment by facilitating the training and upskilling of the workforce. 	<p>enhances identified employment areas for their existing uses, as well as supporting the visitor and tourism economy.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy WS4.1 is screened in for Appropriate Assessment.</p>
Policy WS4.2 – Designated Employment Areas	<ol style="list-style-type: none"> B. Land will be safeguarded within designated Primarily Employment Areas shown on the Policies Map to create and maintain local employment and provide a range and choice of sites and premises in terms of quality, accessibility, type and size. Proposals for the redevelopment, renewal, intensification, or extension of existing employment sites and premises within Use Classes B2 and B8, or wider employment generating uses will be encouraged. C. Uses other than main employment uses and wider employment generating uses will only be acceptable in Primarily Employment Areas where: <ol style="list-style-type: none"> 1. It has been demonstrated with information regarding the marketing of the site and other market signals that there is no longer a reasonable prospect of the site being used for the existing 	<p>Likely Significant Effects of Policy WS4.2 on European sites cannot be excluded.</p> <p>This policy safeguards land in Primarily Employment Areas to create and maintain local employment. It supports redevelopment, renewal, intensification and extension of existing employment sites in these areas.</p>

	<p>employment use, main employment uses or wider employment generating uses or an alternative proposal within Use Classes B2 and B8; and</p> <p>2. the uses proposed are compatible with the character of the surrounding area and would not restrict the operation or function of existing employment uses.</p>	<p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy WS4.2 is screened in for Appropriate Assessment.</p>
Policy WS4.3 – The Port and Maritime Zone	<p><u>Port Related Uses</u></p> <p>D. Proposals to continue the sustainable development of the Ports will be supported. In particular, development requiring a port location, including related supply chain activities and improvements to the accessibility of the ports by low carbon modes of transport, will be supported.</p> <p>E. Port and marine-related proposals requiring approval from the Local Planning Authority will be permitted within the port and maritime zone shown on the Policies Map, where they:</p> <ol style="list-style-type: none"> 1. make effective use of existing port infrastructure and/or associated rail facilities; and 2. are accessible to the Key Route Network; and 3. minimise the visual impact on the surrounding area and the amenity of neighbouring users including cross river, including through the use of routing protocols for traffic to and from the development; and 4. contribute towards the reduction of greenhouse gas emissions, through the more efficient use of rail and water transport; and 	<p>There are no LSEs of Policy WS4.3 on European sites.</p> <p>This is a development management policy that supports the sustainable development of the Ports in principle. However, no specific development proposal is put forward. Furthermore, port and marine-related proposals will only gain approval if they have no adverse impact on water quality in European sites and functionally linked habitats. As such, adequate protective</p>

	<p>5. can demonstrate there will be no adverse impact on, water quality, morphology as identified in the North West River Basin Management Plan, or on designated European Sites or their supporting and functionally linked habitats, or on Sites of Special Scientific Interest; and</p> <p>6. any adverse impact on heritage assets, neighbouring uses and the environment can be mitigated.</p> <p><u>Safeguarding Port-Related Development & Infrastructure</u></p> <p>F. The Port and Maritime Zones shown on the Policies Map, at Alfred Dock and Twelve Quays (DKS-SA2.1), Port West, West Float, Birkenhead (DKS-SA2.2), Cammell Lairds Shipyard (DKS-SA2.3), Tranmere Oil Terminal (DKS-SA2.4), Port Wirral, Eastham (DKS-SA4.1), Bromborough Wharf, Dock Road South (DKS-SA4.2) and Carmet Marine, Bromborough (DKS-SA4.3) will normally be safeguarded from non-port related development.</p> <p>G. Non-port related development will only be permitted within the safeguarded area if it can be demonstrated that:</p> <ol style="list-style-type: none"> 1. consideration has been given to the future needs of the Port; and 2. the continued operations of the Port would not be unacceptably prejudiced; or 3. the development requires a coastal location. <p>H. At Port West (DKS-SA2.1), where a site has been in port-related use, development within Use Class B2 or B8 will be permitted within the safeguarded area if it can be demonstrated that:</p> <ol style="list-style-type: none"> 1. consideration has been given to the future needs of the Port; and 2. the continued operations of the Port would not be unacceptably prejudiced. 	<p>policy wording is already included in the policy.</p> <p>Policy WS4.3 has no negative HRA implications. Therefore, it is screened out from Appropriate Assessment.</p>
<p>Policy WS4.4 – Tourism</p>	<p><u>Protecting Tourism Assets</u></p> <p>I. Development will be permitted within or adjacent to the Urban Tourism Areas shown on the Policies Map where it will maintain or enhance:</p> <ol style="list-style-type: none"> 1. uninterrupted public access to and along the Wirral waterfront; and 2. the character and attractiveness of the area for visitors and tourism. 	<p>Likely Significant Effects of Policy WS4.5 on European sites cannot be excluded.</p> <p>This policy stipulates the protection of tourism assets throughout Wirral Borough. It promotes tourism development in urban locations that may</p>

	<p>J. Development in other urban coastal locations, where coastal access is currently limited, should take opportunities to increase public access to and along the Wirral coastline where this is compatible with environmental designations.</p> <p><u>Tourism Development</u></p> <p>K. Proposals for tourist attractions and visitor facilities, including hotels, will be encouraged in the urban area outside the Primarily Residential Areas shown on the Policies Map, in particular at:</p> <ul style="list-style-type: none"> i. New Brighton; ii. The central and commercial areas of Birkenhead; iii. The Birkenhead Waterfront; and iv. other urban coastal locations including Hoylake and West Kirby. <p>L. Proposals for visitor facilities in the Rural Area will be supported where they meet the tests of national Green Belt Policy.</p>	<p>increase public access to Wirral's coastline, provided that this does not adversely impact environmental designations. For example, tourism developments in Hoylake and West Kirby are highlighted, and both areas are known to encompass SPA / Ramsar bird roosting and foraging locations.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Recreational pressure (both in SPAs and Ramsars, and functionally linked habitat) • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy WS4.4 is screened in for Appropriate Assessment.</p>
Policy WS5 – Strategy for Green and Blue Infrastructure, Open Space, Biodiversity and Landscape Protection		

<p>Policy WS5.1 – Green and Blue Infrastructure Networks</p>	<p>A. Development proposals will contribute to high quality, coherent and resilient networks of blue and green infrastructure in Wirral. This will be achieved by:</p> <ol style="list-style-type: none"> 1. Protecting existing green and blue infrastructure and ecological assets and networks. The loss of green and blue infrastructure is unacceptable and would only be considered in exceptional circumstances and where provision is made for appropriate compensatory measures, mitigation or replacement in line with the relevant legislation. 2. Enhancing the quality, accessibility (where ecologically appropriate) and functionality of green and blue infrastructure including for children's play, footpath networks, making space for water and providing net social gains and measurable biodiversity gains. 3. Creating new accessible green and blue infrastructure as part of landscape and space in new development, and supporting urban greening measures within the built environment including landscaping, public realm and sustainable drainage systems. 4. Connecting green and blue infrastructure with the built environment and with other open space, including the creation, extension or enhancement of greenways, green and blue corridors, public rights of way and cycleways. 5. Maintaining the quality of the blue and green infrastructure assets. <p>B. Development proposals will be required to contribute appropriately towards the protection, enhancement, creation, connection and/or maintenance of green and blue infrastructure of a proportionate size, type and standard relative to the development. Contributions will be required to reflect: the physical characteristics of the site; the type and function of the development proposed; and the character of the surrounding area. Where on site provision is not possible, financial contributions will be sought to make appropriate provision elsewhere with regard to the relevant priority opportunities as highlighted in Policy WS 5.1 C. and WS 5.4.</p> <p>C. The protection, enhancement, creation, connection and maintenance of green and blue infrastructure will secure multi-functional green and blue infrastructure benefits from development which will, where relevant, contribute to priority opportunities having regard to: the Green and Blue Infrastructure Study; Liverpool City Region Recreational Disturbance Avoidance and Mitigation Strategy for nature conservation; the Tree, Hedgerow and Woodland Strategy; forthcoming Local Nature Recovery Strategy and Nature Recovery Network; and the North West River Basin Management Plan and River Dee Basin Management Plan. At all times appropriate plant and tree species should be selected which includes native species and those of local provenance.</p>	<p>There are no LSEs of Policy WS5.1 on European sites.</p> <p>This development management policy protects existing green and blue infrastructure in Wirral Borough, unless any loss will be compensated or mitigated for. New developments will have to create new accessible green and blue infrastructure features. Developer contributions towards the Green and Blue Infrastructure Network will be viewed in the context of strategic documents, such as the Liverpool City Region Recreation Mitigation and Avoidance Strategy.</p> <p>The protection and enhancement of the Green and Blue Infrastructure Network is an essential component of mitigation for European sites. It provides opportunities for recreation (mitigating recreational pressure) and preserves wildlife habitat (mitigating against the loss of functionally linked habitat). Policy WS5.1 is positive for European sites.</p> <p>There are no linking impact pathways present. Therefore,</p>
--	---	---

		Policy WS5.1 is screened out from Appropriate Assessment.												
Policy WS5.2 – Open Space Provision	<p>D. New residential development will be required to contribute to the improvement and enhancement of open space, which may be secured through a mix of on-site provision and/or financial contributions, based on the following standards:</p> <ol style="list-style-type: none"> 1. the provision of 37 square metres of publicly accessible open space per person, of which 2.5 square metres per person will be for equipped children's play or 80 square metres per dwelling, of which 6 square metres will be for equipped children's play; and 2. that all new dwellings should be within 720 metres safe walking distance of a publicly accessible open space or designated Tourism Area of 1.5 hectares or above; and 3. that all new dwellings should be within 400m safe walking distance of an appropriately equipped open-access facility for children's play. <p>E. Where new on-site provision is not required or cannot be achieved, an equivalent financial contribution will be required to secure improvements to existing local facilities and/ or access to strategic provision, within the catchment of the development proposed. A residual contribution will be sought where only provision for children's play is required under clause F below.</p> <p>F. Where 50 or more new dwellings will be further than 720 metres safe walking distance of a publicly accessible open space of 1.5 hectares or above, new on-site provision will be required at 37 square metres per person or 80 square metres per dwelling, with provision for children's play on the following basis:</p> <table> <tr> <th>Size of development</th><th>Type of play provision (or equivalent)</th><th>Minimum size of activity area for play</th></tr> <tr> <td>50 dwellings (or 109 residents) or more</td><td>Local Area for Play (LAP)</td><td>100 square metres</td></tr> <tr> <td>67 dwellings (or 160 residents) or more</td><td>Local Equipped Area for Play (LEAP)</td><td>400 square metres</td></tr> <tr> <td>167 dwellings (or 400 residents) or more</td><td>Neighbourhood Equipped Area for Play (NEAP)</td><td>1,000 square metres</td></tr> </table>	Size of development	Type of play provision (or equivalent)	Minimum size of activity area for play	50 dwellings (or 109 residents) or more	Local Area for Play (LAP)	100 square metres	67 dwellings (or 160 residents) or more	Local Equipped Area for Play (LEAP)	400 square metres	167 dwellings (or 400 residents) or more	Neighbourhood Equipped Area for Play (NEAP)	1,000 square metres	<p>There are no LSEs of Policy WS5.2 on European sites.</p> <p>This infrastructure management policy sets out the requirements for new residential developments regarding open space provision. For example, sites of more than 50 dwellings will need to provide on-site open space. All new dwellings must be within 720m of publicly accessible open space of 1.5ha.</p> <p>The provision of open space is an essential component for the wellbeing of society and the protection of European sites. Open spaces close to home help absorb recreational pressure locally and thus reduce the number of recreational visits in more sensitive sites. Policy WS5.2 is positive for European sites.</p> <p>There are no linking impact pathways present. Therefore, Policy WS5.2 is screened out from Appropriate Assessment.</p>
Size of development	Type of play provision (or equivalent)	Minimum size of activity area for play												
50 dwellings (or 109 residents) or more	Local Area for Play (LAP)	100 square metres												
67 dwellings (or 160 residents) or more	Local Equipped Area for Play (LEAP)	400 square metres												
167 dwellings (or 400 residents) or more	Neighbourhood Equipped Area for Play (NEAP)	1,000 square metres												

	<p>G. Where 50 or more new dwellings will be within 720 metres safe walking distance of a publicly accessible open space of 1.5 hectares or above but not within 400m safe walking distance of an appropriately equipped facility for children's play, appropriate provision for play in line with clause F above must be made on a site (or sites) of no less than 0.40 hectares.</p> <p>H. Off-site provision will be accepted where this would secure an equivalent or better level of provision on an appropriate site. The cost of any agreed on-site or off-site provision will be deducted from the contribution to secure improvements to existing local or strategic facilities or strategic provision required under clause D.</p> <p>I. New on-site open space should, wherever possible, be provided as a single site for public recreation, centrally located to serve the development as a whole unless additional provision is required to secure appropriate access to safe children's play within 400m of each new dwelling. Where a facility for play or outdoor sport is provided, an appropriate distance must be maintained between the main activity area and the nearest residential property boundary, to protect the amenity of neighbouring residents.</p> <p>J. Within Regeneration Areas, strategic provision should be identified within an appropriate master plan or neighbourhood framework. Where appropriate on-site provision would not be achievable, alternative well-designed, high quality open space must be provided, which may include access to formal or informal areas for local recreation or play, waterfront access, tree lined streets, green roofs, access to community growing areas, bespoke approaches to community involvement in maintenance and improved access to appropriate strategic provision.</p>	
Policy WS5.3 – Outdoor Sports Provision	<p>K. New residential development will also be required to contribute to the provision of appropriate facilities for outdoor sport and recreation in line with the needs identified per person within the latest Playing Pitch and Outdoor Sports Strategy for the Borough. Where on-site provision would not be appropriate or achievable, an appropriate financial contribution will be required to secure improvements to existing facilities and/or to support the delivery of appropriate strategic provision to serve the development proposed.</p>	<p>There are no LSEs of Policy WS5.3 on European sites.</p> <p>This infrastructure management policy sets out the requirements for new residential developments to contribute to the provision of appropriate facilities for outdoor sport and recreation in line with the latest Playing Pitch and Outdoor Sports Strategy.</p> <p>The provision of recreational outdoor space is an essential component for the wellbeing of</p>

		<p>society and the protection of European sites. Open spaces close to home help absorb recreational pressure locally and thus reduce the number of recreational visits in more sensitive sites. Policy WS5.3 is positive for European sites.</p> <p>There are no linking impact pathways present. Therefore, Policy WS5.3 is screened out from Appropriate Assessment.</p>
Policy WS5.4 – Ecological Networks	<p>L. Where relevant, development proposals must ensure that the biodiversity assets of the Borough are protected, enhanced and functionally connected within coherent and resilient ecological networks. Biodiversity Net Gain will be delivered appropriately in response to the site characteristics and location:</p> <ol style="list-style-type: none"> 1. Priority should be given to enhancing the quality, connectivity and resilience of habitat within the Liverpool City Region Ecological Network, Local Nature Recovery Strategy and Nature Recovery Network, including the Liverpool City Region Nature Improvement Area, Priority Habitat creation, restoration or enhancement, or the Nature Improvement Area Focus Areas shown on the Policies Map at: <ol style="list-style-type: none"> i. North Wirral Coast and Liverpool Bay (NIA-1) ii. Dee Estuary (NIA-2) iii. West Wirral Heathlands and Arrowe Park (NIA-3) iv. River Birket Corridor (NIA-4) v. Mersey Estuary (NIA-5) vi. East Wirral Heathlands (NIA-6) vii. Dibbinsdale, Raby Mere and Eastham Country Park (NIA-7) 2. Development within the Nature Improvement Area Focus Areas shown on the Policies Map, should: <ol style="list-style-type: none"> i. Enable the effective functioning of the Nature Improvement Area 	<p>There are no LSEs of Policy WS5.4 on European sites.</p> <p>Policy WS5.4 protects and enhances the biodiversity assets of the borough, such as through the application of Biodiversity Net Gain. It explicitly gives priority to the Liverpool City Region Ecological Network, which includes the North Wirral Coast, Liverpool Bay, Dee Estuary and Mersey Estuary. The measures to be delivered include biodiversity enhancement, habitat creation and management.</p> <p>While this policy does not explicitly address European sites, it is considered that these</p>

	<ul style="list-style-type: none"> ii. Contribute to the opportunities for habitat creation, restoration or enhancement as set out in the Nature Improvement Area Focus Area Profiles; and iii. Deliver biodiversity enhancement measures where the proposed development may have a potential impact on the Nature Improvement Area. <p>M. Following the application of the biodiversity harm avoidance, mitigation and compensation hierarchy (set out in Policy WD 3 Biodiversity and Geodiversity), all development must deliver a minimum 10% biodiversity net gain calculated using the DEFRA metric. Where development is located on Council owned land it must deliver minimum 20% biodiversity net gain. If recent detrimental change or damage has occurred to the biodiversity value of the site then the most recent survey undertaken before the change, or an appropriate habitat typology will be applied as the baseline from which net gain will be calculated.</p>	<p>measures would also benefit SPA / Ramsar birds. Overall, this is a positive policy for European sites.</p> <p>There are no linking impact pathways present. Therefore, Policy WS5.4 is screened out from Appropriate Assessment.</p>
Policy WS5.5 – Mitigating Recreational Disturbance on International Sites for Nature Conservation	<p>N. Following screening, developments that are deemed likely to have a significant adverse effect (either individually or in combination with other developments) on European Designated Sites for Nature Conservation must satisfy the requirements of the Habitats Regulations, determining site specific impacts and avoiding or mitigating significant adverse impacts where identified. A precautionary approach to each stage of the Habitats Regulations Assessment process must be taken.</p> <p>O. Where appropriate, contributions from developments will be secured towards mitigation measures identified in the LCR Recreational Disturbance Avoidance and Mitigation Strategy (RMS) which will be completed during the early part of the plan period. It is intended that the RMS will be implemented via a Supplementary Planning Document in cooperation with all LCR authorities and Natural England and it will be funded by developer contributions in respect of residential and tourism accommodation developments.</p> <p>P. Prior to the completion of the RMS, the Council will seek contributions as set out in the Wirral Recreational Management Interim Approach document, where appropriate, from residential proposals of 10 or more dwellings to deliver all measures identified (including strategic measures) through project level HRAs, or otherwise, to mitigate any recreational disturbance impacts in compliance with the Habitats Regulations and Habitats Directive.</p>	<p>There are no LSEs of Policy WS5.5 on European sites.</p> <p>Policy WS5.5 provides the core policy mitigation framework against adverse recreational pressure impacts on SPA / Ramsar bird interests. It specifies that developer contributions will be secured to deliver mitigation in line with the LCR RAMS (to be completed in the early part of the Plan period). In the interim period, Wirral Borough Council will seek financial contributions from residential properties of 10 or more dwellings, as detailed in a future Recreation Mitigation Strategy Wirral Interim Approach document. This policy is very positive for the European sites adjoining the Wirral peninsula.</p>

		There are no linking impact pathways present. Therefore, Policy WS5.5 is screened out from Appropriate Assessment.
Policy WS5.6 – Protecting Geodiversity	Q. Where relevant, development proposals must ensure that the geodiversity assets shown on the Policies Map are protected and development is compatible with: retaining the earth science interest of the site; enhancement of the earth science interest; and public access to the site. Applications for development likely to affect a geodiversity asset must be accompanied by a geological impact assessment.	There are no LSEs of Policy WS5.6 on European sites. This is a development management policy that protects geodiversity interest across Wirral Borough, including any earth science interest. However, geodiversity has no bearing on European sites. Policy WS5.6 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.
Policy WS5.7 – Maintenance of Green Infrastructure and Open Space Provision	R. Developments involving new on-site and/ or off-site provision of all types of green infrastructure and open space will be required to include a management plan securing appropriate arrangements for ongoing management and maintenance throughout the lifetime of the development.	There are no LSEs of Policy WS5.7 on European sites. This is a development management policy that provides for management plans for green infrastructure and open spaces, securing their maintenance in perpetuity. This is considered to be positive for European sites as this ensures the long-term effectiveness of

		<p>Wirral Borough's mitigation approach.</p> <p>Policy WS5.7 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS5.8 – Landscape Character	<p>S. New development should have regard to the recommendations of the most recent Landscape Character Assessment for the Borough. Special attention should be given to protecting the landscape features and visual appearance of the Areas of Special Landscape Value (ASLV) shown on the Policies Map and listed below:</p> <ul style="list-style-type: none"> i. Central Wirral Sandstone Hills ASLV - Bidston Hill (LAN-SA3.1) ii. Central Wirral Sandstone Hills ASLV - Caldys Hill (LAN-SA6.1) iii. Dee Estuary ASLV (LAN-SA8.1) iv. Thornton Hough Estates ASLV (LAN-SA8.2) v. Central Wirral Sandstone Hills ASLV - West Wirral (LAN-SA8.3) <p>T. Development will not be permitted where the visual impact on the local and wider landscape would be inappropriate in terms of character, appearance and landscape setting of the surrounding area.</p>	<p>There are no LSEs of Policy WS5.8 on European sites.</p> <p>This is a development management policy that preserves the landscape character of the borough according to the most recent Landscape Character Assessment. However, the protection of landscape character has no bearing on European sites.</p> <p>Policy WS5.8 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS5.9 – Evidence of Approach	<p>U. Planning applications will be required to be accompanied by a statement setting out how the benefits required in this Policy have been achieved and how the proposal will meet the requirements specified, and contribute to the aims of this Policy.</p>	<p>There are no LSEs of Policy WS5.9 on European sites.</p> <p>This policy requires all planning applications to submit a statement, detailing how the contents of the preceding policies have been addressed. This is a positive policy,</p>

		<p>because it provides further assurance that nature conservation is successfully delivered.</p> <p>Policy WS5.9 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS6 – Placemaking for Wirral		
Policy WS6.1 – Placemaking Principles	<p>A. Development proposals, must demonstrate that the following placemaking principles have been adhered to in a manner which is commensurate with the scale and nature of development and which responds well to the local context and character of the area. Developments are required to:</p> <ol style="list-style-type: none"> 1. provide high quality and well designed development to promote healthy and active lifestyles, vibrant communities, and contribute positively to the efficient revitalisation and regeneration of existing neighbourhoods; 2. enhance the key features, visual amenity, character, and distinctiveness of existing settlements; 3. ensure permeability within the site through the provision of a choice of safe, direct and attractive routes, and provide for positive integration with adjacent communities and services, and public realm, and where relevant and safe to do so, waterfront access; 4. contribute to and where relevant provide for the strategic provision of facilities for open space and recreation, shops, schools and health services; 5. provide high quality, sustainable connections and access internally and externally to the site, with priority given to walking, cycling and public transport within the design, ensuring that people of different ages, abilities and characteristics can move around internally and externally without difficulty over the lifetime of the development; 6. be flood resilient throughout its lifetime and incorporate sustainable drainage and water management systems and adaptability to address climate change; 	<p>There are no LSEs of Policy WS6.1 on European sites.</p> <p>This is a development management policy which identifies the placemaking principles for development proposals in Wirral Borough, including high quality, good design, permeability, flood resilience, landscaping and others. However, placemaking principles have no bearing on European sites.</p> <p>Policy WS6.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

	<ol style="list-style-type: none"> 7. conserve and positively enhance trees, landscapes, habitats and biodiversity and provide appropriate green and blue infrastructure including landscaping and amenity space including giving consideration to the use of communal space for growing food; 8. conserve, sustain and enhance the character, integrity and setting of the historic environment, including designated and non designated heritage assets; 9. create natural surveillance and prevent the opportunity for crime and anti-social behaviour in a way that enhances community cohesion and the character of the area; 10. deliver appropriate public art in the public realm; and 11. provide for the long term management of the shared public realm and community space throughout the lifetime of the development proposed. 	
Policy WS6.2 – Gateway Areas	<p>B. Major development within 100m of the main gateways shown on the Policies Map, will only be permitted where its design is appropriate to and respects the location and context of the gateway. New landmark buildings of exceptional quality will be accepted where they help to define or emphasise the significance of the gateway.</p>	<p>There are no LSEs of Policy WS6.2 on European sites.</p> <p>This development management policy specifies that there are to be no major developments within 100m of the main gateways. However, this has no relevance for European sites.</p> <p>Policy WS6.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS6.3 – Masterplan Areas	<p>C. Development proposals within the following Masterplan Areas shown on the Policies Map, must have regard to a Masterplan which has been endorsed by the Council:</p> <p style="text-align: center;">Masterplan Area</p> <hr/> <p style="text-align: center;">MPA-RA1.1 – Wallasey Town Hall Quarter and Demesne Street Waterside Neighbourhood</p>	<p>There are no LSEs of Policy WS6.3 on European sites.</p> <p>This development management policy specifies the growth areas that will be subject to a Masterplan, which include the</p>

	MPA-RA2.1 – Birkenhead Road Masterplan Area	<p>East Float and West Kirby. These are notable because they lie adjacent to areas that support SPA / Ramsar bird populations. Masterplans are partly required to ensure the timely delivery of support infrastructure. However, setting a requirement for Masterplans generally, has no implications for European sites.</p> <p>Policy WS6.3 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
	MPA-RA2.2 – East Street Masterplan Area	
	MPA-RA3.1 – Woodside and A41 Gyratory	
	MPA-RA4.1 – Birkenhead Commercial District and Mixed Used Quarter	
	MPA-RA4.2 – Charing Cross Quarter	
	MPA-RA4.3 – Dock Branch Park (northern section)	
	MPA-RA5.1 – Hind Street Urban Garden Village	
	MPA-RA5.2 – St. Werburgh's Quarter	
	MPA-RA6.1 – East Float	
	MPA-RA6.2 – MEA Park, Birkenhead	
	MPA-RA6.3 – Bidston Dock	
	MPA-RA7.1 – Britannia New Exemplar Residential Neighbourhood	
	MPA-RA9.1 – Liscard	
	MPA-RA10.1 – Marine Promenade, New Brighton	
	MPA-RA11.1 – New Ferry	
	MPA-SA6.1 – West Kirby Concourse	
	MPA-SA4.1 – Former D1 Oils, Bromborough	
	MPA-SA4.2 – Former MOD and Riverside Office Park, Bromborough	

	<p>D. The approach to Masterplan production, including the scope and parameters of Masterplans, should be proportionate and appropriate to the nature of the Masterplan Area itself. The approach should be discussed and agreed with the Council prior to the submission of any site-specific planning proposals.</p> <p>E. Masterplans will be expected to front-load the planning process and promote the timely delivery of comprehensive high-quality regeneration, development and infrastructure in line with the National Design Guide.</p> <p>F. Masterplans should demonstrate how a comprehensive, phased and coordinated approach shall be taken to site development setting out how necessary infrastructure will be delivered on a phased basis.</p> <p>G. Masterplans should have regard to relevant strategies and background evidence base documents produced by the Council, including Neighbourhood Frameworks.</p> <p>H. Development proposals within Masterplan Areas must demonstrate that they will not prejudice the timely delivery of comprehensive high-quality regeneration, development or infrastructure of the wider Regeneration Area.</p>	
Policy WS7 – Principles of Design		
Policy WS7.1 – Design Principles	<p>A. Development proposals will be required to demonstrate that the development has been planned so that its function and appearance will enhance the character of the area and provide a high standard of amenity for existing and future occupiers, having regard to: Policy WS 8 Strategy for Sustainable Construction, Renewable and Low Carbon Energy; published advice in the Council's Supplementary Planning Documents and Design Codes; and the National Design Guide or any superseding guidance.</p> <p>B. Development proposals should in particular demonstrate how they have, where appropriate, addressed the following design principles and requirements:</p> <ol style="list-style-type: none"> 1. be inclusive, enabling use by all, irrespective of their physical ability and other characteristics such as, but not limited to, age; 2. be visually attractive and positively enhance the character, appearance and setting of the surrounding area; 3. ensure that the density, height, scale, massing and siting is appropriate in context; 4. incorporate high quality materials which complement and enhance surrounding areas and adjacent development; 5. provide a high standard of internal and external amenity that creates comfortable places to live, work and visit - addressing thermal and acoustic comfort; 	<p>There are no LSEs of Policy WS7.1 on European sites.</p> <p>This is a design management policy that identifies the design principles for development proposals in Wirral Borough, including the density, height, scale, massing, siting, high-quality landscaping, highway access and waste storage facilities. Some of these parameters (e.g. the density, height and siting of large developments) are likely to have implications for SPA / Ramsar birds such as through impacts on sight- and flightlines. The</p>

	<ol style="list-style-type: none"> 6. use active design principles to make active travel and physical activity an easy, practical and attractive choice; 7. contribute to the creation of adaptable, safe and accessible places with active frontages; 8. provide for the protection and enhancement of existing healthy trees and hedgerows of visual and wildlife value; 9. provide or protect high quality landscaping including unifying features such as gates, piers, walls, boundary treatment between public and private areas 10. ensure that extensions to existing buildings will match or complement the design and materials of the existing buildings; 11. provide underground service ducts to enable future connections for open source cable, broadband and electronic communications, electric car charging, waste collection and district heating networks, where relevant, and minimise the need for external apparatus; 12. provide an appropriate standard of sustainable transport and highway access, including for emergency services, delivery and waste collection vehicles; 13. provide integrated waste storage and on site provision for collection, recycling and management of waste likely to be generated by the development; 14. provide level access and appropriate internal and external space for lifetime needs; 15. address any issues related to public health and where relevant submit an appropriate Health Impact Assessment; 16. in flatted development to provide for communal space for social purposes and for the storage of belongings where appropriate. 	<p>application of this policy may thus be positive for European sites.</p> <p>Policy WS7.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS7.2 – Privacy and Amenity	<p>C. Development proposals must take account of the privacy and amenity of the development's users and neighbours. Proposals will be required to:</p> <ol style="list-style-type: none"> 1. demonstrate that the proposed uses will be harmonious with neighbouring uses, avoiding unacceptable nuisance and disturbance; 2. provide adequate sunlight, daylight and open aspects to all parts of the development and adjacent buildings and land (including any private amenity space); 3. avoid direct overlooking and loss of privacy detrimental to the living conditions of neighbouring residents and the residents of the proposed development; 4. not result in an over-bearing or overly enclosed form of development which materially harms the outlook of occupiers of neighbouring properties or the users of the proposed development; and 	<p>There are no LSEs of Policy WS7.2 on European sites.</p> <p>This is a development management policy that addresses the privacy and amenity of Wirral's residents by ensuring harmonious neighbouring uses, sufficient sunlight and preventing enclosure. However, these aspects have no bearing on European sites.</p>

	5. adequately address issues of vibration, noise, dust, fumes, odour, light pollution, air quality, waste collection and microclimatic conditions likely to arise from any use or activities as a result of the development or from neighbouring uses or activities.	Policy WS7.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.
Policy WS7.3 – Agent of Change	D. The responsibility for mitigating impacts of established activities or uses on the proposed new development will lie with the agent of change i.e. the proposed new development. Therefore development proposals should be designed to ensure that established uses remain viable and can continue to grow without unreasonable restrictions being placed upon them in respect of noise and other amenity matters.	There are no LSEs of Policy WS7.3 on European sites. This is a development management policy that ensures that development proposals do not affect existing surrounding uses. However, this has no bearing on European sites. Policy WS7.3 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.
Policy WS7.4 – Parking	E. Development proposals must provide well-designed, safe and appropriately supervised parking, including parking for disabled people, and electric vehicle charging facilities that incorporate appropriate landscaping and materials to reduce visual impact and not dominate the streetscene, in accordance with the parking standards at Appendix 8. F. In highly accessible areas where alternative modes of transport are available that can meet the likely demand and where mitigation measures are introduced, the acceptable levels of car parking may be below the parking standards.	There are no LSEs of Policy WS7.4 on European sites. This is a development management policy that specifies car parking provision across the borough. The policy ensures adequate provision of electric vehicle infrastructure and also highlights that lower levels of car parking may be acceptable where alternative modes of transport are provided. These aspects are important in helping reduce

		<p>fossil-fuelled traffic and atmospheric nitrogen deposition in sensitive SPAs / Ramsar / SACs. Overall, this is considered to be a positive policy for European sites.</p> <p>Policy WS7.4 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS7.5 – Tall Buildings	<p>G. Proposals for tall buildings must adhere to the following principles. Proposals which fail to address these matters will be refused:</p> <ol style="list-style-type: none"> 1. Design must be exceptional and of the highest quality, grounded in context. It should: <ol style="list-style-type: none"> i. add to local distinctiveness, identity and placemaking; acknowledge and respect the heritage context; and activate the streetscape; and ii. make positive contributions to public space and the environment at ground floor level. Provide high quality private and communal space and public realm including the use of outdoor space 2. The design must be inclusive in design enabling use and occupation by all generations and demonstrate positive consideration of: <ol style="list-style-type: none"> i. scale; ii. form and massing; iii. proportion and silhouette; iv. detailed surface design; v. facing materials; vi. relationship to other structures; vii. impact on streetscape, near and approach views; 	<p>There are no LSEs of Policy WS7.5 on European sites.</p> <p>This is a development management policy that stipulates design principles for tall buildings, including exceptional design, scale, form and massing, facing materials and others. It also identifies that assessments in relation to wind, light issues, noise and air quality will be required. However, these parameters have no bearing on European sites.</p> <p>Policy WS7.5 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

	<p>viii. impact on cityscape, local and distant views; and</p> <p>ix. impact on the skyline.</p> <p>H. Townscape and impact assessments will be required with proposals that identify the impact of the structure and assess harm against any public benefit. They should demonstrate how the structures will enhance navigation, wayfinding and landmarking where appropriate, and facilitate permeability of the townscape.</p> <p>I. Micro- climate assessments will be required which demonstrate that the proposal either as stand- alone or as part of a cumulative series of buildings, will not damage local environmental conditions. These are to include wind modelling, shadow/ light issues, noise, air quality, privacy and amenity.</p> <p>J. Fully detailed proposals demonstrating the quality of finish, servicing, ventilation, structure, car parking and other logistical matters should be provided rather than dealt with as part of Reserved Matters applications.</p>	
Policy WS8 – Strategy for Sustainable Construction, Renewable and Low Carbon Energy		
Policy WS8.1 – Energy Hierarchy	<p>A. Development proposals should implement the energy hierarchy within the design of new buildings by prioritising fabric first, passive design and landscaping measures to minimise energy demand for heating, lighting and cooling. The design of buildings, in order of importance, should:</p> <ol style="list-style-type: none"> 1. minimise energy demand (using less energy and managing energy demand during construction and operation); 2. maximise energy efficiency (include measures in the development to use energy efficiently); and 3. utilise renewable energy (maximise the use of building mounted and local sources of renewable energy); 4. utilise low carbon energy (where renewable energy is not an option); 5. utilise other energy sources (where low carbon and renewable energy is not an option); 6. compensate or offset residual carbon emissions on site; 7. compensate or offset residual carbon emissions off site. 	<p>There are no LSEs of Policy WS8.1 on European sites.</p> <p>This is a development management policy that specifies the energy hierarchy for development proposals in Wirral Borough, identifying a fabric first and passive design to minimize energy demand. While this is a positive policy for the environment, it has no relevance to European sites.</p> <p>Policy WS8.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

<p>Policy WS8.2 – Sustainable Construction – Energy Efficiency, Overheating and Cooling, and Water Usage</p>	<p>B. All development proposals should take measures to address potential climate change implications. This should include reducing carbon emissions associated with the construction, operation and decommissioning of developments wherever possible thus addressing embodied carbon and:</p> <ol style="list-style-type: none"> 1. All development should be ‘zero carbon ready by design’ to minimise the amount of energy needed to heat and cool buildings through landform, layout, building orientation, massing and landscaping, and minimise any retrofit. 2. Wherever possible and viable, all new buildings should be certified to a Passivhaus or equivalent standard. A pre construction check and certification will be required. The energy efficiency targets sought are a space heating demand of less than 15 kWh/sq.m/ yr and the following Energy Use Intensities: <ol style="list-style-type: none"> i. Residential development – 35 kWh/sq.m/yr ii. Commercial development – 70 kWh/sq.m/yr iii. Schools – 65 kWh/sq.m/yr 3. Proposals for new and refurbished buildings should demonstrate that they have been tested to ensure the buildings will perform as predicted. Planning permissions granted will include a planning condition to require the provision of a Post Occupancy Evaluation Report unless exempted by clause B.2. Where the report identifies poor energy performance compared to that predicted and makes recommendations for reasonable corrective action, the applicant must demonstrate that those actions have been implemented or compensated for through renewable energy generation before the condition will be discharged. 4. Development proposals should reduce potential overheating and reliance on air conditioning systems and demonstrate this in accordance with the following cooling hierarchy: <ol style="list-style-type: none"> i. Minimise internal heat generation through energy efficient design. ii. Reduce the amount of heat entering the building in summer through orientation, shading, albedo, fenestration, insulation and green roofs and walls. iii. Manage the heat within the building through exposed internal thermal mass and high ceilings. iv. Passive ventilation. 	<p>There are no LSEs of Policy WS8.2 on European sites.</p> <p>This is a development management policy that promotes sustainable construction, energy efficiency and water usage efficiency (including rainwater harvesting and grey water recycling). Requirements include a zero carbon-ready design and achievement of Passivhaus standards.</p> <p>Minimising water usage and recycling grey water has potential positive impacts on European sites that are sensitive to water quality / quantity changes. This is particularly important for the Wirral peninsula, which is adjoined by sensitive sites on all sides.</p> <p>Policy WS8.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
--	--	--

	<p>v. Mechanical ventilation.</p> <p>vi. Active cooling systems.</p> <p>C. All development should seek to identify water usage efficiencies and the reuse of water in their design. This includes consideration of rainwater harvesting and water recycling systems using grey water. Residential development is also subject to the water efficiency standards in Policy WS 3.1 Housing Design Standards.</p>	
Policy WS8.3 – Improvements to Historic Buildings	<p>D. Proposals to enhance the environmental performance of heritage assets will be supported where a sensitive approach to design and specification ensures that the significance of the asset is not compromised. Any works should be undertaken based on a thorough understanding of the building's historic evolution and construction (where these matters relate to the heritage significance of the asset), architectural and historic significance and demonstration of the buildings environmental performance. Planning applications should be accompanied by an assessment of the buildings current fabric and energy performance and that expected on completion of the works.</p>	<p>There are no LSEs of Policy WS8.3 on European sites.</p> <p>This is a development management policy that supports proposals to enhance the environmental performance of heritage assets. However, this has no direct bearing on European sites.</p> <p>Policy WS8.3 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS8.4 – On-Site Renewable and Low Carbon Energy	<p>E. Development proposals should demonstrate how residual carbon emissions can be addressed through the use of on site renewable and low carbon energy supplies, unless it is demonstrated that the scheme is not suitable or feasible for this form of energy provision.</p>	<p>There are no LSEs of Policy WS8.4 on European sites.</p> <p>This is a development management policy that addresses residual carbon emissions in development proposals. While positive for the environment, this policy has no bearing on European sites.</p>

		Policy WS8.4 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.
Policy WS8.5 – Carbon Compensation through Renewable and Low Carbon Energy	F. Where a development proposal cannot demonstrate that net zero carbon can be met on-site, applicants should demonstrate how residual carbon emissions can be addressed with renewable energy sources off site, and make provision where feasible.	<p>There are no LSEs of Policy WS8.5 on European sites.</p> <p>This is a development management policy that obliges development proposals which cannot meet net-zero targets to offset their residual carbon emissions. While this is a positive policy for the environment, it has no bearing on European sites.</p> <p>Policy WS8.5 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS8.6 – Heat and Power Networks	<p>G. All development proposals in proximity of an existing or proposed district heat or power network, combined heat and power (CHP), combined cooling, heat and power (CCHP) station will be expected to:</p> <ol style="list-style-type: none"> 1. connect to the network unless it can be demonstrated that the scheme is not suitable or feasible for this form of energy provision; or, 2. where a development is not to be connected to a heat network, but its' location is suitable for a future network, the proposal should demonstrate how the design makes the development 'district heating ready' to enable connection at a later date. <p>H. Any developments of combined heat and power (CHP), combined cooling heat and power (CCHP) station or district energy networks for heat or power must demonstrate:</p> <ol style="list-style-type: none"> 1. a minimum of 85% of the energy supplied is from renewable or low-carbon sources; and 	<p>There are no LSEs of Policy WS8.6 on European sites.</p> <p>This is a development management policy that sets out requirements for proposals in proximity to existing or future district heat or power networks (these must be connected to unless the proposed scheme is not suitable to do so). This policy has no bearing on European sites.</p>

	<p>2. how any heat produced will be productively used on site or linked to a district energy network; and</p> <p>3. how the design and capacity for future expansion to facilitate incorporation of new development enables additional low carbon technology, such as waste heat recovery, heat pumps and electric heating.</p> <p>I. The Birkenhead Heat Network Demand Assessment Area identified for a future heat network is shown on the Policies Map (DHNA-1). Proposals within this Area will be required to comply with Part G above and Policy WS 10.</p>	<p>Policy WS8.6 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS8.7 – Stand-alone Renewable and Low Carbon Energy Schemes	<p>J. Development proposals for renewable and low carbon energy schemes will be supported in appropriate locations, with particular emphasis on the use of decentralised energy networks and in identified areas of opportunity subject to national green belt policy.</p>	<p>There are no LSEs of Policy WS8.7 on European sites.</p> <p>This is a development management policy that supports renewable and low carbon energy schemes in appropriate locations. While positive for the environment, this policy has no bearing on European sites.</p> <p>Policy WS8.7 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS8.8 – Climate Change and Energy Statement	<p>K. All major development will be required to submit an Energy and Climate Statement. This will demonstrate compliance with all relevant aspects of Policy WS 8. The statement will incorporate a Whole Life Cycle Carbon Emission Assessment, using a recognised methodology, to demonstrate actions taken to reduce operational and embodied carbon from the land use change, construction and use of the building over its entire life.</p>	<p>There are no LSEs of Policy WS8.8 on European sites.</p> <p>This is a development management policy that requires all major developments to submit an Energy and Climate Statement (including a Whole Life Cycle Carbon</p>

		<p>Emission Assessment). While positive for the environment, this requirements has no bearing on European sites.</p> <p>Policy WS8.8 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS9 – Strategy for Transport		
Policy WS9.1 – Transport Schemes	<p>A. Routes required for developing future transport infrastructure are shown on the Policies Map and listed in Appendix 9.</p> <p>B. Land will be safeguarded, as shown on the Policies Map, for:</p> <ol style="list-style-type: none"> 1. Schemes to facilitate the greater use of public transport including new rail station proposals; 2. Schemes to support greater use of walking and cycling (active travel) including new an active travel corridor through Dock Branch Park. <p>C. A Mass Transit system will be developed (route to be determined).</p>	<p>There are no LSEs of Policy WS9.1 on European sites.</p> <p>This is a development management policy that safeguards routes and land for future transport infrastructure, such as public transport and walking / cycling proposals. However, the mere safeguarding of land has no negative HRA implications, particularly because no specific projects are included in the Plan.</p> <p>Policy WS9.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS9.2 – Accessibility and Sustainable Transport	<p>D. Development proposals should where practicable incorporate measures to:</p> <ol style="list-style-type: none"> 1. improve accessibility, connectivity and ease of movement in order to facilitateand promote the prevalence and availability of sustainable travel options; 	<p>There are no LSEs of Policy WS9.2 on European sites.</p>

	<ol style="list-style-type: none"> 2. be easily accessible to existing or future planned sustainable travel options and infrastructure projects which provide a coherent, direct, safe, comfortable and attractive modal alternative to future occupants and reduce private car usage; 3. be designed and laid out to give priority to walking, cycling and public transport and be appropriate for the type and volume of traffic likely to use and service the development; 4. deliver inclusive mobility to residents of all ages and abilities and socio economic circumstances in order to reduce the potential for social exclusion; <p>E. The following Regeneration Areas should connect to inland and waterfront walking and cycling routes to ensure access to promenades and Liverpool City skyline views by all members of the community: Seacombe River Corridor (RA1), Scotts Quay (RA2), Birkenhead Waterfront (RA3), Central Birkenhead (RA4), Hind Street & St Werburghs (RA5), Wirral Waters (RA6), Hamilton Park (RA7) and New Brighton (RA10).</p>	<p>This is a development management policy that promotes the permeability of new developments and prevalence of sustainable transport modes (e.g. walking, cycling and public transport). Several Regeneration Areas must connect to inland and waterfront walking and cycling routes. Promoting sustainable transport is positive for European sites, because it will help reduce traffic volume adjacent to nitrogen-sensitive coastal habitats and SPA / Ramsar bird species.</p> <p>Policy WS9.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS9.3 – Servicing Development	<p>F. Development proposals will be required to:</p> <ol style="list-style-type: none"> 1. incorporate appropriate provision for on-site servicing, parking and manoeuvring for vehicles, including commercial and freight; and 2. provide electric vehicle charging infrastructure in accordance with the Parking Standards in Appendix 8; and 3. include appropriate safe, overlooked, covered cycle storage, and cycle parking; and 4. in major non domestic proposals include showers, bike cages and lockers enclosed within a building. 	<p>There are no LSEs of Policy WS9.3 on European sites.</p> <p>This is a development management policy that requires appropriate servicing infrastructure in new development proposals, including vehicle charging infrastructure, cycle storage and parking. Overall, this policy is positive because its application</p>

		<p>will help drive the shift towards sustainable travel modes.</p> <p>Policy WS9.3 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS9.4 – Impact on Networks	<p>G. Development proposals must demonstrate that the resulting cumulative impacts on the efficient operation of the highway and wider transport network, within and outside the Borough, will not be severe¹⁵³.</p> <p>H. Proposals for major development, will be required to provide a Transport Statement, Traffic Assessment and/ or Travel Plans where appropriate.</p> <p>I. Development proposals will not create hazardous highway conditions.</p> <p>J. Where appropriate, development proposals will be required to demonstrate how they will not result in a material increase or significant change in the character of traffic using a rail crossing, unless it can be demonstrated that safety will not be compromised in consultation with Network Rail.</p>	<p>There are no LSEs of Policy WS9.4 on European sites.</p> <p>This is a development management policy, stipulating that developments must demonstrate that they do not have severe impacts on the highway and wider transport network, such as through Transport Assessments, Traffic Assessments and Travel Plans. However, impacts on traffic networks have no bearing on European sites.</p> <p>Policy WS9.4 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS9.5 – Overnight Lorry Parking	<p>K. Overnight Lorry Parking facilities should be located in urban commercial locations where they would not prejudice residential amenity, planned regeneration or highway safety.</p>	<p>There are no LSEs of Policy WS9.5 on European sites.</p> <p>This policy relates to overnight lorry parking and has no relevance to European sites.</p>

		Policy WS9.5 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.
Policy WS10 – Infrastructure Delivery		
Policy WS10.1 – Provision of Infrastructure	<p>A. Proposals for development should, where appropriate, have regard to the Infrastructure Delivery Plan, which sets out the infrastructure required for the implementation of the Local Plan.</p> <p>B. Proposals must demonstrate that there is sufficient appropriate infrastructure capacity to support the development or that such capacity will be delivered by the proposed development.</p> <p>C. Developers will be expected to provide on-site provision where essential to the acceptable delivery of the development, or where appropriate a financial contribution towards either off-site provision or the enhancement of existing off-site facilities to mitigate the impact of development. This will be determined on a site- by- site basis.</p> <p>D. Development proposals in master plan areas and included in the Infrastructure Delivery Plan must be accompanied by a comprehensive, site wide infrastructure strategy, including that for surface and foul water drainage.</p> <p>E. Planning permission will normally be granted unless:</p> <ol style="list-style-type: none"> 1. existing or proposed infrastructure would not be capable of supporting the scale or nature of the development proposed without significant environmental or other harm assessed in consultation with utilities or other infrastructure providers and any relevant statutory agencies; and 2. a capacity issue exists of which there is no prospect of resolution prior to the delivery of the proposed development. <p>F. Where necessary, proposals should demonstrate how development and supporting infrastructure will be phased in accordance with a timetable which can be secured through an appropriate planning condition and/ or legal agreement. Mitigation measures may require the implementation of development proposals to be phased in order to prevent significant harm to the environment or other interests of acknowledged importance. In most cases, this will mean phasing the completion of development after the completion of mitigation programmes or measures.</p>	<p>There are no LSEs of Policy WS10.1 on European sites.</p> <p>This is an infrastructure management policy that ensures sufficient infrastructure capacity to accommodate new developments. Developers are expected to provide adequate on-site or financial contributions towards off-site infrastructure delivery. If necessary, developments will need to be phased to keep pace with infrastructure delivery.</p> <p>Policy WS10.1 is positive for European sites as it ensures that adequate infrastructure (e.g. sufficient capacity at Wastewater Treatment Works) is in place to serve new developments. This helps protect designated sites that are sensitive to water quality impacts, such as Wirral's estuaries.</p>

		Overall, Policy WS10.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.
Policy WS10.2 – District Heat Networks	<p>G. Major developments located within 500m of a planned future district heat or power network, or combined (cooling) heat and power network, which is considered by the Council likely to be operational within 3 years of a grant of a planning permission, will be required to provide a means to connect to that network and developers shall provide a reasonable financial contribution for the future costs of connection and a commitment to connect via a legal agreement or contract, unless a feasibility assessment demonstrates that connection is not reasonably possible.</p> <p>H. All development proposals within the Birkenhead Heat Network area (as shown on the Policies Map) or in proximity to an existing or proposed district heat or power network, combined heat and power (CHP), combined cooling, heat and power (CCHP) station will be expected to comply with Policy WS 8.6 Heat and Power Networks.</p> <p>I. Land shown on the Policies Map at Marcus Street (ENG-SA2.1), Canning Street (ENG- SA2.2) and at Woodside Waterfront (ENG SA2.3) will be safeguarded for the provision of future energy centres for Birkenhead Heat Network.</p>	<p>There are no LSEs of Policy WS10.2 on European sites.</p> <p>This is an infrastructure management policy that requires major developments within 500m of planned future district heat or power networks to be provided with the means to be connected to these networks. However, this has no relevance for European sites.</p> <p>Overall, Policy WS10.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS10.3 – Enabling Broadband Connection	<p>J. All applications for new dwellings and business premises should demonstrate how the development will be provided with the infrastructure necessary to allow the development to be served by high quality communications infrastructure. Where possible this should be open source. It should include ducting for cabling for full fibre broadband connections as these will, in almost all cases, provide the optimum solution. This should be provided at the same time as other underground services are laid.</p>	<p>There are no LSEs of Policy WS10.3 on European sites.</p> <p>This is an infrastructure development policy that secures high-quality communications infrastructure (e.g. full fibre broadband connection) to new developments. However, this has no bearing on European sites.</p>

		Policy WS10.3 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.
Policy WS10.4 – Facilities for Education, Health, Emergency Services	<p>K. Developer contributions will be sought for education and health services where needed and in line with the requirements in Appendix 10.</p> <p>L. Development proposals which would be detrimental to, or result in the loss of, essential facilities and services that meet community needs will be permitted where it can be clearly demonstrated that:</p> <ol style="list-style-type: none"> 1. the service or facility is no longer needed; and 2. it is no longer practical, desirable or viable to retain. 	<p>There are no LSEs of Policy WS10.4 on European sites.</p> <p>This is an infrastructure development policy that protects essential facilities and services across Wirral Borough. For example, developer contributions will be sought for education and health services. However, the provision of these facilities has no relevance to European sites.</p> <p>Policy WS10.4 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS10.5 – Community, Sport, Leisure and Cultural Facilities	<p>M. Developer contributions will be sought for community, sport, leisure and cultural facilities where needed and in line with the requirements in Appendix 10.</p> <p>N. Proposals that would result in the loss of facilities currently or last used for the provision of community, sport, leisure or cultural activities will be permitted if it is demonstrated through an up-to-date needs assessment that:</p> <ol style="list-style-type: none"> 1. the facility is no longer needed for any of the functions it can perform; and 2. it is no longer practical, desirable or viable to retain them. 	<p>There are no LSEs of Policy WS10.5 on European sites.</p> <p>This is a development management policy that protects existing community, sport, leisure and cultural facilities. However, the protection of such facilities has no negative implications for European sites.</p>

	<p>O. The loss of facilities for sport and recreation shown on the Policies Map and listed in Appendix 11 will only be permitted if it is demonstrated that any necessary replacement facilities and provision for their ongoing maintenance is secured before alternative development will be permitted.</p>	<p>Policy WS10.5 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS10.6 – Open Space	<p>P. Development that would be incompatible with the continued use and benefits of the sites and facilities shown on the Policies Map and listed as open space in Appendix 12 or for sport and recreation in Appendix 11 will not be permitted unless:</p> <ol style="list-style-type: none"> 1. the proposal is for ancillary development for visitors, sport or play that would support the continued use of the site for public amenity, sport or recreation; and/ or 2. appropriate provision would still be made in line with the standards for open space set out within this Local Plan or in line with the requirements identified in an approved strategic assessment for the provision of the type of facility to be lost; and 3. an up-to-date needs assessment demonstrates that the site is not needed for any alternative identified open space or recreational purpose. <p>Q. The loss of grass sports pitches and facilities for outdoor sport or children's play will not be permitted unless they are replaced by equal or better provision on an alternative site.</p> <p>R. Development that would prejudice the openness or character of the Local Green Spaces shown on the Policies Map and listed in Appendix 13 will not be permitted unless:</p> <ol style="list-style-type: none"> 1. the proposal is for the re-use or replacement of an existing building or would provide an appropriate facility to improve or support the existing use of the land; and/or 2. the proposal would have no significantly greater visual or operational impact than the existing use or structures on the site. <p>S. The areas designated for countryside recreation shown on the Policies Map and listed in Appendix 14 will be protected from incompatible development subject to national Green Belt controls.</p>	<p>There are no LSEs of Policy WS10.6 on European sites.</p> <p>This is a development management policy that protects designated open spaces from development / change of use. Furthermore, the policy also protects the openness and character of Local Green Spaces and areas designated for countryside recreation. Overall, this is a positive policy for disturbance – sensitive European sites, because maintaining a strong inventory of local green spaces offers alternative recreation destinations.</p> <p>Policy WS10.6 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS11 – Strategy for Town and Local Centres		
Policy WS11.1 – Meeting the Strategy	<p>A. The Town, District and Local Centres shown on the Policies Map will be supported to maintain their vitality and viability as community hubs for a range of retail, recreational, cultural and community uses by:</p>	<p>There are no LSEs of Policy WS11.1 on European sites.</p>

	<ol style="list-style-type: none"> 1. maintaining an appropriate hierarchy of centres; 2. managing the potential impact of edge of centre and out of centre retail and leisure proposals; 3. maintaining a Primary Shopping Area shown on the Policies Map in the Town Centres at Birkenhead (PSA-SA2.1), Liscard (PSA-SA1.1), Moreton (PSA-SA5.1), West Kirby (PSA-SA6.1) and Heswall (PSA-SA7.1) where retail development should be concentrated; 4. allowing appropriate meanwhile and pop up uses; 5. enabling appropriate residential uses to support centres; and 6. providing for further commercial, cultural and community uses to be developed. 	<p>This is a development management policy that sets out the strategy for town and local centres. Primarily, it stipulates that the vitality and viability of these centres will be secured, such as through maintaining a hierarchy of centres and maintaining Primary Shopping Areas. However, this overarching strategy has no bearing on European sites.</p> <p>Policy WS11.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS11.2 – Hierarchy of Retail Centres	<p>Sub-Regional Centre</p> <p>B. Birkenhead Town Centre (TC-SA2.1) shown on the Policies Map is the Borough's main comparison shopping destination and the primary focus for retail, office, leisure, service, arts, culture and tourist development, community facilities and other main town centre uses of Borough wide significance.</p> <p>Town Centres</p> <p>C. The Town Centres of Heswall (TC-SA7.1), Liscard (TC-SA1.1), Moreton (TC-SA5.1) and West Kirby (TC-SA6.1), shown on the Policies Map, will be the main focus for development and investment in shops, services, leisure and community facilities outside Birkenhead.</p> <p>District Centres</p> <p>D. The District Centres of Bromborough Village (TC-SA4.1), Hoylake (TC-SA6.2) and Woodchurch Road, Prenton (TC-SA3.1), shown on the Policies Map, will be the focus for district level shops, services and community facilities at a level above local centres.</p> <p>Local Centres</p>	<p>There are no LSEs of Policy WS11.2 on European sites.</p> <p>This is a development management policy that identifies a hierarchy of retail centres in Wirral Borough, including sub-regional centres, town centres, district centres, local centres and smaller parades. However, no specific growth quanta or project proposals are identified for these areas. Therefore, this policy has no negative HRA implications.</p>

	<p>E. The focus for local level shops, services and community facilities to serve everyday needs will be the Local Centres shown on the Policies Map at:</p> <table><tr><td>Prenton Park, Borough Road (TC-SA3.4)</td><td>Claughton Village (TC-SA3.3)</td></tr><tr><td>Dacre Hill (TC-SA3.6)</td><td>Eastham Rake (TC-SA4.4)</td></tr><tr><td>Greasby Village (TC-SA5.3)</td><td>Irby Village (TC-SA7.2)</td></tr><tr><td>Laird Street (TC-SA3.7)</td><td>Lower Bebington (TC-SA4.3)</td></tr><tr><td>New Ferry (TC-SA4.2)</td><td>Oxton Village (TC-SA3.2)</td></tr><tr><td>Poultton Road, Seacombe (TC-SA1.2)</td><td>Seabank Road, New Brighton (TC-SA1.4)</td></tr><tr><td>Tranmere Urban Village (TC-SA3.5)</td><td>Upton Village (TC-SA5.2)</td></tr><tr><td>Victoria Road, New Brighton (TC-SA1.5)</td><td>Wallasey Village (TC-SA1.3)</td></tr><tr><td>Argyle Street, Birkenhead (TC-SA2.2)</td><td>Grange Road West / Oxton Road (TC-SA2.3)</td></tr></table> <p>Smaller Parades and Individual Premises in Primarily Residential Areas.</p> <p>F. Providing for some every day needs make up the remaining retail locations of smaller parades and individual premises in Primarily Residential Areas.</p>	Prenton Park, Borough Road (TC-SA3.4)	Claughton Village (TC-SA3.3)	Dacre Hill (TC-SA3.6)	Eastham Rake (TC-SA4.4)	Greasby Village (TC-SA5.3)	Irby Village (TC-SA7.2)	Laird Street (TC-SA3.7)	Lower Bebington (TC-SA4.3)	New Ferry (TC-SA4.2)	Oxton Village (TC-SA3.2)	Poultton Road, Seacombe (TC-SA1.2)	Seabank Road, New Brighton (TC-SA1.4)	Tranmere Urban Village (TC-SA3.5)	Upton Village (TC-SA5.2)	Victoria Road, New Brighton (TC-SA1.5)	Wallasey Village (TC-SA1.3)	Argyle Street, Birkenhead (TC-SA2.2)	Grange Road West / Oxton Road (TC-SA2.3)	Policy WS11.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.
Prenton Park, Borough Road (TC-SA3.4)	Claughton Village (TC-SA3.3)																			
Dacre Hill (TC-SA3.6)	Eastham Rake (TC-SA4.4)																			
Greasby Village (TC-SA5.3)	Irby Village (TC-SA7.2)																			
Laird Street (TC-SA3.7)	Lower Bebington (TC-SA4.3)																			
New Ferry (TC-SA4.2)	Oxton Village (TC-SA3.2)																			
Poultton Road, Seacombe (TC-SA1.2)	Seabank Road, New Brighton (TC-SA1.4)																			
Tranmere Urban Village (TC-SA3.5)	Upton Village (TC-SA5.2)																			
Victoria Road, New Brighton (TC-SA1.5)	Wallasey Village (TC-SA1.3)																			
Argyle Street, Birkenhead (TC-SA2.2)	Grange Road West / Oxton Road (TC-SA2.3)																			
Policy WS11.3 – Town and Local Centre Impact Assessments	<p>G. Development proposals for main town centre uses that are edge of centre or outside a Town, District or Local Centre shown on the Policies Map will only be permitted where it can be demonstrated that:</p> <ol style="list-style-type: none">1. no alternative, suitable sites are available, first within, and then at the edge of a Town, District or Local Centre shown on the Policies Map in line with the sequential test; and2. the site is easily accessible by a choice of means of transport and is, or will be, well-connected to a Town, District or Local Centre shown on the Policies Map.3. they do not undermine the vitality and viability of existing centres.	<p>There are no LSEs of Policy WS11.3 on European sites.</p> <p>This is a development management policy that provides for Town and Local Centre Impact Assessments. For example, Impact Assessments for retail uses in edge our out-of-centre locations</p>																		

	<p>H. Development proposals for new retail, and leisure floorspace, in edge or out-of-centre locations not designated for such use will be required to submit an impact assessment, that includes consideration of impact on relevant centres in adjoining districts. The applicable thresholds for an impact assessment of proposed new edge-of-centre and out-of-centre floorspace are:</p> <p>Sub-Regional Centre</p> <table><tr><td>Birkenhead Town Centre (TC-SA2.1)</td><td>1,500 square metre (gross) retail</td></tr></table> <p>Town Centres</p> <table><tr><td>Liscard Town Centre (TC-SA1.1)</td><td>1,250 square metres (gross) retail</td></tr><tr><td>Heswall Town Centre (TC-SA7.1)</td><td>1,000 square metres (gross) retail</td></tr><tr><td>Moreton Town Centre (TC-SA5.1)</td><td>1,000 square metres (gross) retail</td></tr><tr><td>West Kirby Town Centre (TC-SA6.1)</td><td>1,000 square metres (gross) retail</td></tr></table> <p>District Centres</p> <table><tr><td>Bromborough Village (TC-SA4.1)</td><td>750 square metres (gross) retail</td></tr><tr><td>Woodchurch Road, Prenton (TC-SA3.1)</td><td>750 square metres (gross) retail</td></tr><tr><td>Hoylake District Centre (TC-SA6.2)</td><td>400 square metres (gross) retail</td></tr></table> <p>Local Centres</p> <table><tr><td>All Local Centres</td><td>350 square metres (gross) retail</td></tr></table> <p>Should any assessment demonstrate that there would be a significant adverse impact on the existing, committed or planned investment in the centre or its vitality or viability then the application will normally be refused.</p>	Birkenhead Town Centre (TC-SA2.1)	1,500 square metre (gross) retail	Liscard Town Centre (TC-SA1.1)	1,250 square metres (gross) retail	Heswall Town Centre (TC-SA7.1)	1,000 square metres (gross) retail	Moreton Town Centre (TC-SA5.1)	1,000 square metres (gross) retail	West Kirby Town Centre (TC-SA6.1)	1,000 square metres (gross) retail	Bromborough Village (TC-SA4.1)	750 square metres (gross) retail	Woodchurch Road, Prenton (TC-SA3.1)	750 square metres (gross) retail	Hoylake District Centre (TC-SA6.2)	400 square metres (gross) retail	All Local Centres	350 square metres (gross) retail	<p>are specified. However, this has no bearing on European sites.</p> <p>Policy WS11.3 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Birkenhead Town Centre (TC-SA2.1)	1,500 square metre (gross) retail																			
Liscard Town Centre (TC-SA1.1)	1,250 square metres (gross) retail																			
Heswall Town Centre (TC-SA7.1)	1,000 square metres (gross) retail																			
Moreton Town Centre (TC-SA5.1)	1,000 square metres (gross) retail																			
West Kirby Town Centre (TC-SA6.1)	1,000 square metres (gross) retail																			
Bromborough Village (TC-SA4.1)	750 square metres (gross) retail																			
Woodchurch Road, Prenton (TC-SA3.1)	750 square metres (gross) retail																			
Hoylake District Centre (TC-SA6.2)	400 square metres (gross) retail																			
All Local Centres	350 square metres (gross) retail																			

Policy WS11.4 – Meanwhile Use	I. Meanwhile uses and pop-up shops within buildings, where they are complementary to the surrounding uses, will be permitted provided they do not compromise the longer-term development of a site and contribute to a diverse offer of activities that reflects the individuality of the centre.	<p>There are no LSEs of Policy WS11.4 on European sites.</p> <p>This is a development management policy that supports meanwhile uses within buildings, provided they do not interfere with the long-term goals of a site. However, such uses have no bearing on European sites.</p> <p>Policy WS11.4 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS11.5 – Ground Floor Uses	<p>J. Proposals for non-main town centre uses at ground floor within retail or commercial frontages, will not normally be permitted unless:</p> <ol style="list-style-type: none"> 1. active frontages are maintained and enhanced; and 2. the function of the centre and neighbouring uses would not be adversely affected. 	<p>There are no LSEs of Policy WS11.5 on European sites.</p> <p>This is a development management policy that sets criteria for ground floor town centre uses. This is not relevant for European sites.</p> <p>Policy WS11.5 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WS11.6 – Residential Development in Centres	<p>K. In all centres and parades, residential development will be permitted at appropriate sites in the following circumstances:</p> <ol style="list-style-type: none"> 1. on upper floors within retail and commercial frontages including within primary shopping areas, where identified; 	<p>There are no LSEs of Policy WS11.6 on European sites.</p> <p>This is a development management policy that</p>

	<ol style="list-style-type: none"> 2. on back-land sites with no street level retail and commercial frontages including within in primary shopping areas where identified; 3. within any area that has been formally identified for planned contraction through a future review or masterplan; 4. provided that the operations of existing and future businesses and community facilities are not adversely affected. 	<p>specifies the conditions / settings under which residential development can be delivered in centres (e.g. on upper floors and back-land sites). However, this is not relevant for European sites.</p> <p>Policy WS11.6 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Plan Monitoring and Review		
Policy WS12 – Monitoring and Review	The Council will monitor the implementation of the Local Plan policies and infrastructure provision. The results will be reported on an annual basis. Should the results indicate that there is significant failure to meet the development trajectories or a change in circumstances that significantly impacts on changes in demand for land the Council will review the Local Plan prior to the relevant five year period for review.	<p>There are no LSEs of Policy WS12 on European sites.</p> <p>This is a policy that reviews Local Plan and infrastructure provision progress on an annual basis. However, plan monitoring has no bearing on European sites.</p> <p>Policy WS12 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Part 4 – Regeneration Area Policies		
Policy RA1 – Seacombe River Corridor Regeneration Area	A. The Seacombe River Corridor Regeneration Area, shown on the Policies Map, is identified as a focus for neighbourhood renewal and the creation of new sustainable waterside residential communities and a new mixed use quarter adjoining Wallasey Town Hall. It will provide for approximately 340 new dwellings, during the Local Plan period, to support the delivery of the development and regeneration strategy as set out in Policy WS 1:	Likely Significant Effects of Policy RA1 on European sites cannot be excluded.

Site Ref	Location	Size and Capacity	<p>This policy sets out that 340 net additional dwellings will be delivered in the Seacombe River Corridor Regeneration Area. Successful applications within the Regeneration Area will need to consider their riverside setting and incorporate safe walking and cycling routes. This policy identifies both a quantum and the geographic location of housing development.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Recreational pressure (both in SPAs and Ramsars, and functionally linked habitat) • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy RA1 is screened in for Appropriate Assessment.</p>
	Other developable areas	340 units	
	<p>B. Applications within Seacombe River Corridor Regeneration Area will be permitted subject to meeting the following requirements and other relevant policies of the Local Plan. Development proposals should:</p> <ol style="list-style-type: none"> 1. ensure that the design of buildings and public realm reflects and enhances the appearance of the Seacombe River Corridor area including its riverside setting; 2. incorporate distinctive and climate resilient landscaping and public realm to reflect the area's distinctive coastal environment; 3. protect and enhance the setting and strategic views of the river frontage and landmark heritage buildings, including Wallasey Town Hall, The Brighton Public House and the Seacombe Ferry Terminal; 4. incorporate safe walking and cycling routes, and enhance connectivity to local amenities, including waterfront promenades, and the Wirral Circular Trail. <p>Wallasey Town Hall Quarter and Demesne Street Waterside Neighbourhood Masterplan Area (MPA-RA1.1)</p> <p>C. Development proposals within the Masterplan Areas shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate, for:</p> <ol style="list-style-type: none"> 1. the creation of a residential led mixed use waterside neighbourhood or 'Town Hall Quarter' based on the redevelopment of redundant Council offices and car parks, and rationalisation and/ or improvement of other uses adjoining Wallasey Town Hall and along the river corridor; 2. appropriate alternative uses for the Wallasey Town Hall Building; 3. ensuring that the settings of the heritage assets at Wallasey Town Hall, The Brighton Public House and the Seacombe Ferry Terminal are protected and enhanced; 4. the regeneration of the existing Demesne Street residential neighbourhood as a high quality and attractive waterside neighbourhood through: 		

	<p>i. appropriate residential remodelling, infill development, public realm improvements; and retrofit energy efficiency improvements;</p> <p>ii. provision of new and/or relocation of existing community facilities.</p> <p>Brighton Street Improvement Corridor (IMP-RA1.1)</p> <p>D. Development proposals along the Improvement Corridor shown on the Policies Map will be supported which have regard to an Environmental Improvement Strategy and Design Code which has been agreed with the Council and which will provide for the redevelopment of vacant and underused retail units and sites along the Corridor for high quality residential, commercial and retail uses.</p>													
Policy RA2 – Scotts Quay Regeneration Area	<p>A. The Scott's Quay Regeneration Area, shown on the Policies Map, will become a sustainable residential led mixed use area with improved connections to the Mersey waterfront and will provide for approximately 900 new dwellings, as set out in the Housing Trajectory. The following sites are allocated for residential use within the Regeneration Area to support the delivery of the development and regeneration strategy as set out in Policy WS 1:</p> <table border="1"> <thead> <tr> <th>Site Ref</th><th>Location</th><th>Size and Capacity</th></tr> </thead> <tbody> <tr> <td>RES-RA2.1</td><td>Land East of Birkenhead Road, Seacombe (North)</td><td>3.57 hectares, 400 units</td></tr> <tr> <td>RES-RA2.2</td><td>Land East of Birkenhead Road, Seacombe (South)</td><td>1.57 hectares, 250 units</td></tr> <tr> <td></td><td>Other developable areas</td><td>250units</td></tr> </tbody> </table> <p>B. Applications within the Scott's Quay Regeneration Area will be permitted subject to meeting the following requirements and other relevant policies of the Local Plan. Development proposals should:</p> <ol style="list-style-type: none"> 1. Ensure that the design of buildings and public realm maximises and enhances key vistas through the docklands, river frontage and landmark buildings; 2. Incorporate distinctive and climate resilient landscaping and public realm to reflect the area's distinctive coastal environment; 	Site Ref	Location	Size and Capacity	RES-RA2.1	Land East of Birkenhead Road, Seacombe (North)	3.57 hectares, 400 units	RES-RA2.2	Land East of Birkenhead Road, Seacombe (South)	1.57 hectares, 250 units		Other developable areas	250units	<p>Likely Significant Effects of Policy RA2 on European sites cannot be excluded.</p> <p>This policy sets out that 900 net additional dwellings will be delivered in the Scotts Quay Regeneration Area. Successful applications within the Regeneration Area will need to consider their strategic views of the docklands and river frontage, and incorporate safe walking and cycling routes. This policy identifies both a quantum and the geographic location of housing development.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Recreational pressure (both in SPAs and Ramsars, and
Site Ref	Location	Size and Capacity												
RES-RA2.1	Land East of Birkenhead Road, Seacombe (North)	3.57 hectares, 400 units												
RES-RA2.2	Land East of Birkenhead Road, Seacombe (South)	1.57 hectares, 250 units												
	Other developable areas	250units												

	<p>3. Take into account potential flood risk within the Regeneration Area; and</p> <p>4. Incorporate safe walking and cycling routes, and enhance connectivity to local amenities, including waterfront promenades, the Wirral Circular Trail and the Birkenhead Road Boulevard.</p> <p>Birkenhead Road Masterplan Area (MPA-RA2.1)</p> <p>C. Development proposals within the Masterplan Area, as shown on the Policies Map, must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate, for:</p> <ol style="list-style-type: none"> 1. a high quality, attractive and vibrant residential neighbourhood; and 2. provides for east-west pedestrian and cycling links between the riverfront promenade from Birkenhead Road; and 3. small scale retail provision to serve the day to day needs of the immediate community incorporated within the residential development at ground floor level, with a frontage to Birkenhead Road; and 4. mitigation measures to ensure that the operation of port related businesses are not impacted on by adjoining residential uses and that appropriate residential amenity is achieved. <p>East Street Masterplan Area (MPA-RA2.2)</p> <p>D. Development proposals within the Masterplan Area shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate, for:</p> <ol style="list-style-type: none"> 1. a high quality, attractive and vibrant neighbourhood with a mix of sustainable residential and employment uses which complement the regeneration objectives of the neighbouring areas at Wirral Waters and the Seacombe River Corridor; 2. provides for east-west pedestrian and cycling links between the riverfront from Brighton Street; and 3. responds to its riverside setting in appropriate scale, height and design. <p>Mixed Use Neighbourhoods</p> <p>E. The area at Kelvin Road (MUA-RA2.1) shown on the Policies Map is designated for mixed commercial and residential uses, where appropriate development will be supported where a high standard of</p>	<p>functionally linked habitat)</p> <ul style="list-style-type: none"> • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy RA2 is screened in for Appropriate Assessment.</p>
--	--	--

	residential amenity for all future occupiers will be achieved and there would be no unreasonable restrictions on the operation or future development of adjacent businesses, uses or sites.																		
Policy RA3 – Birkenhead Waterfront Regeneration Area	<p>A. The Birkenhead Waterfront Regeneration Area shown on the Policies Map will be developed as a residential led mixed use area with associated cultural and commercial uses set in a high quality waterside public realm with strong connections to Birkenhead Town Centre, and will provide for approximately 630 new dwellings, as set out in the Housing Trajectory. The following sites are allocated for residential use within the Regeneration Area to support the delivery of the development and regeneration strategy set out in Policy WS 1:</p> <table><tr><th>Site Ref</th><th>Location</th><th>Size and Capacity</th></tr><tr><td>RES-RA3.4</td><td>Rose Brae, Church Street, Woodside</td><td>1.96 hectares, 180 units</td></tr><tr><td></td><td>Other developable areas</td><td>450 units</td></tr></table> <p>The following site is allocated for employment use within the Regeneration Area to support the delivery of the development and regeneration strategy as set out in Policy WS 1:</p> <table><tr><th>Site Ref</th><th>Location</th><th>Uses</th><th>Size and Capacity</th></tr><tr><td>EMP-RA3.1</td><td>Twelve Quays, North of Morpeth Wharf, Birkenhead</td><td>B2, B8/Port related</td><td>1.58 hectares</td></tr></table> <p>B. Applications within the Birkenhead Waterfront Regeneration Area will be permitted subject to meeting the following requirements and other relevant policies of the Local Plan. Development proposals should:</p> <ol style="list-style-type: none">complement the ongoing regeneration of the waterfront and the wider area with priority given to uses which support the adjoining Twelve Quays RoRo terminal in the case of EMP-RA3.1, subject to the provision of adequate boundary treatment and screening of port uses within the site;be designed to reflect the area’s riverside setting, and protect and enhance key views of Liverpool’s waterfront;	Site Ref	Location	Size and Capacity	RES-RA3.4	Rose Brae, Church Street, Woodside	1.96 hectares, 180 units		Other developable areas	450 units	Site Ref	Location	Uses	Size and Capacity	EMP-RA3.1	Twelve Quays, North of Morpeth Wharf, Birkenhead	B2, B8/Port related	1.58 hectares	<p>Likely Significant Effects of Policy RA3 on European sites cannot be excluded.</p> <p>This policy sets out that 630 net additional dwellings and 1.58ha of employment land will be delivered in the Birkenhead Waterfront Regeneration Area. Successful applications within the Regeneration Area will need to consider their riverside location and provide for active travel improvements. This policy identifies both a quantum and the geographic location of housing and employment development. Positively, planning applications will need to support and contribute to the delivery of the Dock Branch Park, a strategic open space for the Waterfront Regeneration Area and beyond.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none">Recreational pressure (both in SPAs and Ramsars, and functionally linked habitat)
Site Ref	Location	Size and Capacity																	
RES-RA3.4	Rose Brae, Church Street, Woodside	1.96 hectares, 180 units																	
	Other developable areas	450 units																	
Site Ref	Location	Uses	Size and Capacity																
EMP-RA3.1	Twelve Quays, North of Morpeth Wharf, Birkenhead	B2, B8/Port related	1.58 hectares																

	<ol style="list-style-type: none"> 3. incorporate distinctive and climate resilient landscaping and public realm to reflect the area's distinctive coastal environment; 4. protect and enhance the area's historic environment, including views from and to Birkenhead Park, Hamilton Square Conservation Area, and Birkenhead Priory; 5. where appropriate, provide for ancillary retail and community uses to support the day to day needs of the new residential community; 6. provide or contribute proportionately and appropriately to the provision of the following comprehensive network of high quality public realm incorporating active travel improvements and enhancing connectivity within the waterfront area and to the town centre, Hamilton Square, Shore Road, the Birkenhead Priory, Dock Branch Park, Morpeth Dock and the Wirral Circular Trail (shown on Figure 4.4 and Figure 4.5 below); <ol style="list-style-type: none"> i. Dockside Boardwalks; ii. Time Gun Park and bridge; iii. Dock Branch Park; iv. Woodside Yard; v. Bridge Street Link; vi. Hamilton Place; vii. Birkenhead Waterfront; viii. Water Street and Clover's Park; ix. Ivy Way and Monk's Ferry Park; and x. Priory Gardens. 7. support and integrate with the delivery of Phase 1 of Dock Branch Park as strategic open space for the Regeneration Area and wider areas; 8. contribute proportionately and appropriately to primary school place provision; 	<ul style="list-style-type: none"> • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy RA3 is screened in for Appropriate Assessment.</p>
--	---	--

9. incorporate active ground floor use frontages in appropriate locations to ensure street level vitality and surveillance; and
10. avoid residential development in areas at risk of flooding within the Regeneration Area unless appropriate mitigation can be demonstrated.

Woodside Masterplan Area (MPA-RA3.1)

- C. Development proposals within the Masterplan Area shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate, for:
1. the delivery of a high quality, attractive and vibrant residential mixed use neighbourhood of appropriate scale, height and massing which reflects the opportunity of the strategic waterside location;
 2. a mix of residential, cultural, hotel, leisure, and commercial uses which are complementary to the regeneration of Birkenhead town centre;
 3. the provision of high quality public spaces with riverside access;
 4. a shared use road network which ensures safe access for all users and provides a safe pedestrian and cyclist route between Hamilton Square and the waterfront; and
 5. a range of building heights including taller landmark buildings which acknowledge and respect the Queensway Tunnel ventilation tower and key views from the Hamilton Square Conservation Area.

Rose Brae Village (RES-RA3.4)

- D. Proposals for residential development at Rose Brae, as shown on the Policies Map, will be supported where they provide, as appropriate, for:
1. a built form which responds to the opportunities offered by its sloping waterside topography; and
 2. a linear neighbourhood greenspace providing a connection from Church Street to the waterfront promenade; and
 3. an enhanced waterfront public realm with a generous setback from the river edge to allow for dwell time and variety of uses; and
 4. active travel routes north, through the land between Rose Brae and Woodside and the Gyratory.

	<p>Dock Branch Park (Northern Section) Masterplan Area (MPA-RA4.3)</p> <p>See Policy RA4: Central Birkenhead Regeneration Area</p> <p>Mixed Use Neighbourhoods</p> <p>E. The areas at Morpeth Dock (MUA-RA3.1), and Priory Village (MUA-RA3.2), shown on the Policies Map, are designated for mixed commercial and residential uses, where appropriate development will be supported where a high standard of residential amenity for all future occupiers will be achieved and there would be no unreasonable restrictions on the operation or future development of adjacent businesses, uses or sites.</p>																
Policy RA4 – Central Birkenhead Regeneration Area	<p>A. Development within the Central Birkenhead Regeneration Area shown on the Policies Map will comprise a new commercial office quarter with new residential-led mixed use neighbourhoods which will provide for approximately 1,450 new dwellings, as set out in the Housing Trajectory. The following sites are allocated for residential use within the Regeneration Area to support the delivery of the development and regeneration strategy set out in Policy WS 1:</p> <table border="1"> <thead> <tr> <th>Site Ref</th><th>Location</th><th>Size and Capacity</th></tr> </thead> <tbody> <tr> <td>RES-RA4.1</td><td>WGC Town Centre Plot E, Hemingford Street, Birkenhead</td><td>1.38 hectares, 172 units</td></tr> <tr> <td>RES-RA4.2</td><td>WGC Town Centre Plot G, South of Conway Park Station, Birkenhead</td><td>1.24 hectares, 92 units</td></tr> <tr> <td>RES-RA4.3</td><td>WGC Town Centre Plots I and J, North of Conway Park Station, Birkenhead</td><td>1.43 hectares, 185 units</td></tr> <tr> <td></td><td>Other developable areas</td><td>1,000 units</td></tr> </tbody> </table> <p>B. Applications within the Central Birkenhead Regeneration Area will be permitted subject to meeting the following requirements and other relevant policies of the Local Plan. Development proposals should:</p> <ol style="list-style-type: none"> 1. protect and enhance the area's historic environment, including views from and to Birkenhead Park, Hamilton Square Conservation Area, Birkenhead Priory, and Clifton Park Conservation Area; 	Site Ref	Location	Size and Capacity	RES-RA4.1	WGC Town Centre Plot E, Hemingford Street, Birkenhead	1.38 hectares, 172 units	RES-RA4.2	WGC Town Centre Plot G, South of Conway Park Station, Birkenhead	1.24 hectares, 92 units	RES-RA4.3	WGC Town Centre Plots I and J, North of Conway Park Station, Birkenhead	1.43 hectares, 185 units		Other developable areas	1,000 units	<p>Likely Significant Effects of Policy RA4 on European sites cannot be excluded.</p> <p>This policy sets out that approx. 1,450 net additional dwellings will be delivered in the Central Birkenhead Regeneration Area. Successful applications within the Regeneration Area will need to consider their historic environment and views to Birkenhead Park, and provide for a high-quality public realm and active transport improvements. This policy identifies both a quantum and geographic location of housing development.</p> <p>Positively, planning applications will need to support and contribute to the Phase 1 of the</p>
Site Ref	Location	Size and Capacity															
RES-RA4.1	WGC Town Centre Plot E, Hemingford Street, Birkenhead	1.38 hectares, 172 units															
RES-RA4.2	WGC Town Centre Plot G, South of Conway Park Station, Birkenhead	1.24 hectares, 92 units															
RES-RA4.3	WGC Town Centre Plots I and J, North of Conway Park Station, Birkenhead	1.43 hectares, 185 units															
	Other developable areas	1,000 units															

	<ol style="list-style-type: none"> 2. incorporate distinctive and climate resilient landscaping and public realm to reflect the area's coastal environment; and 3. provide or contribute proportionately and appropriately to the provision of a comprehensive network of high quality public realm, including Dock Branch Park Phase 1 as identified in the Birkenhead Design Guide and Public Realm Strategy SPD; 4. incorporate active travel improvements and enhance permeability and connectivity within the regeneration area; 5. contribute proportionately and appropriately to primary school place provision. <p>Birkenhead Commercial District Mixed Use Quarter Masterplan Area (MPA-RA4.1)</p> <p>C. Development proposals within the Masterplan Area as shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate, for:</p> <ol style="list-style-type: none"> 1. the delivery of a mixed use commercial quarter and residential neighbourhood; 2. a high quality distinctive design framework and public realm strategy that is designed to reflect its relationship to the waterfront and adjoining neighbourhoods; 3. inclusion of one or more building/s of appropriate scale and height to create a landmark and sense of place having regard to the impact on heritage assets and strategic views to and along the Birkenhead waterfront, including planned development within the Waterfront (RA3), Hind Street and St Werburgh's (RA5), Wirral Waters (RA6) and Scott's Quay (RA2) Regeneration Areas, and across the Peninsula. <p>Charing Cross Quarter Masterplan Area (MPA-RA4.2)</p> <p>D. Major development proposals within this Masterplan Area shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate for the delivery of a mixed use retail led neighbourhood which retains retail and active ground floor uses along Grange Road West.</p> <p>Dock Branch Park (Northern section) Masterplan Area (MPA-RA4.3)</p> <p>E. Development proposals within this Masterplan Area shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate</p>	<p>Dock Branch Park, a strategic open space for the Waterfront Regeneration Area and beyond. This is to be a world-class linear park with high accessibility, good interpretation and sustainable design principles (e.g. Sustainable Drainage Systems, biodiversity).</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Recreational pressure (both in SPAs and Ramsars, and functionally linked habitat) • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy RA4 is screened in for Appropriate Assessment.</p>
--	---	--

	<p>for the delivery of a world class linear park and mixed use residential led neighbourhood, to complement Birkenhead Park through an approach which:</p> <ol style="list-style-type: none"> 1. conserves, protects and interprets important railway heritage features; 2. ensures inclusive accessibility and provides safe and legible movement networks suitable for all users, connected along its whole route; 3. is safe and inviting during the day and night time and which provides a range of activities, uses and experiences for people of all ages and abilities; 4. provides opportunities for people to improve their health and well being; 5. incorporates appropriate cultural, leisure and community facilities; 6. creates a destination that will make a significant contribution to the Borough's visitor economy; 7. uses interpretation to educate and inspire residents and visitors about what makes Birkenhead a special place; 8. incorporates innovative, best practice in design and robust solutions that are cost effective to construct, maintain and renew; 9. provides opportunities for social interaction, active and passive physical activity, with places for children and young and old people to have fun, play, learn and relax in a creative and stimulating environment. Designs should include artworks, and be able to accommodate events; 10. addresses climate change and promotes environmental awareness through sustainable design including SuDs, low energy lighting, and biodiversity; 11. provides the context for and is closely integrated with new mixed use development along its route. <p>Mixed Use Neighbourhoods</p> <p>F. The areas around Hamilton Square (MUA-RA4.1) shown on the Policies Map are designated for mixed commercial and residential uses, where appropriate development will be supported where a high standard of residential amenity for all future occupiers will be achieved and there would be no unreasonable restrictions on the operation or future development of adjacent businesses, uses or sites.</p>	
--	---	--

Policy RA5 – Hind Street and St Werburgh's Regeneration Area

- A. Within the Hind Street and St Werburgh's Regeneration Area shown on the Policies Map a new exemplar low carbon urban garden village will be developed at Hind Street, to the north of Green Lane and Appin Road; and a new gateway residential mixed use quarter will be developed at St Werburgh's, to the north of Borough Road and Borough Road East. The Regeneration Area will provide for approximately 1,640 new dwellings, as set out in the Housing Trajectory. The following sites are allocated residential use within the Regeneration Area to support the delivery of the development and regeneration strategy as set out in Policy WS 1:

Site Ref	Location	Size and Capacity
RES-RA5.1	Land at Hind Street, Tranmere	14.65 hectares, 1,400 units
	Other developable areas	240 units

- B. Applications within the Hind Street and St Werburgh's Regeneration Area will be permitted subject to meeting the following requirements and other relevant policies of the Local Plan. Development proposals should contribute proportionately and appropriately to:

1. the provision of a comprehensive network of high quality public realm, including Dock Branch Park (Southern section) shown on the Policies Map (OS-SA2.7);
2. incorporate distinctive and climate resilient landscaping, sustainable drainage and public realm to reflect the area's coastal environment; and
3. to primary school place provision.

Hind Street Urban Garden Village Masterplan Area (MPA-RA5.1)

- C. Development proposals within the Masterplan Area shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate, for the delivery of a high quality, low carbon urban village which:
1. incorporates a new highway network to accommodate changes arising from the removal of the Borough Road (A5227) and Queensway Tunnel flyovers and to provide appropriate vehicular access to the site; and
 2. provides high quality, safe and convenient pedestrian and cycling links:
 3. is well designed as a principal gateway to Birkenhead, to reflect its relationship to the waterfront and to include one or more landmark buildings of appropriate scale and height that create a sense

Likely Significant Effects of Policy RA5 on European sites cannot be excluded.

This policy sets out that approx. 1,640 net additional dwellings will be delivered in the Hind Street and St Werburghs Regeneration Area. Successful applications within the Regeneration Area will need to contribute to primary school provision and provide for a high-quality public realm. This policy identifies both a quantum and geographic location of housing development.

Positively, planning applications will need to support and contribute to the Phase 1 of the Dock Branch Park, a strategic open space for the Waterfront Regeneration Area and beyond. Both Masterplan Areas within the Regeneration Areas are to prioritise active transport networks, as well as incorporating strong green design principles.

The following impact pathways are present:

- Recreational pressure (both in SPAs and

	<p>of place and focal points of interest, having regard to: strategic views in context with the waterfront skyline including planned development within the Birkenhead Waterfront (RA3), Wirral Waters (RA6) and Scott's Quay (RA2) Regeneration Areas and the St Werburgh's Masterplan Area (MPA-RA5.2); and the need to preserve or enhance the setting of heritage assets including the designated Conservation Areas at Clifton Park (CON-SA3.6), Hamilton Square (CON-SA2.1) and Birkenhead Park (CON-SA3.2);</p> <ol style="list-style-type: none"> 4. incorporates strong green design principles and promotes healthy living through a network of open space, green infrastructure and public realm including a new community park that links to the southern section of Dock Branch Park to provide an appropriate network of high quality strategic open space for the Masterplan Area and wider communities, and provides appropriate high quality links: <ol style="list-style-type: none"> i. to Birkenhead Central and Green Lane Merseyrail stations, Birkenhead Town Centre, the new residential quarter at St Werburgh's (MPA-RA5.2); Birkenhead Priory; the Mersey waterfront; and Rock Retail Park; and ii. between the two phases of Dock Branch Park via a surface link in addition to any direct link between the northern and southern sections of the Dock Branch Park provided by the existing tunnels; 5. capitalises on its proximity to Birkenhead Town Centre at its northern extent by providing a new high quality gateway to Central Birkenhead Regeneration Area (RA4); 6. promotes intensification of development around the public transport provision at the railway stations; 7. provides for the design of public realm treatment of Central Station to reflect its prominence as a gateway to the Hind Street Urban Garden Village and the Central Birkenhead Regeneration Area (RA4); 8. allows for the provision for ancillary uses including Commercial, Business and Service uses (Use Class E), Local Community and Learning uses (Use Class F) and Hotels (Use Class C1) will also be considered within the Regeneration Area boundary to the north of Hind Street and Waterloo Place where it can be demonstrated that these uses are complimentary to Birkenhead Town Centre Sub-Regional Centre and Birkenhead Commercial District or the uses cannot be practically or successfully accommodated within the designated Sub-Regional Centre / Commercial District. 	<p>Ramsars, and functionally linked habitat)</p> <ul style="list-style-type: none"> • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy RA5 is screened in for Appropriate Assessment.</p>
--	--	---

	<p>St Werburgh's Masterplan Area (MPA-RA5.2)</p> <p>D. Development proposals within the St Werburgh's Masterplan Area shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate:</p> <ol style="list-style-type: none">1. an appropriate gateway design for Birkenhead, to reflect its relationship to the waterfront, and to include one or more landmark buildings of appropriate scale and height that create a sense of place and focal points of interest, having regard to: strategic views in context with the waterfront skyline including planned development within the Birkenhead Waterfront (RA3), Wirral Waters (RA6) and Scott's Quay (RA2) Regeneration Areas and the Hind Street Urban Garden Village Masterplan Area (MPA-RA5.1) and; the need to preserve or enhance the setting of heritage assets including the designated Conservation Areas at Clifton Park (CON-SA3.6), Hamilton Square (CON-SA2.1) and Birkenhead Park (CON-SA3.2);2. appropriate arrangements for a new highway network to accommodate changes arising from the removal of the Borough Road (A5227) and Queensway Tunnel flyovers and to provide appropriate vehicular access to the site;3. high quality, safe and convenient pedestrian and cycling links to the Birkenhead Commercial District and Mixed Use Quarter (MPA-RA4.1); the Hind Street Urban Garden Village (MPA-RA5.1); Birkenhead Priory, the Mersey waterfront; and Rock Retail Park.					
Policy RA6 – Wirral Waters Regeneration Areas	<p>A. Wirral Waters is identified as a strategic regeneration site and the Council will support the development of the area for a major, residential-led mixed use, urban regeneration project.</p> <p>B. The Wirral Waters Regeneration Area shown on the Policies Map will provide for approximately 3,230 new dwellings, as set out in the Housing Trajectory. The following sites are allocated for residential and employment use within the Regeneration Area to support the delivery of the development and regeneration strategy set out in Policy WS 1:</p> <p>East Float</p> <p><i>Northbank</i></p> <table><thead><tr><th>Site Ref</th><th>Location</th><th>Uses</th><th>Size and Capacity</th></tr></thead></table>	Site Ref	Location	Uses	Size and Capacity	<p>Likely Significant Effects of Policy RA6 on European sites cannot be excluded.</p> <p>This policy sets out that approx. 3,230 net additional dwellings and 29.61ha of employment land will be delivered in the Wirral Waters Regeneration Area. Successful applications within the Regeneration Area will need to protect the dockland and riverside views, and preserve the heritage assets of</p>
Site Ref	Location	Uses	Size and Capacity			

Prepared for: Wirral Metropolitan Borough Council

West Float

Site Ref	Location	Uses	Size and Capacity
EMP-RA6.1	MEA Park West, Beaufort Road, Birkenhead	B2, B8	1.8 hectares
EMP-RA6.2	MEA Park West, Wallasey Bridge Road, Birkenhead	B2, B8	8.84 hectares
EMP-RA6.3	MEA Park East, Beaufort Road, Birkenhead	B2, B8 / Port related	9.02 hectares
EMP-RA6.4	MEA Park Phase 2, Beaufort Road, Birkenhead	B2, B8	1.76 hectares

East Float Masterplan Area (MPA-RA6.1)

- C. Development proposals within the Masterplan Area shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate, for:
1. a new high quality, attractive and vibrant waterside neighbourhood with a mix of sustainable residential, community and employment uses which support and complement the ongoing regeneration of the neighbouring areas including Birkenhead, Liscard and Seacombe;
 2. non-residential ground floor uses in areas at risk of flooding;
 3. the protection of dockland and riverside views and of the setting of heritage assets, including the Conservation Areas at Birkenhead Park (CON-SA3.2) and Hamilton Square (CON-SA2.1);
 4. incorporation of distinctive and climate resilient landscaping and public realm to reflect the area's distinctive coastal environment;
 5. measures to monitor and maintain the structural condition of the dock walls and lock gates; and
 6. proportionate and appropriate contributions to primary school place provision.

	<p>MEA Park Masterplan Area (MPA-RA6.2)</p> <p>D. Development proposals within the Masterplan Area shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate, for:</p> <ol style="list-style-type: none"> 1. high quality flexible business premises that can be adapted in response to changing circumstances and promote sustainable economic growth over the lifetime of the development with priority given to port related and maritime uses on MEA Park East (EMP-RA6.3); 2. incorporation of distinctive and climate resilient landscaping and public realm to reflect the area's distinctive coastal environment; and 3. integration to safeguard the Graving Dock site and supporting infrastructure as a strategic maritime asset. <p>Bidston Dock Masterplan Area (MPA-RA6.3)</p> <p>E. Development proposals within the Masterplan Area shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate, for:</p> <ol style="list-style-type: none"> 1. Mixed use development comprising leisure, community and health uses (Use Classes C1; E, and F) where it can be demonstrated that these uses are complementary to, and/or, cannot be accommodated within the Birkenhead Town Centre Sub-Regional Centre and Birkenhead Commercial District; 2. Incorporation of distinctive and climate resilient landscaping and public realm to reflect the area's distinctive coastal environment; and 3. Provision of cycle and pedestrian access to the adjoining Bidston Moss recreational area. 	
Policy RA7 – Hamilton Park Regeneration Area	<p>A. The Hamilton Park Regeneration Area shown on the Plan Policies Map will be the focus of significant urban regeneration and land use change which will see the development of a new family oriented neighbourhood adjoining the Vittoria Studios development at Wirral Waters and new mixed use employment/ residential neighbourhoods. Existing streets will become green active travel routes providing links to Birkenhead Park (OS-SA3.1); and Birkenhead Park Railway Station at Duke Street; and the new Dock Branch Park (OS-SA2.7).</p>	<p>Likely Significant Effects of Policy RA7 on European sites cannot be excluded.</p> <p>This policy sets out that approx. 1,025 net additional dwellings and 0.98ha of employment land</p>

	<p>B. The area will provide for approximately 1,025 dwellings during the Local Plan period, to support the delivery of the development and regeneration strategy as set out in Policy WS 1:</p> <table><tr><th>Site Ref</th><th>Location</th><th>Uses</th><th>Size and Capacity</th></tr><tr><td></td><td>Other developable areas</td><td>Residential</td><td>1,025 units</td></tr></table> <p>C. The following site is allocated for employment use within the Regeneration Area to support the delivery of the development and regeneration strategy as set out in Policy WS 1:</p> <table><tr><th>Site Ref</th><th>Location</th><th>Uses</th><th>Size and Capacity</th></tr><tr><td>EMP-RA7.1</td><td>Kern's Warehouse, Cleveland Street, Birkenhead</td><td>B2, B8</td><td>0.98 hectares</td></tr></table> <p>D. Applications within Hamilton Park Regeneration Area will be permitted subject to meeting the following requirements and other relevant policies of the Local Plan. Development proposals should:</p> <ol style="list-style-type: none">protect and maximise strategic views into Wirral Waters and landmark buildings (including the settings of heritage assets); andbe based on the historic grid iron street pattern and connect to local amenities and facilities by the creation of high quality green streets providing safe cycle and walking routes in particular:<ol style="list-style-type: none">Birkenhead Park (TPT-RA5.1/OS-SA3.1); and Birkenhead Park Merseyrail Station, Duke Street; and Vittoria Studios waterfront via Duke Street, Livingston Street and Vittoria Street (RES-RA6.1); andDock Branch Park (OS-SA2.7) and the Town Centre (TC-SA2.1) via Corporation Road Boulevard, Cleveland Street and Price Street; and.allow provision for ancillary retail and community uses to support the day to day needs of the new residential community. <p>Britannia Residential Led Mixed Use Masterplan Area (MPA-RA7.1)</p>	Site Ref	Location	Uses	Size and Capacity		Other developable areas	Residential	1,025 units	Site Ref	Location	Uses	Size and Capacity	EMP-RA7.1	Kern's Warehouse, Cleveland Street, Birkenhead	B2, B8	0.98 hectares	<p>will be delivered in the Hamilton Park Regeneration Area. Successful applications within the Regeneration Area will need to protect strategic views into Wirral Waters and provide safe walking / cycling routes. This policy identifies both a quantum and geographic location of housing development and employment land.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none">Recreational pressure (both in SPAs and Ramsars, and functionally linked habitat)Loss of functionally linked habitatWater qualityWater resourcesAtmospheric pollutionNoise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy RA7 is screened in for Appropriate Assessment.</p>
Site Ref	Location	Uses	Size and Capacity															
	Other developable areas	Residential	1,025 units															
Site Ref	Location	Uses	Size and Capacity															
EMP-RA7.1	Kern's Warehouse, Cleveland Street, Birkenhead	B2, B8	0.98 hectares															

	<p>E. Development proposals within the Masterplan Area shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council to deliver a new high quality residential led mixed use neighbourhood which provides, as appropriate, for:</p> <ol style="list-style-type: none">1. a new area of public open space and incidental pocket parks as part of a network of connected green streets; and2. proportionate contributions towards primary school place provision; and3. new active ground floor uses along key street frontages in particular Vittoria Street. <p>Mixed Use Neighbourhoods</p> <p>F. The areas bounded by Vittoria Street, Rendell Street, Corporation Road and Price Street (MUA-RA7.1), at the junction of Duke Street and Price Street (MUA-RA7.2) and between Park Street and Trinity Lane/ Russell Street (MUA-RA7.3) as shown on the Policies Map are designated for mixed commercial and residential uses, where development will be supported where a high standard of amenity for all future occupiers will be achieved and there would be no unreasonable restrictions on the operation or future development of adjacent businesses, uses or sites.</p>													
Policy RA8 – Northside Regeneration Area	<p>A. The Northside Regeneration Area shown on the Policies Map will provide for new employment floorspace to support general industry and employment needs over the Local Plan period. The following sites are allocated for employment use within the Regeneration Area to support the delivery of the development and regeneration strategy set out in Policy WS 1:</p> <table><thead><tr><th>Site Ref</th><th>Location</th><th>Uses</th><th>Size and Capacity</th></tr></thead><tbody><tr><td>EMP-RA8.1</td><td>Northside West, Dock Road, Poulton</td><td>B2, B8 / sui generis</td><td>6.28 hectares</td></tr><tr><td>EMP-RA8.2</td><td>SMM Business Park, Dock Road, Seacombe</td><td>B2, B8</td><td>6.83 hectares</td></tr></tbody></table> <p>B. Applications within the Northside Regeneration Area will be permitted subject to meeting the following requirements and other relevant policies of the Local Plan. Development proposals should:</p> <ol style="list-style-type: none">1. safeguard the continued attractiveness of the Area for employment use; and	Site Ref	Location	Uses	Size and Capacity	EMP-RA8.1	Northside West, Dock Road, Poulton	B2, B8 / sui generis	6.28 hectares	EMP-RA8.2	SMM Business Park, Dock Road, Seacombe	B2, B8	6.83 hectares	<p>Likely Significant Effects of Policy RA8 on European sites cannot be excluded.</p> <p>This policy sets out that approx. 13.11ha of employment land will be delivered in the Northside Regeneration Area. Successful applications within the Regeneration Area will need to deliver a high-quality business community, maximise land usage and enhance the appearance of the area. This policy identifies both a quantum and geographic location of employment land.</p>
Site Ref	Location	Uses	Size and Capacity											
EMP-RA8.1	Northside West, Dock Road, Poulton	B2, B8 / sui generis	6.28 hectares											
EMP-RA8.2	SMM Business Park, Dock Road, Seacombe	B2, B8	6.83 hectares											

	<ol style="list-style-type: none"> help to deliver a thriving high quality business community with a mix of sustainable employment uses to complement the regeneration of the neighbouring areas at Wirral Waters (RA6) and Scott's Quay (RA2); ensure that the design of buildings and external space will enhance the appearance of the area; incorporate a layout which is orientated to maximise the use of land through appropriate storage, parking and servicing layouts, including the use of decking and mezzanine floors; maximise opportunities to create and connect to walking and cycling routes throughout the Regeneration area and to local neighbourhoods. 	<p>The following impact pathways are present:</p> <ul style="list-style-type: none"> Loss of functionally linked habitat Water quality Water resources Atmospheric pollution Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy RA8 is screened in for Appropriate Assessment.</p>									
Policy RA9 – Liscard Regeneration Area	<p>A. The Liscard Regeneration Area shown on the Policies Map will see the development of vacant and underutilised land and buildings for residential use to revitalise the Town Centre and the Cherry Tree Centre at its core. The Regeneration Area will provide for approximately 200 dwellings, as set out within the Housing Trajectory. The following sites are allocated residential use within the Regeneration Area to support the delivery of the development and regeneration strategy set out in Policy WS 1:</p> <table border="1"> <thead> <tr> <th>Site Ref</th><th>Location</th><th>Size and Capacity</th></tr> </thead> <tbody> <tr> <td>RES-RA9.1</td><td>Former Municipal Buildings, Seaview Road, Liscard</td><td>100 units</td></tr> <tr> <td></td><td>Other developable areas</td><td>100 units</td></tr> </tbody> </table> <p>Liscard Town Centre Masterplan (MPA-RA9.1)</p>	Site Ref	Location	Size and Capacity	RES-RA9.1	Former Municipal Buildings, Seaview Road, Liscard	100 units		Other developable areas	100 units	<p>Likely Significant Effects of Policy RA9 on European sites cannot be excluded.</p> <p>This policy sets out that approx. 200 net additional dwellings will be delivered in the Liscard Regeneration Area. The Liscard Masterplan specifies that development proposals should convert / redevelop former office buildings, providing for mixed-use commercial and residential development. This policy identifies both a quantum and geographic location of housing development.</p>
Site Ref	Location	Size and Capacity									
RES-RA9.1	Former Municipal Buildings, Seaview Road, Liscard	100 units									
	Other developable areas	100 units									

	<p>C. Development proposals within the Masterplan Area shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate, for:</p> <ol style="list-style-type: none"> 1. the conversion or redevelopment of the former municipal buildings at Seaview Road and the development of its adjoining car park for residential use; and 2. the retention of active frontages with safe and improved access for pedestrians and cyclists between Seaview Road and Egerton Grove; and 3. mixed use commercial and residential development on upper floors above the Cherry Tree Shopping Centre and on its associated backland sites and surplus car park areas; and 4. the appropriate remodelling and realignment of the Liscard Gyratory and Liscard Way to improve traffic flows and pedestrian and cycling safety; and 5. retaining an active frontage at ground floor along Liscard Way; and 6. the conversion and or redevelopment of Dominick House for residential led mixed use development. 	<p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Recreational pressure (both in SPAs and Ramsars, and functionally linked habitat) • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy RA9 is screened in for Appropriate Assessment.</p>						
Policy RA10 – New Brighton Regeneration Area	<p>A. Within the New Brighton Regeneration Area shown on the Policies Map the focus of regeneration will see new mixed-use development on the Marine Promenade area comprising leisure, residential and hotel uses. The Regeneration Area will provide for approximately 315 new dwellings, as set out in the Housing Trajectory. The following sites are allocated for residential use within the Regeneration Area to support the delivery of the development and regeneration strategy set out in Policy WS 1:</p> <table> <tr> <th>Site Ref</th><th>Location</th><th>Size and Capacity</th></tr> <tr> <td>RES-RA10.1</td><td>Former Grand Hotel, Marine Promenade, New Brighton</td><td>0.15 hectares, 12 units</td></tr> </table>	Site Ref	Location	Size and Capacity	RES-RA10.1	Former Grand Hotel, Marine Promenade, New Brighton	0.15 hectares, 12 units	<p>Likely Significant Effects of Policy RA10 on European sites cannot be excluded.</p> <p>This policy sets out that approx. 315 net additional dwellings will be delivered in the New Brighton Regeneration Area. Successful planning applications will need to deliver climate-resilient landscaping, provide for safe walking and</p>
Site Ref	Location	Size and Capacity						
RES-RA10.1	Former Grand Hotel, Marine Promenade, New Brighton	0.15 hectares, 12 units						

	<table border="1"> <tr> <td>RES-RA10.2</td><td>Egerton Street Playground, New Brighton</td><td>0.13 hectares, 13 units</td></tr> <tr> <td>RES-RA10.3</td><td>New Palace Amusements, Marine Promenade, New Brighton</td><td>0.53 hectares, 40 units</td></tr> <tr> <td></td><td>Other developable areas</td><td>250 units</td></tr> </table> <p>B. Applications within New Brighton Regeneration Area will be permitted subject to meeting the following requirements and other relevant policies of the Local Plan. Development proposals should:</p> <ol style="list-style-type: none"> 1. Incorporate distinctive and climate resilient landscaping and public realm to reflect the area's distinctive coastal environment; and 2. Incorporate safe walking and cycling routes, and enhance connectivity to local amenities, including waterfront promenades; and 3. Protect and maximise strategic views of the waterfront and the settings of heritage assets including Fort Perch Rock; and 4. Contribute proportionately and appropriately to the provision of the public realm and active travel improvements. <p>Marine Promenade Masterplan Area (MPA-RA10.1)</p> <p>C. Development proposals within the Masterplan Area shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate, for:</p> <ol style="list-style-type: none"> 1. the delivery of a high quality, attractive and vibrant mixed use quarter of appropriate scale, height and massing which reflects the strategic seaside location and character of adjoining areas; and 2. a mix of cultural, hotel, leisure and residential uses which support the regeneration of neighbouring areas and facilities including the Floral Pavilion Theatre and the Local Centres at Victoria Road (TC-SA1.5) and Seabank Road (TC-SA1.4); and 3. one or more landmark buildings; and 4. east west pedestrian and cyclist links between Marine Promenade and Wellington Road/ Virginia Road; and 5. active frontages onto Marine Promenade and Virginia Road. 	RES-RA10.2	Egerton Street Playground, New Brighton	0.13 hectares, 13 units	RES-RA10.3	New Palace Amusements, Marine Promenade, New Brighton	0.53 hectares, 40 units		Other developable areas	250 units	<p>cycling routes, and protect strategic views over the waterfront. This policy identifies both a quantum and geographic location of housing development.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Recreational pressure (both in SPAs and Ramsars, and functionally linked habitat) • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy RA10 is screened in for Appropriate Assessment.</p>
RES-RA10.2	Egerton Street Playground, New Brighton	0.13 hectares, 13 units									
RES-RA10.3	New Palace Amusements, Marine Promenade, New Brighton	0.53 hectares, 40 units									
	Other developable areas	250 units									

	<p>Victoria Quarter (TC-SA1.5)</p> <p>D. Mixed town centre/residential use within the Victoria Quarter shown on the Policies Map, which retains active ground retail frontages and make a positive contribution to the vitality and viability of the Victoria Road Local Centre (TC-SA1.5), will be supported.</p> <p>Seabank Road (TC-SA1.4)</p> <p>E. Proposals for mixed town centre/residential use development within Seabank Road Local Centre (TC-SA1.4), which retain active ground floor retail frontages including the distinctive canopies above existing buildings, will be supported.</p> <p>Fort Perch Rock & Lighthouse</p> <p>F. Proposals for the repair and enhancement of Fort Perch Rock and the lighthouse in a manner that protects their special historic interest and positively contributes to their character and setting will be supported.</p>																									
Policy RA11 – New Ferry Regeneration Area	<p>A. The New Ferry Regeneration Area shown on the Policies Map will see the regeneration of vacant and underutilised land in and adjoining the Local Centre by residential led mixed use development. The Regeneration Area will provide for approximately 109 new dwellings, as set out in the Housing Trajectory. The following sites are allocated for residential use within the Regeneration Area to support the delivery of the development and regeneration strategy as set out in Policy WS 1:</p> <table><tr><th>Site Ref</th><th>Location</th><th>Uses</th><th>Size and Capacity</th></tr><tr><td>RES-RA11.1</td><td>43 Bebington Road, New Ferry</td><td>Residential-led Mixed Use</td><td>0.09 hectares, 20 units</td></tr><tr><td>RES-RA11.2</td><td>Woodhead Street Car Park, New Ferry</td><td>Residential led Mixed Use</td><td>0.77 hectares, 37 units</td></tr><tr><td>RES-RA11.3</td><td>Land at Grove Street and Bebington Road, New Ferry</td><td>Residential led Mixed Use</td><td>0.29 hectares, 14 units</td></tr><tr><td>RES-RA11.4</td><td>Site of 78, 78A and 82 Bebington Road, New Ferry</td><td>Residential led Mixed Use</td><td>0.06 hectares, 11 units</td></tr><tr><td>RES-RA11.5</td><td>100 New Chester Road, New Ferry</td><td>Residential led Mixed Use</td><td>0.26 hectares, 27 units</td></tr></table>	Site Ref	Location	Uses	Size and Capacity	RES-RA11.1	43 Bebington Road, New Ferry	Residential-led Mixed Use	0.09 hectares, 20 units	RES-RA11.2	Woodhead Street Car Park, New Ferry	Residential led Mixed Use	0.77 hectares, 37 units	RES-RA11.3	Land at Grove Street and Bebington Road, New Ferry	Residential led Mixed Use	0.29 hectares, 14 units	RES-RA11.4	Site of 78, 78A and 82 Bebington Road, New Ferry	Residential led Mixed Use	0.06 hectares, 11 units	RES-RA11.5	100 New Chester Road, New Ferry	Residential led Mixed Use	0.26 hectares, 27 units	<p>Likely Significant Effects of Policy RA11 on European sites cannot be excluded.</p> <p>This policy sets out that approx. 109 net additional dwellings will be delivered in the New Ferry Regeneration Area. Successful planning applications will need to protect views over heritage assets and contribute to public realm and highway improvements. This policy identifies both a quantum and geographic location of housing development.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none">Recreational pressure (both in SPAs and
Site Ref	Location	Uses	Size and Capacity																							
RES-RA11.1	43 Bebington Road, New Ferry	Residential-led Mixed Use	0.09 hectares, 20 units																							
RES-RA11.2	Woodhead Street Car Park, New Ferry	Residential led Mixed Use	0.77 hectares, 37 units																							
RES-RA11.3	Land at Grove Street and Bebington Road, New Ferry	Residential led Mixed Use	0.29 hectares, 14 units																							
RES-RA11.4	Site of 78, 78A and 82 Bebington Road, New Ferry	Residential led Mixed Use	0.06 hectares, 11 units																							
RES-RA11.5	100 New Chester Road, New Ferry	Residential led Mixed Use	0.26 hectares, 27 units																							

	<p>B. Applications within New Ferry Regeneration Area will be permitted subject to meeting the following requirements and other relevant policies of the Local Plan. Development proposals should:</p> <ol style="list-style-type: none"> 1. Support the reconfiguration of the shopping centre at Woodhead Street and along Bebington Road, where alternative uses including appropriate high-density residential development will be encouraged as shown on the Policies Map (TC-SA4.2); 2. protect and maximise views and the setting of heritage assets including Port Sunlight Village; 3. contribute proportionately and appropriately to and/or not prejudice the provision of public realm and highway improvements, including the proposed partial reopening of Bebington Road. <p>New Ferry Masterplan (MPA-RA11.1)</p> <p>C. Development proposals within the Masterplan Area shown on the Policies Map must be in conformity with a Masterplan and Design Code which has been endorsed by the Council and provide, as appropriate, for:</p> <ol style="list-style-type: none"> 1. Mixed use residential led development on land in and around the New Ferry Local Centre shown on the Policies Map where: <ol style="list-style-type: none"> i. High quality flexible premises will be delivered to be adaptable in response to changing circumstances and promote sustainable economic growth over the lifetime of the development; and ii. A high standard of amenity for all future occupiers will be achieved; and iii. There would be no unreasonable restrictions on the operation, or future development of adjacent businesses, uses or sites. 2. Residential development on the Woodhead Street Car Park (RES-RA11.2) shown on the Policies Map will be permitted subject to the delivery of: <ol style="list-style-type: none"> i. The removal of obsolete hard surfaces and associated equipment to create a new high quality residential area with active frontages that will support and complement the regeneration of New Ferry Local Centre and preserve and enhance heritage assets at Port Sunlight Village and Hesketh Hall; and ii. A permeable layout which will give priority to cycle and pedestrian routes into the Local Centre. 	<p>Ramsars, and functionally linked habitat)</p> <ul style="list-style-type: none"> • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy RA11 is screened in for Appropriate Assessment.</p>
Part 5 – Settlement Area Policies		
Policy WP1 – Policy for Wallasey		
<p>Policy WP1.1 – Conservation Areas</p>	<p>Wellington Road (CON-SA1.1)</p> <p>A. Proposals within the Wellington Road Conservation Area will be supported where they:</p>	<p>There are no LSEs of Policy WP1.1 on European sites.</p>

	<ol style="list-style-type: none"> 1. preserve the grade II listed Victorian Villas, and conserve the character, immediate and wider setting of these assets, in addition to the terraced gardens extending to Pilots Way, boundary walls and ornate cast iron railings and balconies; 2. retain, preserve and enhance the following common aspects of villa design on existing buildings: <ol style="list-style-type: none"> i. roof design; ii. barge – boarding; iii. stuccoed elevations; iv. decorated friezes; v. cast iron balconies and railings; and vi. stone boundary walls. 3. preserve, retain and enhance the open aspect of views into, and out of the Conservation Area together with the unobstructed views of the listed buildings and green open and leisure space to the immediate north; 4. preserve and enhance the nature and character of Marine park for formal open–air public recreation; 5. retain and enhance the character, style and building materials of Marine Mansions, Marine Park and Portland Court; 6. respect the villa form in terms of mass, scale, tone and texture, and preserve and enhance the character of the area. <p>The Magazines (CON-SA1.2)</p> <p>B. Proposals within the Magazines Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. enhance the consistency of scale, massing and separation between neighbouring buildings; 2. preserve the setting and character of the historic riverside village; 3. preserve the formal character and layout of Vale Park; 	<p>This is a development management policy that protects the Wellington Road and The Magazines Conservation Areas from adverse effects from new development. However, the protection of Conservation Areas has no bearing on European sites.</p> <p>Policy WP1.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
--	--	---

	<div><div><div>4. preserve the area’s urban green spaces; and</div><div>5. preserve the variety of buildings, materials and designs including highly decorative details, balconies and roofscapes;</div><div>6. retain and improve unifying features such as landscaping, and boundary treatment, including stone and brick boundary walls;</div><div>7. ensure the material palette, landscaping, boundary treatments and building design respect the character of the Conservation Area.</div></div></div>																					
Policy WP1.2 Residential Sites	<div><div>–</div><div><div>C. Sites of 1- 9 units listed in Appendix 16 and shown on the Policies Map are expected to yield a total of 8 dwellings, in addition to existing commitments.</div><div>D. The following sites of 10 units or more, shown on the Policies Map, are allocated for residential development.</div><table><thead><tr><th>ID</th><th>Name</th><th>Approximate Capacity</th><th>Delivery Timescale</th></tr></thead><tbody><tr><td>RES-SA1.1</td><td>Rear of The Lighthouse Public House, Wallasey Village</td><td>10</td><td>2025/26 onwards</td></tr><tr><td>RES-SA1.2</td><td>Land at Gibson House, Seabank Road, Egremont</td><td>15</td><td>2023/24 onwards</td></tr><tr><td>RES-SA1.3</td><td>Rear of Gibson House, Maddock Road, Egremont</td><td>87</td><td>2024/25 onwards</td></tr><tr><td>RES-SA1.5</td><td>Old Manor Club, Withens Lane, Liscard</td><td>10</td><td>2023/24 onwards</td></tr></tbody></table></div></div>	ID	Name	Approximate Capacity	Delivery Timescale	RES-SA1.1	Rear of The Lighthouse Public House, Wallasey Village	10	2025/26 onwards	RES-SA1.2	Land at Gibson House, Seabank Road, Egremont	15	2023/24 onwards	RES-SA1.3	Rear of Gibson House, Maddock Road, Egremont	87	2024/25 onwards	RES-SA1.5	Old Manor Club, Withens Lane, Liscard	10	2023/24 onwards	<div><div>Likely Significant Effects of Policy WP1.2 on European sites cannot be excluded.</div><div>This policy sets out that at least 122 net additional dwellings will be delivered on residential sites across Wallasey (outside the Regeneration Areas). Furthermore, several sites comprising 1 – 9 units will result in a total of 8 net additional dwellings.</div><div>Overall, this policy identifies both a quantum and geographic location of housing development. While the number of dwellings to be delivered is relatively small, these dwellings will add to the ‘in-combination’ effect on European sites.</div><div>The following impact pathways are present:</div></div>
ID	Name	Approximate Capacity	Delivery Timescale																			
RES-SA1.1	Rear of The Lighthouse Public House, Wallasey Village	10	2025/26 onwards																			
RES-SA1.2	Land at Gibson House, Seabank Road, Egremont	15	2023/24 onwards																			
RES-SA1.3	Rear of Gibson House, Maddock Road, Egremont	87	2024/25 onwards																			
RES-SA1.5	Old Manor Club, Withens Lane, Liscard	10	2023/24 onwards																			

		<ul style="list-style-type: none"> • Recreational pressure (both in SPAs and Ramsars, and functionally linked habitat) • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy WP1.2 is screened in for Appropriate Assessment.</p>
Policy WP2 – Policy for the Birkenhead Commercial Core		
Policy WP2.1 – Conservation Areas	Hamilton Square (CON-SA2.1) <p>A. Proposals within the Hamilton Square Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. preserve and enhance the historic character, formal setting and sense of enclosure within the central square; 2. retain the unity of design and elevational treatment of buildings and the cohesive frontages overlooking the central gardens; 3. preserve and enhance buildings and spaces that contribute positively to the significance and character of the Conservation Area; 4. secure where appropriate, economic, residential and leisure activity within the Area, that will secure a sustainable future for heritage at risk; 	<p>There are no LSEs of Policy WP2.1 on European sites.</p> <p>This is a development management policy that protects the Hamilton Square Conservation Area from adverse effects from new development. However, the protection of Conservation Areas has no bearing on European sites.</p>

		<p>5. retain the historic and formal character of the central garden area; and</p> <p>6. any new development of buildings or sites neutral or negative to the conservation area, should acknowledge the street context, and reflect the scale, proportions and materiality of the surrounding area.</p> <p>B. Buildings of scale located beyond the Square should not be overly dominant, and should not detract from the cohesive character of the formal garden and the townhouses. New buildings which are not of the highest design quality will not be permitted.</p>	<p>Policy WP2.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>												
Policy WP2.2 Residential Sites	–	<p>C. There are no residential sites of 1 - 9 units, in addition to existing commitments.</p>	<p>There are no LSEs of Policy WP2.2 on European sites.</p> <p>This development management policy stipulates that no further residential sites of 1-9 units will be delivered in the Birkenhead Commercial Core.</p> <p>Policy WP2.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>												
Policy WP2.3 Employment Sites	–	<p>D. The following sites, shown on the Policies Map, are allocated for new employment development. The specific site requirements are set out below.</p> <table border="1"> <thead> <tr> <th>ID</th><th>Name</th><th>Area (ha)</th><th>Uses</th></tr> </thead> <tbody> <tr> <td>EMP-SA2.1</td><td>Cammell Laird South, Campbeltown Road, Birkenhead</td><td>5.52</td><td>B2, B8 / Port related</td></tr> <tr> <td>EMP-SA2.2</td><td>Twelve Quays, north of Tower Wharf, Birkenhead</td><td>1.06</td><td>B2, B8 / Port related</td></tr> </tbody> </table>	ID	Name	Area (ha)	Uses	EMP-SA2.1	Cammell Laird South, Campbeltown Road, Birkenhead	5.52	B2, B8 / Port related	EMP-SA2.2	Twelve Quays, north of Tower Wharf, Birkenhead	1.06	B2, B8 / Port related	<p>Likely Significant Effects of Policy WP2.3 on European sites cannot be excluded.</p> <p>This policy sets out that at approx. 6.58ha of employment land will be delivered on Cammell Laird South and Twelve Quays north of Tower Wharf. Development of these sites will need to deliver flexible</p>
ID	Name	Area (ha)	Uses												
EMP-SA2.1	Cammell Laird South, Campbeltown Road, Birkenhead	5.52	B2, B8 / Port related												
EMP-SA2.2	Twelve Quays, north of Tower Wharf, Birkenhead	1.06	B2, B8 / Port related												

	<p>Site EMP – SA2.1 Cammell Laird South, Campbeltown Road, Birkenhead (5.52ha)</p> <p>E. This site is allocated for main employment uses - including industrial processes, research and development, storage and distribution, with priority given to uses which would support the maritime sector. Development of this site should:</p> <ol style="list-style-type: none"> 1. Take a comprehensive design approach providing flexible business premises that can be adapted in response to changing circumstances that: <ol style="list-style-type: none"> i. connects to the highways network at either the existing access to the car park at the east of the site or by a new junction on Campbeltown Road, adjacent but offset from the existing access to Lairdside Laser Engineering Centre; ii. provides a permeable layout that connects buildings with pedestrian and cycle routes within the site to the Wirral Circular Trail; iii. uses landscaping to soften the visual impact of new buildings and enhances the Campbeltown Road frontage; and 2. Demonstrate that the potential for unscheduled archaeological remains has been evaluated. <p>Site EMP – SA2.2 Twelve Quays, Tower Wharf, Birkenhead (1.06ha)</p> <p>F. This site is allocated for main employment uses including industrial processes, research and development, storage and distribution with priority given to uses which support the adjoining Twelve Quays RoRo terminal. Development of this site should:</p> <ol style="list-style-type: none"> 1. take a comprehensive approach providing flexible business premises that can be adapted in response to changing circumstances that: 2. create attractive frontages facing Tower Road and Tower Wharf; 3. in the case of port-related uses supporting the adjacent Ro-Ro terminal provide adequate boundary treatment and screening of port uses within the site; 4. locate any mechanical plant, service, storage and parking areas to avoid prominence in the street scene: and 5. provide vehicular access that coordinates safely with the public realm and traffic calming improvements, which have taken place on Tower Road and Tower Wharf. 	<p>business premises and attractive frontages.</p> <p>Overall, this policy identifies both a quantum and geographic location of employment development. While the extent of employment land to be delivered is relatively small, these sites will add to the ‘in-combination’ effect on European sites.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy WP2.3 is screened in for Appropriate Assessment.</p>
Policy WP3 – Policy for Suburban Birkenhead		
Policy WP3.1 – Conservation Areas	Bidston Village (CON-SA3.1)	There are no LSEs of Policy WP3.1 on European sites.

	<p>A. Proposals within Bidston Village Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. preserve and enhance the rural character of the historic village and retain the visual separation of the village from the modern, built-up areas nearby; 2. retain and enhance the character, scale and setting of remaining agricultural buildings and cottages; 3. preserve unifying features of design, such as window treatments, stone parapets, gabled entrance porches, the mix between brick and stone as building materials, stone paving flags, and stone boundary walls; 4. retain tree-belts on the lower slopes of Bidston Hill behind Bidston Hall, and on land between Lennox Lane and Bidston Village Road; 5. ensure land-uses within the precincts of Church Farm, Ivy Farm, Yew Tree Farm and Bidston Hall Farm acknowledge and respect the former agricultural and rural character of the sites, and new proposed uses are sympathetic; 6. retain the open aspect of land between Boundary Road and Bidston Hall, and at the junction of Lennox Lane and Bidston Village Road. <p>Birkenhead Park (CON-SA3.2)</p> <p>B. Proposals within Birkenhead Park Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. conserve and enhance the Park's historic context in volume, scale, form, materials and quality; 2. preserve and enhance the setting, character and appearance of an extensive Victorian public park including its buildings backing on to the Park such as lodges, terraces and villas; 3. retain unifying features of design, such as gate piers, boundary fences and walls, and the nature and extent of landscaping throughout the Conservation Area; 4. give priority to the residential use of historic buildings; 5. preserve uninterrupted, tree-lined, open vistas within the "inner park" as delineated by the route of Park Drive; 	<p>This is a development management policy that protects the Bidston Village, Birkenhead Park, Oxtown Village, Rock Park, Flaybrick Cemetery, Clifton Park and Mountwood Conservation Areas from adverse effects from new development. However, the protection of Conservation Areas has no bearing on European sites.</p> <p>Policy WP3.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
--	--	---

6. introduce an effective landscaping treatment to Park Drive which allows glimpsed views only of houses backing on to the Park;
7. avoid development of backland areas facing the park consistent with the restrictive covenants affecting private land beyond the periphery of Park Drive.

Oxton Village (CON-SA3.3)

C. Proposals within Oxton Village Conservation Area will be supported where they:

1. conserve and enhance the essential unifying features of the landscape and street scene throughout the area, particularly the extensive canopy of mature trees and historic sandstone boundary walls;
2. conserve the diversity of its architectural and historic interest exemplified in its five zones;
3. within garden areas, demonstrate that the scale, form and design will preserve or enhance the setting of the parent and adjacent buildings and the character of the immediate locality;
4. within the village centre, demonstrate that they will not generate environmental impacts likely to harm the mixed retail, business, and residential character of the centre, and that design of shopfronts will preserve and enhance its character;
5. retain existing areas of York stone flags.

Rock Park (CON-SA3.4)

D. Proposals within Rock Park Conservation Area will be supported where they:

1. preserve and enhance the original character, design and layout of the former merchants' estate.
2. preserve and enhance public access along the Esplanade and views across the Mersey Estuary;
3. retain unifying features, including but not limited to the irregular, looped, landscaped driveway and the density, scale, massing and woodland setting of the developed areas;
4. retain the open, landscaped character of Rock Park Linear Open Space and Rock Park Esplanade Open Space;

Flaybrick Cemetery (CON-SA3.5)

	<p>E. Proposals within Flaybrick Cemetery Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. retain and enhance the landscape quality and quiet diverse characters of the various sections of the High Victorian cemetery; 2. preserve and reinstate glimpsed views of Birkenhead and across the River Mersey to Liverpool through tree management and control of development in the immediate vicinity of the cemetery which affects its setting; 3. retain and enhance unifying features, such as stone walls and gate piers, railings, symmetrical composition and the Gothic style of chapels and lodges; 4. preserve the visual dominance and style of the main processional avenue; 5. through Conservation Area Consent protect pre 1925 monuments and gravestones from being laid down or removed. <p>Clifton Park (CON-SA3.6)</p> <p>F. Proposals within Clifton Park Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. conserve and enhance the historic character and appearance of a Victorian suburb and it's landscaped setting; 2. retain and enhance the consistency of scale, massing and separation between neighbouring buildings; 3. retain the variety of buildings together with highly decorative details and roofscapes, their materials and design; 4. retain, create and improve unifying features such as boundary treatment, including stone walls, sandstone flags and railings and attractive landscaping within public vantage points as well as protect the tree scape within the Park area. <p>Mountwood (CON-SA3.7)</p> <p>G. Proposals within Mountwood Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. preserve and enhance the intrinsic charm and character of the Conservation Area of large houses of eclectic and varied architecture set within mature grounds; 	
--	--	--

		<ol style="list-style-type: none"> 2. retain key views out of the conservation area to north Wales and Liverpool, and the setting of Prenton Reservoir, St Stephen's Church, Prenton War Memorial and the Merchant Marine Memorial; 3. preserve and regenerate the extensive canopy of woodland to retain and enhance character and increase biodiversity; 4. in proposals for new residential development, maintain the character of a single substantial building set within an appropriate plot size, rather than a series of smaller dwellings; 5. retain and reinstate existing architectural features of boundary treatments including sandstone walls, pillars, gateposts, fences and hedges. 									
Policy WP3.2 – Proposals in Devonshire Park	H.	Proposals within the neighbourhood plan area should be brought forward in line with the Devonshire Park Neighbourhood Plan.	<p>There are no LSEs of Policy WP3.2 on European sites.</p> <p>This is a development management policy that brings forward development proposals in Devonshire Park in line with the relevant Neighbourhood Plan.</p> <p>Policy WP3.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>								
Policy WP3.3 – Residential Sites	I. J.	<p>Sites of 1- 9 units listed in Appendix 16 and shown on the Policies Map are expected to yield a total of 3 dwellings, in addition to existing commitments.</p> <p>The following sites of 10 units or more, shown on the Policies Map, are allocated for residential development.</p> <table border="1"> <thead> <tr> <th>ID</th><th>Name</th><th>Approximate Capacity</th><th>Delivery Timescale</th></tr> </thead> <tbody> <tr> <td>RES-SA3.1</td><td>Former Gladstone Liberals, Dial Road, Tranmere</td><td>31</td><td>2023/24 onwards</td></tr> </tbody> </table>	ID	Name	Approximate Capacity	Delivery Timescale	RES-SA3.1	Former Gladstone Liberals, Dial Road, Tranmere	31	2023/24 onwards	<p>Likely Significant Effects of Policy WP3.3 on European sites cannot be excluded.</p> <p>This policy sets out that at least 135 net additional dwellings will be delivered on residential sites across Suburban Birkenhead. Furthermore, several sites comprising 1 – 9 units will result</p>
ID	Name	Approximate Capacity	Delivery Timescale								
RES-SA3.1	Former Gladstone Liberals, Dial Road, Tranmere	31	2023/24 onwards								

	RES-SA3.2	Redcourt School, 7 Devonshire Place, Oxton	30	2023/24 onwards	<p>in a total of 3 net additional dwellings being delivered.</p> <p>Overall, this policy identifies both a quantum and geographic location of housing development. While the number of dwellings to be delivered is relatively small, these dwellings will add to the 'in-combination' effect on European sites.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Recreational pressure (both in SPAs and Ramsars, and functionally linked habitat) • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy WP3.3 is screened in for Appropriate Assessment.</p>
	RES-SA3.3	Sevenoaks, Phase 2b, Chatham Road, Rock Ferry	43	2022/23 onwards	
	RES-SA3.4	Atherton Hall, Westbourne Road, Birkenhead	15	2022/23 onwards	
	RES-SA3.9	Former Christ Church, Park Road South, Birkenhead	16	2026/27 onwards	

Policy WP3.4 – Employment Sites	<p>K. The following sites shown on the Policies Map are allocated for new employment development. The specific site requirements are set out below.</p> <table><tr><th>ID</th><th>Name</th><th>Area (ha)</th><th>Uses</th></tr><tr><td>EMP-SA3.1</td><td>Land west of Prenton Way, North Cheshire Trading Estate, Prenton</td><td>0.58</td><td>B2, B8</td></tr></table> <p>Site EMP-SA3.1 Land West of Prenton Way North Cheshire Trading Estate, Prenton (0.58 ha)</p> <p>L. The site is allocated for main employment uses - offices/ light industry, research and development general industry, storage and distribution (B2, B8). Development of this site should:</p> <ol style="list-style-type: none">1. provide flexible business premises that can be adapted in response to changing circumstances; and2. provide a landscape buffer with the M53.	ID	Name	Area (ha)	Uses	EMP-SA3.1	Land west of Prenton Way, North Cheshire Trading Estate, Prenton	0.58	B2, B8	<p>Likely Significant Effects of Policy WP3.3 on European sites cannot be excluded.</p> <p>This policy sets out that at approx. 0.58ha of employment land will be delivered on the North Cheshire Trading Estate. Development of this site will need to deliver flexible business premises and provide a landscape buffer with the M53.</p> <p>Overall, this policy identifies both a quantum and geographic location of employment development. While the extent of employment land to be delivered is relatively small, the site will add to the ‘in-combination’ effect on European sites.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none">• Loss of functionally linked habitat• Water quality• Water resources• Atmospheric pollution• Noise and visual disturbance from urbanization (e.g. construction, light pollution)
ID	Name	Area (ha)	Uses							
EMP-SA3.1	Land west of Prenton Way, North Cheshire Trading Estate, Prenton	0.58	B2, B8							

		Due to these linking impact pathways, Policy WP3.4 is screened in for Appropriate Assessment.
Policy WP4 – Policy for Bebington, Bromborough and Eastham		
Policy WP4.1 – Conservation Areas	<p>Port Sunlight (CON-SA4.1)</p> <p>A. Proposals within Port Sunlight Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. preserve and enhance the area’s unifying features such as scale, massing and design of buildings including use of superblocks and landscape setting; 2. preserve and enhance the character and layout of Registered landscapes: The Dell, The Diamond and The Causeway; 3. preserve the historic factory frontage overlooking the village from Wood Street; 4. preserve and enhance the visual setting of the village, its buildings, including all designed views and vistas, monuments, public art and landscaped areas; 5. preserve and enhance the quality and nature of the key approaches and entrances to the village; 6. retain the largely unbroken skyline, and preserve the sense of enclosure and separation, limit height and scale of buildings in close proximity to the village; 7. enhance the public realm and accessibility for the Conservation Area; 8. retain the primarily residential uses within the village whilst allowing complementary adaptive use of buildings that enhance the character and ensure its long term sustainability; 9. provide complementary uses within the Unilever factory site. <p>Bromborough Village (CON-SA4.2)</p> <p>B. Proposals within Bromborough Village Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. preserve and enhance the historic core character of Bromborough Village including the architecture, setting and environment around Bromborough Cross and the significance of St 	<p>There are no LSEs of Policy WP4.1 on European sites.</p> <p>This is a development management policy that protects the Port Sunlight, Bromborough Village, Bromborough Pool and Lower Bebington Conservation Areas from adverse effects from new development. However, the protection of Conservation Areas has no bearing on European sites.</p> <p>Policy WP4.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

	<p>Barnabas' Church, its spire, precincts, curtilage and courtyard, Hall, school, schoolhouse and lych-gate enhancing its surrounding landscaping;</p> <ol style="list-style-type: none"> 2. retain and maintain its unifying character and features including but not limited to, shared architectural design, materials, boundary walls, red sandstone structures and narrow lanes; 3. preserve the villages rurality by retaining, maintaining and conserving the stock of trees, shrubs, and hedgerows which act to characterise and screen it from adjacent commercial and urban uses. <p>Bromborough Pool (CON-SA4.3)</p> <p>C. Proposals within Bromborough Pool Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. preserve and enhance the character of a mid 19th century housing area; 2. preserve and enhance the five different types of significant, simply detailed, brick built, Welsh slated roofed, grade ii listed terraced housing; 3. retain the pattern and detail of windows; 4. preserve the open aspect of land providing an important separation function from surrounding modern industrial uses; 5. retain, preserve and maintain the buildings of architectural importance including, but not limited to the school, church, village hall and social club, together with the Court House site Scheduled Monument; 6. retain, conserve and maintain the green open spaces, set out as a grid pattern within the square formed by heritage buildings; 7. retain the front garden areas of all the properties as unfenced buffer zones. <p>Lower Bebington (CON-SA4.4)</p> <p>D. Proposals within Lower Bebington Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. preserve and enhance the sense of a village in a rural setting and retain the mixture of period buildings, rural cottages, merchant's houses and modern Civic Centre; 2. sustain and enhance the sense of enclosure provided by the sandstone boundary walls; 	
--	---	--

	<div><div><div>3.</div><div>preserve the pre industrial and rural origins of the village core;</div></div><div><div>4.</div><div>retain and maintain, in private residences and public spaces, the good quality specimen trees and encourage further tree planting;</div></div><div><div>5.</div><div>conserve and enhance Mayer Hall, Mayer library, Pennant House and Mayer Park including the parks sense of quiet and peace;</div></div><div><div>6.</div><div>maintain the contrast between Mayer Hall complex and the modern Civic Centre;</div></div><div><div>7.</div><div>sustain and enhance the setting of St. Andrew's Church which may contain important archaeological deposits.</div></div></div>																									
Policy WP4.2 Residential Sites –	<div><div><div>E.</div><div>Sites of 1- 9 units shown on the Policies Map are expected to yield a total of 11 dwellings, in addition to existing commitments.</div></div><div><div>F.</div><div>The following sites of 10 units or more, shown on the Policies Map, are allocated for residential development. The specific site requirements are set out below for sites over 50 dwellings.</div></div></div> <table><tr><th>ID</th><th>Name</th><th>Approximate Capacity</th><th>Delivery Timescale</th></tr><tr><td>RES-SA4.1</td><td>Land at Civic Way, Bebington</td><td>60</td><td>2024/25 onwards</td></tr><tr><td>RES-SA4.2 / MPA-SA4.2</td><td>Former MOD, Old Hall Road, Bromborough</td><td>250</td><td>2024/25 onwards</td></tr><tr><td>RES-SA4.3 / MPA-SA4.2</td><td>Riverside Office Park, Riverwood Road, Bromborough</td><td>200</td><td>2024/25 onwards</td></tr><tr><td>RES-SA4.5</td><td>Eastham Youth Centre, Lyndale Road</td><td>15</td><td>2024/25 onwards</td></tr><tr><td>RES-SA4.6</td><td>Former Croda, Prices Way, Bromborough Pool</td><td>100</td><td>2024/25 onwards</td></tr></table>	ID	Name	Approximate Capacity	Delivery Timescale	RES-SA4.1	Land at Civic Way, Bebington	60	2024/25 onwards	RES-SA4.2 / MPA-SA4.2	Former MOD, Old Hall Road, Bromborough	250	2024/25 onwards	RES-SA4.3 / MPA-SA4.2	Riverside Office Park, Riverwood Road, Bromborough	200	2024/25 onwards	RES-SA4.5	Eastham Youth Centre, Lyndale Road	15	2024/25 onwards	RES-SA4.6	Former Croda, Prices Way, Bromborough Pool	100	2024/25 onwards	<div><div>Likely Significant Effects of Policy WP4.2 on European sites cannot be excluded.</div><div>This policy sets out that at least 1,970 net additional dwellings will be delivered on residential sites across Bebington, Bromborough and Eastham. Furthermore, several sites comprising 1 – 9 units will result in a total of 11 net additional dwellings.</div><div>Overall, this policy identifies both a quantum and geographic location of housing development. The number of dwellings to be delivered is relatively large, meaning that the residential growth could result in impacts to European sites, both alone and ‘in-combination’.</div></div>
ID	Name	Approximate Capacity	Delivery Timescale																							
RES-SA4.1	Land at Civic Way, Bebington	60	2024/25 onwards																							
RES-SA4.2 / MPA-SA4.2	Former MOD, Old Hall Road, Bromborough	250	2024/25 onwards																							
RES-SA4.3 / MPA-SA4.2	Riverside Office Park, Riverwood Road, Bromborough	200	2024/25 onwards																							
RES-SA4.5	Eastham Youth Centre, Lyndale Road	15	2024/25 onwards																							
RES-SA4.6	Former Croda, Prices Way, Bromborough Pool	100	2024/25 onwards																							

	RES-SA4.7 / MPA- SA4.1	Former D1 Oils, Dock Road South, Bromborough	1,225	2024/25 onwards	<p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Recreational pressure (both in SPAs and Ramsars, and functionally linked habitat) • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy WP4.2 is screened in for Appropriate Assessment.</p>
	RES-SA4.11	Unilever Research, Quarry Road East, Bebington	120	2023/24 onwards	
	<p>Site RES SA4.1 Land at Civic Way, Bebington (0.84ha) approx 60 dwellings</p> <p>G. Development of this site should:</p> <ol style="list-style-type: none"> 1. take a comprehensive approach to create a sustainable residential area with active frontages to Civic Way; 2. conserve and enhance the Lower Bebington Conservation Area and integrate with neighbouring housing and the police station; 3. complete the front building line along Toleman Avenue and enhance the appearance of the area in context with the landscaped setting across open space toward the Village; 4. promote wildlife corridors into the neighbouring woodland and trees, Mayer Park and surrounding open space; 5. retain access to Wirral Evolutions/ Highcroft Centre from Civic Way through the site; and 6. retain pedestrian connections to Heath Road. <p>Site RES-SA4.2, RES SA 4.3 [MPA-SA4. 2] Land South of Riverwood Road and Old Hall Road (14.50 ha), Bromborough approx 450 dwellings.</p> <p>H. Development of this site should be in conformity with a comprehensive masterplan and design code which has been endorsed by the Council to coordinate the built form and landscape that demonstrates the delivery of an integrated sustainable community that delivers:</p> <ol style="list-style-type: none"> 1. a permeable layout with cycle and pedestrian routes through and to the site.; 2. appropriate infrastructure as set out in the Infrastructure Delivery Plan including appropriate provision for: 				

	<ul style="list-style-type: none"> i. the maintenance of a 5 metre wide natural wildlife foraging buffer zone adjacent to the Long Plantation Woodland and Local Wildlife Site along the southern boundary of the eastern part of the site; ii. public access to the coast, Eastham Country Park and Leverhulme playing fields for cyclists and pedestrians with continuous links to the Wirral Circular Trail; <p>3. Contributes appropriately and proportionately to:</p> <ul style="list-style-type: none"> i. the cost of managing recreational pressure on Eastham Country Park; ii. controlled crossing facilities at Old Hall Road/ New Chester Road and a pedestrian crossing along Old Hall Road between Riverwood Road and the junction of Old Hall Road and the A41 to enable safe access to schools, shops and community facilities; and iii. enhanced bus stop infrastructure and service. <p>Site RES 4.6 Former Croda, Prices Way, Bromborough Pool (4.62ha) approx 100 dwellings.</p> <ul style="list-style-type: none"> I. Development of the site should be comprehensive to create a sustainable residential area with active frontages facing public amenity open space and routes along Dibbinsdale Brook to Port Sunlight River Park that: <ul style="list-style-type: none"> 1. provides access for maintenance of Dibbinsdale Brook; 2. provides vehicular access at two points from the existing housing off Pool Lane; 3. provides pedestrian and cycleway links along and over Dibbinsdale Brook to Port Sunlight River park; 4. contributes appropriately and proportionately to bus services. <p>Site RES–SA4.7 [MPA-SA4. 1] Former D1 Oils, Dock Road South, Bromborough (23.50ha) approx 1,225 dwellings.</p> <ul style="list-style-type: none"> J. Development of this site should be in conformity with a comprehensive masterplan and design code which has been endorsed by the Council to coordinate the built form and landscape which demonstrates the delivery of an integrated sustainable community that delivers: 	
--	---	--

	<ol style="list-style-type: none"> 1. a high quality design, residential area with accessible public open space including children's play within the site and along the Mersey waterfront; 2. coherent active frontages facing Bromborough Pool Conservation Area on Dock Road South and throughout the public realm that encourage social interaction and enhance the setting of the buildings; 3. a permeable layout with cycle and pedestrian routes that enables public access between all parts of the neighbourhood and the neighbouring areas; 4. an appropriate drainage strategy; and 5. appropriate infrastructure as set out in the Infrastructure Delivery Plan including appropriate provision for: <ol style="list-style-type: none"> i. a new bus route between Dock Road South and Riverbank and new bus stop infrastructure within the neighbourhood ii. public access to the coast for cyclists and pedestrians with continuous links to neighbouring coastal land and the Wirral Circular Trail subject to any impact on European nature conservation sites; 6. Contributes appropriately and proportionately to: <ol style="list-style-type: none"> i. Primary school places; ii. Bus services and bus stop infrastructure on Dock Road South and Riverbank Road; iii. controlled crossing facilities at Port Causeway/New Chester Rd and Thermal Rd/Dock Rd South; iv. the upgrade of the uncontrolled crossing facility to the south of Port Causeway/ Thermal Road junction to a toucan crossing; v. the upgrade of the junction of Riverbank Road/ Thermal Road to signal control incorporating controlled pedestrian crossing facilities. <p>Site SA4.11 Unilever Research, Quarry Road East, Bebington (3.42ha) approx 120 dwellings</p>	
--	--	--

	<p>K. Development of the site should be comprehensive to create a sustainable residential area with active frontages facing Quarry Road East that:</p> <p>1. integrates and protects established trees and woodland in and around the site and promotes wildlife corridors through the site and into neighbouring woodland;</p> <p>2. provides highway access via two access points from Quarry Road East;</p> <p>3. contributes appropriately and proportionately to:</p> <p>i. the subway (lighting and refurbishment) between Bromborough Road and Westgate Road;</p> <p>ii. upgraded traffic signal infrastructure where Bromborough Road passes below the rail line to the south of the site including cycle detectors.</p>																									
Policy WP4.3 – Employment Sites	<p>L. The following sites shown on the Policies Map are allocated for new employment development. The specific site requirements are set out below.</p> <table><thead><tr><th>ID</th><th>Name</th><th>Area (ha)</th><th>Uses</th></tr></thead><tbody><tr><td>EMP-SA4.1</td><td>Land South of Riverbank Road, Bromborough</td><td>1.01</td><td>B2, B8</td></tr><tr><td>EMP-SA4.2</td><td>Sun Valley expansion, Commercial Road, Bromborough</td><td>0.97</td><td>B2, B8</td></tr><tr><td>EMP-SA4.3</td><td>Land north of Caldbeck Road, east of Welton Road, Bromborough</td><td>2.35</td><td>B2, B8</td></tr><tr><td>EMP-SA4.4</td><td>Tulip expansion, Plantation Road, Bromborough</td><td>2.05</td><td>B2, B8</td></tr><tr><td>EMP-SA4.5</td><td>North Road Business Park, North Road, Eastham</td><td>9.28</td><td>B2, B8</td></tr></tbody></table> <p>Site EMP SA4.1 Land south of Riverbank Road, Bromborough (1.01ha)</p>	ID	Name	Area (ha)	Uses	EMP-SA4.1	Land South of Riverbank Road, Bromborough	1.01	B2, B8	EMP-SA4.2	Sun Valley expansion, Commercial Road, Bromborough	0.97	B2, B8	EMP-SA4.3	Land north of Caldbeck Road, east of Welton Road, Bromborough	2.35	B2, B8	EMP-SA4.4	Tulip expansion, Plantation Road, Bromborough	2.05	B2, B8	EMP-SA4.5	North Road Business Park, North Road, Eastham	9.28	B2, B8	<p>Likely Significant Effects of Policy WP4.3 on European sites cannot be excluded.</p> <p>This policy sets out that at approx. 15.66ha of employment land will be delivered on employment sites across Bebington, Bromborough and Eastham. Development of these sites will need to deliver flexible business premises, provide landscaped frontages and viable pedestrian / cycling routes permeating the developments.</p> <p>Overall, this policy identifies both a quantum and geographic location of employment development. The extent of employment land to be</p>
ID	Name	Area (ha)	Uses																							
EMP-SA4.1	Land South of Riverbank Road, Bromborough	1.01	B2, B8																							
EMP-SA4.2	Sun Valley expansion, Commercial Road, Bromborough	0.97	B2, B8																							
EMP-SA4.3	Land north of Caldbeck Road, east of Welton Road, Bromborough	2.35	B2, B8																							
EMP-SA4.4	Tulip expansion, Plantation Road, Bromborough	2.05	B2, B8																							
EMP-SA4.5	North Road Business Park, North Road, Eastham	9.28	B2, B8																							

	<p>M. The site is allocated for main employment uses - industrial processes, research and development storage and distribution (B2, B8). Development of this site should:</p> <ol style="list-style-type: none"> 1. take a comprehensive design approach providing flexible business premises that can be adapted in response to changing circumstances; 2. provide landscaped frontages along Riverbank Road, with any external service, storage yards and parking areas located to the rear to avoid prominence in the street scene; 3. retain existing healthy trees and hedging plants on the southern and eastern boundaries of the site and promote wildlife corridors; 4. provide legible pedestrian and cycle routes to buildings and a connection to the Wirral Circular Trail; 5. ensure visibility splays to achieve the safest line of sight taking into account the bend in Riverbank Road <p>Site EMP- SA4.2 Sun Valley expansion, Commercial Road, Bromborough (0.97ha)</p> <p>N. The site is allocated for main employment uses - industrial processes, research and development storage and distribution (B2, B8). Development of this site should:</p> <ol style="list-style-type: none"> 1. take a design approach providing flexible business premises that can be adapted in response to changing circumstances; 2. provide landscaped frontages facing Stadium Road and Commercial Road and locate any external service, storage yards and parking areas to the rear to avoid prominence in the street scene; 3. provide landscaping to promote wildlife corridors; 4. provide for legible pedestrian and cycle routes to buildings and a connection to Stadium Road and Commercial Road. <p>Site EMP- SA4.3 Land north of Caldbeck Road, east of Welton Road, Bromborough (2.35ha)</p> <p>O. The site is allocated for main employment uses - industrial processes, research and development storage and distribution (B2, B8). Development of this site should:</p> <ol style="list-style-type: none"> 1. take a comprehensive design approach providing flexible business premises that can be adapted in response to changing circumstances; 2. provide landscaped frontages facing Caldbeck Road and Welton Road and locate any external service, storage yards and parking areas to the rear to avoid prominence in the street scene; 3. provide a single vehicular access point via a signalled junction from Caldbeck Road/ Thursby Road; 4. retain existing healthy trees on the boundaries of the site and provide landscaping to promote wildlife corridors; 	<p>delivered may lead to LSEs on European sites, both alone and 'in-combination'.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy WP4.3 is screened in for Appropriate Assessment.</p>
--	--	--

5. provide for legible pedestrian and cycle routes to buildings and a connection to the Croft Retail Park via Welton Road.

Site EMP SA4.4 – Tulip expansion, Plantation Road, Bromborough (2.05ha)

- P. The site is allocated for main employment uses - industrial processes, research and development storage and distribution (B2, B8). For possible future expansion of the existing Tulip factory or separate development, subject to there being no adverse impact on the operation of the existing business and satisfactory boundary arrangements being put in place. Development of this site should:
1. take a comprehensive design approach providing flexible business premises that can be adapted in response to changing circumstances;
 2. create attractive frontages facing Plantation Road and Riverwood Road and locate any external service, storage yards and parking areas to the rear to avoid prominence in the street scene;
 3. retain existing healthy trees and hedging plants on the boundary with Power Road and provide landscaping to promote wildlife corridors;
 4. provide vehicular access from Plantation Road;
 5. provide for legible pedestrian and cycle routes to buildings and a connection to the Wirral Circular Trail along Plantation Road.

Site EMP- S4.5 North Road Business Park, North Road, Eastham (9.28ha)

- Q. The site is allocated for main employment uses - industrial processes, research and development storage and distribution (B2, B8). Development of this site should:
1. take a comprehensive design approach providing flexible business premises that can be adapted in response to changing circumstances in accordance with existing outline planning permission or a design code for the site;
 2. minimise the loss of healthy trees and provide landscaping to promote wildlife corridors;
 3. provide two road accesses with visibility splays at a grade capable of crossing the disused freight line (within the boundary of Cheshire West and Chester Council) ;
 4. provide for legible pedestrian and cycle routes to buildings and a connection to North Road (within the boundary of Cheshire West and Chester Council);
 5. provide an HGV routing and signage strategy and Haulier Rules which avoids travelling through Eastham Village.

Access to this site via Road/rail is within the administrative boundary of Cheshire West and Chester Council. The site has outline planning permission (with all matters reserved) for B2/B8 Use floorspace and ancillary uses up to a maximum of 500,000sqft (46,450sqm). The application was submitted to both Wirral and Cheshire West and Chester Councils with Wirral acting as the lead authority. The planning permission allows development to be commenced either before the expiration of 7 years from the date of this permission or before the expiration of 5

	years from the date of approval of the last of the reserved matters to be approved, whichever is the later. The site is allocated to safeguard the quantum of floorspace permitted. The site is considered to be complementary to Cheshire West and Chester’s key sub-regional adjacent employment allocation (Hooton Park/Vauxhall), and the wider Ellesmere Port Industrial Area. The quoted site area relates to the land within Wirral's administrative boundary only.																													
Policy WP5 – Policy for Leasowe, Moreton, Upton, Greasby and Woodchurch																														
Policy WP5.1 – Residential Sites	<p>A. Sites of 1- 9 units shown on the Policies Map are expected to yield a total of 18 dwellings, in addition to existing commitments.</p> <p>B. The following sites of 10 units or more, shown on the Policies Map, are allocated for residential development. Where relevant, the additional site requirements below apply:</p> <table><thead><tr><th>ID</th><th>Name</th><th>Approximate Capacity</th><th>Delivery Timescale</th></tr></thead><tbody><tr><td>RES-SA5.1</td><td>Moreton Family Centre, Pasture Road</td><td>75</td><td>2023/24 onwards</td></tr><tr><td>RES-SA5.3</td><td>East of Typhoo, Reeds Lane, Leasowe</td><td>100</td><td>2024/25 onwards</td></tr><tr><td>RES-SA5.4</td><td>Former Foxfield School, Douglas Drive, Moreton</td><td>65</td><td>2024/25 onwards</td></tr><tr><td>RES-SA5.5</td><td>Former Stirrup PH, Arrowe Park Road, Woodchurch</td><td>45</td><td>2024/25 onwards</td></tr><tr><td>RES-SA5.7</td><td>Land at Knutsford Road, Moreton</td><td>36</td><td>2024/25 onwards</td></tr><tr><td>RES-SA5.8</td><td>Former Dodd’s Builders Merchants, Bermuda Road, Moreton</td><td>14</td><td>2023/24 onwards</td></tr></tbody></table> <p>Site RES-SA5.3 East of Typhoo, Reeds Lane, Leasowe (5.01ha) approx 100 dwellings</p> <p>C. Development of this site should:</p> <p>1. take a comprehensive approach to create a new sense of place in a sustainable residential area distinct from its neighbouring uses;</p>	ID	Name	Approximate Capacity	Delivery Timescale	RES-SA5.1	Moreton Family Centre, Pasture Road	75	2023/24 onwards	RES-SA5.3	East of Typhoo, Reeds Lane, Leasowe	100	2024/25 onwards	RES-SA5.4	Former Foxfield School, Douglas Drive, Moreton	65	2024/25 onwards	RES-SA5.5	Former Stirrup PH, Arrowe Park Road, Woodchurch	45	2024/25 onwards	RES-SA5.7	Land at Knutsford Road, Moreton	36	2024/25 onwards	RES-SA5.8	Former Dodd’s Builders Merchants, Bermuda Road, Moreton	14	2023/24 onwards	<p>Likely Significant Effects of Policy WP5.1 on European sites cannot be excluded.</p> <p>This policy sets out that at least 335 net additional dwellings will be delivered on residential sites across Leasowe, Moreton, Upton, Greasby and Woodchurch. Furthermore, several sites comprising 1 – 9 units will result in a total of 18 net additional dwellings being delivered.</p> <p>Overall, this policy identifies both a quantum and geographic location of housing development. The number of dwellings to be delivered is relatively large, meaning that the residential growth could result in LSEs on European sites, both alone and ‘in-combination’.</p> <p>The following impact pathways are present:</p>
ID	Name	Approximate Capacity	Delivery Timescale																											
RES-SA5.1	Moreton Family Centre, Pasture Road	75	2023/24 onwards																											
RES-SA5.3	East of Typhoo, Reeds Lane, Leasowe	100	2024/25 onwards																											
RES-SA5.4	Former Foxfield School, Douglas Drive, Moreton	65	2024/25 onwards																											
RES-SA5.5	Former Stirrup PH, Arrowe Park Road, Woodchurch	45	2024/25 onwards																											
RES-SA5.7	Land at Knutsford Road, Moreton	36	2024/25 onwards																											
RES-SA5.8	Former Dodd’s Builders Merchants, Bermuda Road, Moreton	14	2023/24 onwards																											

	<table><tr><td>EMP-SA5.3</td><td>Land south of Premier / Typhoo access Road, Reeds Lane, Moreton</td><td>1.93</td><td>B2, B8</td></tr><tr><td>EMP-SA5.4</td><td>Land south of Tarran Way North, Moreton</td><td>0.25</td><td>B2, B8</td></tr></table>	EMP-SA5.3	Land south of Premier / Typhoo access Road, Reeds Lane, Moreton	1.93	B2, B8	EMP-SA5.4	Land south of Tarran Way North, Moreton	0.25	B2, B8	<p>these sites will need to deliver flexible business premises, provide landscaped buffers and viable pedestrian / cycling routes permeating the developments.</p> <p>Overall, this policy identifies both a quantum and geographic location of employment development. The extent of employment land to be delivered may lead to LSEs on European sites, both alone and 'in-combination'.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none">• Loss of functionally linked habitat• Water quality• Water resources• Atmospheric pollution• Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy WP5.2 is screened in for Appropriate Assessment.</p>
EMP-SA5.3	Land south of Premier / Typhoo access Road, Reeds Lane, Moreton	1.93	B2, B8							
EMP-SA5.4	Land south of Tarran Way North, Moreton	0.25	B2, B8							
	<p>Site EMP-SA5.1 Peninsula Business Park, Reeds Lane, Moreton (1.1ha)</p> <p>F. The site is allocated for main employment uses -industrial processes, research and development storage and distribution (B2, B8). Development of this site should:</p> <ol style="list-style-type: none">1. provide flexible business premises that can be adapted in response to changing circumstances;2. retain existing healthy trees and provide a landscaped buffer along the boundaries with Reeds Lane and the River Birket Corridor to promote wildlife corridors;3. provide for legible pedestrian and cycle routes to buildings and a connection to the Wirral Circular Trail along the River Birkett and the route to Leasowe Railway Station. <p>Site EMP-SA5.2 Land north of Premier/ Typhoo access Road, Reeds Lane, Moreton (1.46ha)</p> <p>G. The site is allocated for main employment uses- industrial processes, research and development storage and distribution (B2, B8). Development of this site should:</p> <ol style="list-style-type: none">1. provide flexible business premises that can be adapted in response to changing circumstances;2. provide a landscaped buffer along the boundaries with Reeds Lane, the main access to road to the factory complex and the River Birket Corridor to promote wildlife corridors;3. provide for legible pedestrian and cycle routes to buildings and a connection to the Wirral Circular Trail along the River Birkett and the route to Leasowe Railway Station. <p>Site EMP-SA5.3 Land south of Premier/ Typhoo access Road, Reeds Lane, Moreton (1.93ha)</p> <p>H. The site is allocated for main employment uses - industrial processes, research and development storage and distribution (B2, B8). Development of this site should:</p>									

	<ol style="list-style-type: none"> 1. provide flexible business premises that can be adapted in response to changing circumstances; 2. retain healthy trees and provide a landscaped buffer along the boundary of the existing factory complex to promote wildlife corridors; 3. contribute appropriately and proportionately to provide for legible pedestrian and cycle routes to buildings and a connection to the Wirral Circular Trail and the route to Leasowe Railway Station; 4. Include a Transport Assessment and Travel Plan that, among other matters identify how the existing private road will continue to serve the factory complex and the future development and be maintained. <p>Site EMP- SA5.4 Land south of Tarran Way North, Moreton (0.25ha)</p> <ol style="list-style-type: none"> I. The site is allocated for main employment uses- industrial processes, research and development storage and distribution (B2, B8). Development of this site should: <ol style="list-style-type: none"> 1. provide flexible business premises that can be adapted in response to changing circumstances; 2. provide landscaping to promote a wildlife corridor link with the River Birket and surrounding area; 3. provide for legible pedestrian and cycle routes to buildings; 4. connect to pedestrian and cycle connections to the Wirral Circular Trail along the River Birket and the route to Moreton Railway Station; 5. provide vehicular access from Pasture Road. 	
Policy WP5.3 – Town Centre Proposals	<ol style="list-style-type: none"> J. The northern edge of Moreton Town Centre will be re-configured along Pasture Road, where alternative uses including new residential development will be encouraged, as shown on the Policies Map (TC-SA5.1). 	<p>There are no LSEs of Policy WP5.3 on European sites.</p> <p>This is a development management policy that promotes the residential redevelopment of the northern edge of Moreton Town Centre. However, this additional development is adequately</p>

		<p>assessed in Policies WP5.1 and WP5.2 above.</p> <p>Overall, Policy WP5.3 has no additional linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WP6 – Policy for West Kirby and Hoylake		
Policy WP6.1 – Conservation Areas	<p>Caldy (CON-SA6.1)</p> <p>A. Proposals within Caldys Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. retain and enhance the character of a maturely landscaped suburb with substantial houses in large grounds; 2. retain the unifying features of spatial design, layout and building materials within the old village core; 3. in proposals for new residential development, maintain the character of a single substantial building set within an appropriate plot size, rather than a series of smaller dwellings; 4. preserve the unity of strongly enclosed boundary treatment incorporating high walls, dense landscaping or dark-stained, close-boarded, timber fences in the area outside the old village core; 5. preserve the tree cover and encourage supplementary tree planting; 6. maintain views out of the conservation area to the Dee Estuary and of the North Wales coast beyond. <p>West Kirby Old Village (CON-SA6.2)</p> <p>B. Proposals within West Kirby Old Village Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. preserve the remaining semi-rural, low density character of a former medieval hamlet in a woodland setting; 	<p>There are no LSEs of Policy WP6.1 on European sites.</p> <p>This is a development management policy that protects the Caldys, West Kirby Old Village, Kings Gap Hoylake and Meols Drive Conservation Areas from adverse effects from new development. However, the protection of Conservation Areas has no bearing on European sites.</p> <p>Policy WP6.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

2. preserve the open aspect of remnant fields and pasture which originally surrounded the Village; and
3. retain the scale and massing of buildings at the Village core, between 4-32, Village Road, and the open setting of The Ring O' Bells, The Rectory and St. Bridget's Church and former agricultural buildings; and
4. retain unifying features, such as woodland, tree groups, stone walls, and narrow unmade paths.

Kings Gap Hoylake (CON-SA6.3)

C. Proposals within the Kings Gap Hoylake Conservation Area will be supported where they:

1. preserve and enhance the character and appearance of a Victorian and Edwardian seaside resort and commuter settlement;
2. preserve particular aspects of historic building design such as barge boards and blind boxes, gate piers, setts and cast iron railings;
3. retain unifying features such as the style, scale, massing and setting of property, the gridiron pattern of roads, grass verges, street trees, granite kerb stones, sandstone and other boundary walls, mature hedges and trees, and close boarded timber fences;
4. retain and enhance the open views across the Royal Liverpool Golf Course, the Dee Estuary and Liverpool Bay.

Meols Drive (CON-SA6.4)

D. Proposals within the Meols Drive Conservation Area will be supported where they:

1. preserve the historic character and appearance of a wealthy late Victorian and Edwardian commuter suburb and the setting, landscape and skyline of the Royal Liverpool Golf Course;
2. retain the consistency of scale, massing and separation between neighbouring buildings;
3. preserve the style and variety of buildings and materials linked by a common design approach, including highly decorative details and roofscapes;
4. retain unifying features such as grass verges, street trees, building lines, generous landscaping and boundaries, including mature hedges and sandstone and red brick walls;

	<div><div>5. preserve and enhance the public buildings located in the area's gateways;</div><div>6. ensure that new development within gardens is of a scale, that preserves or enhances the setting of the original building and the character of the immediate locality;</div><div>7. promote a more unified treatment along the boundary with the Royal Liverpool Golf Course;</div><div>8. enhance the public realm.</div></div>									
Policy WP6.2 – Hoylake Neighbourhood Plan Area	<div>E. Proposals in the neighbourhood plan area should be brought forward in line with the Hoylake Neighbourhood Plan.</div>	<div>There are no LSEs of Policy WP6.2 on European sites.</div> <div>This is a development management policy that aligns development proposals in Hoylake with the emerging Hoylake Neighbourhood Plan. This has no relevance for European sites.</div> <div>Policy WP6.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</div>								
Policy WP6.3 – Residential Sites	<div><div>F. Sites of 1- 9 units listed in Appendix 16 and shown on the Policies Map are expected to yield a total of 23 dwellings, in addition to existing commitments.</div><div>G. The following sites of 10 units or more, shown on the Policies Map, are allocated for residential development.</div><table><thead><tr><th>ID</th><th>Name</th><th>Approximate Capacity</th><th>Delivery Timescale</th></tr></thead><tbody><tr><td>RES-SA6.4</td><td>Land at Grange Hill Farm, Grange Old Road, West Kirby</td><td>35</td><td>2024/25 onwards</td></tr></tbody></table></div>	ID	Name	Approximate Capacity	Delivery Timescale	RES-SA6.4	Land at Grange Hill Farm, Grange Old Road, West Kirby	35	2024/25 onwards	<div>Likely Significant Effects of Policy WP6.3 on European sites cannot be excluded.</div> <div>This policy sets out that at least 35 net additional dwellings will be delivered on two residential sites across West Kirby and Hoylake. Furthermore, several sites comprising 1 – 9 units will result in a total of 23 net</div>
ID	Name	Approximate Capacity	Delivery Timescale							
RES-SA6.4	Land at Grange Hill Farm, Grange Old Road, West Kirby	35	2024/25 onwards							

	<p>Site RES-SA6.4 Land at Grange Hill Farm, Grange Old Road, West Kirby</p> <p>H. Development of this site will be supported subject to:</p> <ol style="list-style-type: none"> 1. the submission and approval of visual and heritage impact assessments, a high quality design code and landscape plan to create a bespoke development with a unique non suburban identity of appropriate height and scale for this sensitive ridge top location; 2. the design of the development not having an unacceptable impact on short and long distance views of the site and ridge top or on the setting of the Grade II* Listed Hoylake and West Kirby War Memorial (in particular key views from the war memorial; junction of Ashburton and Grange Road; junction of Hilbre View; Black Horse Hill and Column Road, from the north along Greenbank Road, and from the beach); 3. The scale and height of dwelling units should diminish from south to north and to the west, working with the grain of the topography, and consideration should be given to appropriate materials which will weather and blend with the landscape. <p>West Kirby Concourse Masterplan Area</p> <p>I. Development proposals within the West Kirby Concourse Masterplan Area (MPA-SA6.1) shown on the Policies Map will be supported which have regard to a Masterplan which has been agreed with the Council and provide, as appropriate, for:</p> <ol style="list-style-type: none"> 1. a revitalised community hub comprising leisure, residential, health, retail, community and transport used which maximise the locational benefits of its central gateway and highly accessible location; and 2. landmark buildings of appropriate scale and height that create an enhanced sense of place and focal points of interest having regard to strategic views in the townscape, the gateway setting of the site and the wider context of the surrounding hillside and Dee Estuary setting; and 3. improved access to West Kirby Railway Station and the creation of a new public square; and 4. Support for public transport accessibility through the retention and improvement of the bus layby area and car and cycle parking to meet the needs of users of the community hub, residents, visitors and rail users. 	<p>additional dwellings being delivered.</p> <p>Overall, this policy identifies both a quantum and geographic location of housing development. The number of dwellings to be delivered is relatively large, meaning that the residential growth could result in LSEs on European sites, both alone and ‘in-combination’. Planning applications will need to achieve high design standards, deliver enhanced walking / cycling routes and connect wildlife corridors.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Recreational pressure (both in SPAs and Ramsars, and functionally linked habitat) • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution)
--	--	---

		Due to these linking impact pathways, Policy WP6.3 is screened in for Appropriate Assessment.
Policy WP6.4 – Town Centre Proposals	J. West Kirby Town Centre (TC-SA6.1) will be re-configured, in the area between Bridge Road, Orrysdale Road and Grange Road, where alternative uses including new residential development will be encouraged, in line with the West Kirby Concourse Master Plan (MPA-SA6.1).	<p>There are no LSEs of Policy WP6.4 on European sites.</p> <p>This is a development management policy that promotes the reconfiguration of West Kirby Town Centre. However, this development is adequately assessed in Policy WP6.3 above.</p> <p>Overall, Policy WP6.4 has no additional linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WP7 – Policy for Irby, Thingwall, Pensby, Heswall and Gayton		
Policy WP7.1 – Conservation Areas	<p>Gayton Village (CON-SA7.1)</p> <p>A. Proposals within Gayton Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. preserve and enhance the character of a small farming village in a woodland setting at the urban fringe; 2. conserve and enhance the wooded and open grounds of the Gayton Hall Estate; 3. conserve and enhance the sequence of open views to the Dee Estuary and the North Wales coast beyond; 	<p>There are no LSEs of Policy WP7.1 on European sites.</p> <p>This is a development management policy that protects the Gayton Village and Heswall Lower Village Conservation Areas from adverse effects from new development. However, the protection of Conservation</p>

	<div>4. conserve and enhance the rural character which includes, but is not limited to, its unmade paths, country lanes, hedges and the duck stone surface of Gayton Farm Road.</div> <div>Heswall Lower Village (CON-SA7.2)</div> <div>B. Proposals within Heswall Lower Village Conservation Area will be supported where they preserve and enhance:<div><div>1. the diversity of its architectural and historic interest as illustrated by its three distinctive character zones: The Village Road Area; The late Victorian development around The Mount and Dee View Road and the Dawston Road and Wallrake area; and</div><div>2. the essential unifying features of the landscape and street scenes throughout the area, in particular the extensive canopy of mature trees and historic sandstone boundary walls; and</div><div>3. the historic character of Dawstone Park.</div></div></div>	<div>Areas has no bearing on European sites.</div> <div>Policy WP7.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</div>								
Policy WP7.2 – Residential Sites	<div>C. Sites of 1- 9 units shown on the Policies Map are expected to yield a total of 11 dwellings, in addition to existing commitments.</div> <div>D. The following sites of 10 units or more, shown on the Policies Map, are allocated for residential development.</div> <table><thead><tr><th>ID</th><th>Name</th><th>Approximate Capacity</th><th>Delivery Timescale</th></tr></thead><tbody><tr><td>RES-SA7.2</td><td>Former Heswall Gospel Hall, Pensby Road, Heswall</td><td>23</td><td>2023/24 onwards</td></tr></tbody></table>	ID	Name	Approximate Capacity	Delivery Timescale	RES-SA7.2	Former Heswall Gospel Hall, Pensby Road, Heswall	23	2023/24 onwards	<div>Likely Significant Effects of Policy WP7.2 on European sites cannot be excluded.</div> <div>This policy sets out that at least 23 net additional dwellings will be delivered on one residential site in the Irby, Thingwall, Pensby, Heswall and Gayton Settlement Area. Furthermore, several sites comprising 1 – 9 units will result in a total of 11 net additional dwellings being delivered.</div> <div>Overall, this policy identifies both a quantum and geographic location of housing development. While the number of dwellings to be delivered is</div>
ID	Name	Approximate Capacity	Delivery Timescale							
RES-SA7.2	Former Heswall Gospel Hall, Pensby Road, Heswall	23	2023/24 onwards							

		<p>relatively low, the policy will contribute to 'in-combination' effects on European sites.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none"> • Recreational pressure (both in SPAs and Ramsars, and functionally linked habitat) • Loss of functionally linked habitat • Water quality • Water resources • Atmospheric pollution • Noise and visual disturbance from urbanization (e.g. construction, light pollution) <p>Due to these linking impact pathways, Policy WP7.2 is screened in for Appropriate Assessment.</p>
Policy WP8 – Policy for the Rural Area		
Policy WP8.1 – Green Belt	A. National Policy for the Green Belt will apply in the determination of proposals within the Rural Settlement Area in addition to the other relevant policies in this Local Plan.	<p>There are no LSEs of Policy WP8.1 on European sites.</p> <p>This is a development management policy that applies national policy for the Green Belt will apply to development</p>

		<p>proposals in the Rural Area. However, this has no bearing on European sites.</p> <p>Policy WP8.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WP8.2 – Agricultural Land	<p>B. Proposals in the Rural Area should safeguard the beneficial and productive use of best and most versatile agricultural land for food production and where development is necessary, avoid the use of land of high environmental or economic value.</p> <p>C. Proposals that would lead to the loss of agricultural land should in particular be accompanied by:</p> <ol style="list-style-type: none"> 1. a description of the extent of hard development and of the extent and depth of disturbance to soil structure proposed; and 2. an appropriate up-to-date soil survey and technical land quality assessment to determine whether the site is best and most versatile agricultural land; and 3. a viability and impact assessment for each farm unit affected to understand the potential effect on the farm and the local economy. <p>D. Proposals involving the loss of best and most versatile agricultural land will normally be refused unless it can be demonstrated that:</p> <ol style="list-style-type: none"> 1. it would still be practicable to maintain or return the land to its former quality if the development took place; or 2. there is an overriding need for the development and no alternative site of lower environmental or economic value is available; and 3. the impact on agriculture and the rural environment would not be significant. 	<p>There are no LSEs of Policy WP8.2 on European sites.</p> <p>This is a development management policy that safeguards the best and most versatile agricultural land across Wirral Borough. However, this approach has no direct bearing on European sites.</p> <p>Policy WP8.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WP8.3 – Public Rights of Way and Access	<p>E. Proposals will be required to protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks or by improving their character, while continuing to protect the rural economy and environment.</p>	<p>There are no LSEs of Policy WP8.3 on European sites.</p>

		<p>This is a development management policy that protects and enhances Public Rights of Way across the borough, such as the provision of adding linkages and better connections.</p> <p>Improving accessibility and connectivity in the wider countryside is positive for European sites, because it may help detract some residents from visiting Wirral's more sensitive estuarine sites.</p> <p>Policy WP8.3 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WP8.4 – Conservation Areas	<p>Barnston Village (CON-SA8.1)</p> <p>F. Proposals within Barnston Village Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. conserve the settlement's distinct agricultural and rural character, its setting and visual character 2. preserve the wooded corridor and surrounding field systems; 3. conserve the significance of historic landmark buildings dating back to C18; the Church, the Vicarage, the Hall and Beech Farm; 4. retain and reinstate the characteristic use of historic cobbled lane surfaces and local red sandstone boundary treatments to domestic and agricultural properties as well as agricultural wooden gates and a variety of stone pillar entrances. <p>Eastham Village (CON-SA8.2)</p>	<p>There are no LSEs of Policy WP8.4 on European sites.</p> <p>This is a development management policy that protects the Barnston Village, Eastham Village, Frankby Village, Saughall Massie Village, Thurstaston and Thornton Hough Conservation Areas from adverse effects from new development. However, the protection of Conservation Areas has no bearing on European sites.</p>

	<p>G. Proposals within Eastham Village Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. retain the design, architecture, grouping and setting of the roadside cottages, the back- to- front houses and the larger properties; 2. preserve and enhance the C12 Church of St Mary, its churchyard, war memorial and 1800 year old yew tree; 3. retain and maintain the winding mediaeval street pattern; 4. include street furniture that is designed to enhance the Conservation Area as it is an important component in character definition; 5. retain and enhance the unifying features of the landscape and street scene, including the extensive canopy of mature trees, historic sandstone boundary walls and gateposts; 6. maintain the setting of the village within the landscape. <p>Frankby Village (CON-SA8.3)</p> <p>H. Proposals within Frankby Village Conservation Area will be supported where they conserve and preserve:</p> <ol style="list-style-type: none"> 1. the character and appearance of an historic rural village, isolated from neighbouring settlement; 2. the winding unadopted lanes with their enclosed character; 3. local sandstone walls and decorative gate posts; 4. the mixtures of construction materials and finishes ; 5. the range of agricultural buildings and their layout; 6. the area of common land known as Frankby Green. <p>Saughall Massie Village (CON-SA8.4)</p> <p>I. Proposals within Saughall Massie Conservation Area will be supported where they:</p> <ol style="list-style-type: none"> 1. conserve the settlement's distinct compact, architectural setting and form 2. retain the rural setting, scale and character of the old Village core; 	<p>Policy WP8.4 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
--	---	--

3. retain unifying features, including but not limited to, sandstone boundary walls, narrow mature hedgerow, enclosed lands, courtyard laid out building groups, with all structures and buildings constructed from consistent and sympathetic materials;
4. ensure that conversions of buildings sustain or enhance the conservation area's agricultural character and conserve the villages overall character and setting.

Thurstaston (CON-SA8.5)

J. Proposals within Thurstaston Conservation Area will be supported where they:

1. preserve and enhance the essential features, character, grouping, size, mass, design, and style of an historic English hamlet with its Manor house, Church, farmhouse and farm buildings grouped around a public green;
2. preserve its rural character retaining its sandstone boundary walls and close cut hedges;
3. preserve the fundamental countryside elements of its rural character including but not limited to its landscape setting, cobbled surfaces, rough 'unmetalled' tracks and soft verges;
4. preserve the distinctive character of the Conservation Areas sub zones that exemplify different historic periods and land use;
5. preserve the area of open land in front of St. Bartholomew's known as the 'Green';
6. retain trees and woodland including but not limited to, the North of Thurstaston Hall, to the south west of the Station Road/ Telegraph Road roundabout, and to the East of Station Road between the two lodges.

Thornton Hough (CON-SA8.6)

K. Proposals within Thornton Hough Conservation Area will be supported where they:

1. conserve and enhance a compact settlement pattern within the setting of the historic country estate
2. preserve the consistency of scale, and the variety of design, building materials and architectural detailing of individual buildings and cottage terraces within the Area;
3. preserve the significance including their settings of St. George's Church and All Saints Parish Church, as focal points within the Village;

	<ol style="list-style-type: none"> 4. retain the open character of Thornton Hough Recreation Ground, to preserve the visual setting of the Village; 5. retain the contrast between the areas of the village developed by Joseph Hirst and those subsequently built by William Lever; 6. retain and enhance the wide variety of architectural design and visual richness that Hirst and Lever introduced; 7. maintain views and vistas including but not limited to the Neston Road to the village, St Georges and All Saints churches, the thatched cricket pavilion and those in and out of the village; 8. retain views into and out of the Village. 	
Part 6 – Detailed Policy		
Policy WD1 - Landscaping		
Policy WD1.1 – Landscaping Proposals	<ol style="list-style-type: none"> A. Development proposals will be required to demonstrate, how suitable landscaping has been used to contribute positively to visual amenity and successfully integrate the development within the landscape character and local distinctiveness of the area including its heritage. The natural regeneration of suitable plant species on site will be encouraged. B. Landscaping proposals should also be designed to support climate change adaptation and mitigation while taking into account local climatic influences, improve surface water control, enhance air quality management, and deliver biodiversity net gain. C. Plant and tree selection should be based on the soil type using the most appropriate species from local nursery stock, be UK and Northern Ireland sourced and grown and conform to the latest British Standard. Species suitable for growing on green roofs, balconies, walls and court yards will also need to be considered, particularly for sites where there is limited scope for traditional planting. All plants should be suitable for local climatic conditions including salt and wind exposure. In all landscaped planting native or wildlife friendly species should be given priority. D. Proposals for hard surfacing should use high quality materials, including permeable surfaces where appropriate and boundary treatment, including fencing, walls, gates and railings should be locally distinctive and appropriate to the character of the area. E. Planning permission will be subject to conditions relating to the protection of existing features specified for retention, the timing and aftercare of new planting including provision for the replacement of stolen, 	<p>There are no LSEs of Policy WD1.1 on European sites.</p> <p>This is a development management policy that identifies the requirements for suitable landscaping proposals across Wirral Borough. These should contribute to surface water control and air quality management. However, the requirements for landscaping proposals have no bearing on European sites.</p> <p>Policy WD1.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

	damaged, diseased or dead plants or trees throughout the period until newly planted stock is established and capable of normal growth.	
Policy WD1.2 – Trees	<p>F. In assessing the protection to be given to trees on development sites the Local Planning Authority will consider the general health, structure, size and life expectancy of trees, their visual value within the locality and their value for nature conservation and will require that buildings, structures and hard surface areas are sited in order to:</p> <ol style="list-style-type: none"> 1. Substantially preserve the wooded character of the site or of the surrounding area; 2. Provide for the protection of trees of greatest visual or wildlife value and other vigorous healthy trees, and hedgerows ; 3. Ensure that trees to be retained have adequate space in order to prevent damage to their canopy or root structure during construction and to allow for the future growth of canopy and roots to normal mature sizes; 4. Prevent the removal of trees by occupiers of the development to obtain reasonable sunlight to habitable rooms, secure an open unshaded garden area, or to remove perceived dangers to life and property; and 5. Protect trees on adjacent land which may be affected by the development proposed. <p>G. Applications should include an arboricultural assessment in accordance with the latest British Standards alongside detailed plans showing the location of individual trees to be affected by the development proposed, together with information related to trunk girth, species mix, height, canopy spread and general health and condition. Trees to be felled should be clearly indicated and their proposed felling clearly justified.</p> <p>H. Where development involving the loss of trees is to be permitted, the Local Planning Authority will normally require replacement trees to be planted, in a suitable location with the most appropriate species, where this is required in order to protect or conserve local amenity, having regard to the Council's Tree, Hedgerow and Woodland Strategy.</p> <p>I. Planning conditions will include provision for the future maintenance of newly planted stock, including the replacement of failures, until the newly planted stock is established and capable of normal unaided growth; and during the construction period, measures related to the protection of trees to be retained.</p>	<p>There are no LSEs of Policy WD1.2 on European sites.</p> <p>This is a development management policy that protects trees across Wirral Borough. Development proposals will need to consider the general health, structure, size and life expectancy of trees on site. Furthermore, any trees lost will need to be replaced according to the council's Tree, Hedgerow and Woodland Strategy. The protection of trees is positive for the environment, but has no bearing on European sites.</p> <p>Policy WD1.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

	J. Work to trees, including felling, removal, thinning and crown lifting must be completed prior to construction commencing in accordance with a scheme of work agreed in advance with the Local Planning Authority.	
Policy WD2 – Heritage Assets		
Policy WD2.1 – Protecting Heritage Assets	<p>A. Development proposals which conserve and where appropriate enhance Wirral's historic environment will be supported.</p> <p>B. Development proposals which have the potential to impact upon a heritage asset or its setting must be accompanied by proportionate evidence set out in a Heritage Impact Assessment.</p> <p>C. Harm or loss to designated heritage assets and their settings will not be permitted unless there is clear and convincing justification in line with national policy. Proposals likely to cause substantial harm to or loss of the significance of a heritage asset or its setting will only be permitted where:</p> <ol style="list-style-type: none"> 1. there are exceptional circumstances to clearly justify substantial harm or loss to a grade II listed building or grade II registered park or garden; or 2. there are wholly exceptional circumstances to clearly justify substantial harm or loss to a scheduled monument or equivalent archaeological asset, a grade I or grade II* listed building or registered parks and gardens, or World Heritage Sites; and 3. the development is necessary to achieve substantial public benefits, which would clearly outweigh the harm or loss, or all the following apply: <ol style="list-style-type: none"> i. the nature of the heritage asset prevents all reasonable uses of the site; and ii. no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and iii. conservation by grant funding of some form of not for profit, charitable or public ownership is demonstrably not possible; and iv. the harm or loss is outweighed by the benefit of bringing the site back into use. <p>D. Development proposals likely to cause less than substantial harm to the significance of the heritage asset or its setting will only be supported where it is clearly demonstrated that the harm will be outweighed by the public benefits of the proposal, including where appropriate securing optimal viable use.</p>	<p>There are no LSEs of Policy WD2.1 on European sites.</p> <p>This is a development management policy that conserves Wirral's designated and non-designated heritage assets. However, the preservation of heritage assets has no bearing on European sites.</p> <p>Policy WD2.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

	<p>E. Development proposals will be supported where they seek to retain and enhance a non- designated heritage asset. Proposals affecting the significance of a non designated heritage asset will be assessed with regard to the degree of any harm or loss and the significance of the heritage asset and the public benefit of the proposal.</p>	
Policy WD2.2 – Conservation Areas	<p>F. Development proposals that conserve and enhance the special character and appearance of Wirral's conservation areas will be supported. Proposals will be assessed using, where relevant, any conservation area appraisals, management plans and / or approved master plans for the area which have been approved by the Council. Demolition will only be supported within a conservation area as part of approved plans for the redevelopment or treatment of the site, where the proposals are compatible with the wider objectives of Conservation Area designation.</p> <p>G. New proposals for development shall have integrity and authenticity, and respect the form, mass, materials and character of the existing context. If a traditional design is proposed, this should be based on a thorough understanding of the style, and fully detailed. Poorly designed pastiche will not be permitted.</p>	<p>There are no LSEs of Policy WD2.2 on European sites.</p> <p>This is a development management policy that conserves and enhances Wirral's Conservation Areas. However, the preservation of Conservation Areas has no bearing on European sites.</p> <p>Policy WD2.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WD2.3 – Archaeological Assets	<p>H. Development proposals will be supported where they provide an opportunity to better understand and record non- designated archaeological sites of local interest. When considering development proposals that affect a non designated site of archaeological interest any of the following will be required depending upon the nature of the proposal and asset:</p> <ol style="list-style-type: none"> 1. a desk study, 2. ground survey, 3. recording of the asset, 4. ongoing site monitoring during the construction period. 	<p>There are no LSEs of Policy WD2.3 on European sites.</p> <p>This is a development management policy that addresses Wirral's non-designated archaeological sites of local interest. However, the preservation of archaeological assets has no bearing on European sites.</p> <p>Policy WD2.3 has no linking impact pathways. Therefore, it</p>

		is screened out from Appropriate Assessment.
Policy WD3 – Biodiversity and Geodiversity	<p>A. Development which may result in a likely significant effect on an internationally important site must be accompanied by sufficient evidence to enable the Council to make a Habitats Regulations Assessment. Adverse effects should be avoided and/or mitigated to ensure that the integrity of internationally important sites is protected. Development which may adversely affect the integrity of internationally important sites will only be permitted where there are no alternative solutions, there are imperative reasons of overriding public interest, suitable mitigation is in place and compensatory provision is secured. This also applies to functionally linked land i.e. sites and habitats outside the designated boundaries that support species listed as being important in the designations of the internationally important sites.</p> <p>B. Following the application of the biodiversity harm avoidance, mitigation and compensation hierarchy, development which may cause significant harm to other designated sites of nature or geological conservation importance, Priority Habitats, legally protected species and Priority Species of conservation concern will only be permitted on:</p> <ol style="list-style-type: none"> 1. Sites of National Importance (including Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs): where there are no alternatives and where the benefits of development clearly outweigh the impact on the features for which it is designated and its broader contribution to the national network, and a suitable mitigation or compensation strategy exists; 2. Sites of Local Importance - Local Nature Reserves, Local Wildlife Sites and Regionally Important Geological/ Geomorphological Sites: where the reasons for and the benefits of development clearly outweigh the impact on the nature conservation or geological value of the site and its broader contribution to the Liverpool City Region Ecological Network; and a suitable mitigation or compensation strategy exists; 3. Sites including Irreplaceable Habitats (as defined in the NPPF and including ancient woodlands and aged or veteran trees) or Priority Habitats where there are wholly exceptional reasons and a suitable mitigation or compensation strategy exists. <p>C. Where it has been demonstrated that significant harm to biodiversity from development cannot be avoided, appropriate mitigation, replacement or other compensatory provision will be required.</p> <p>D. Where significant harm to biodiversity resulting from development cannot be avoided, adequately mitigated or, as a last resort, compensated for, then planning permission will be refused.</p>	<p>There are no LSEs of Policy WD3 on European sites.</p> <p>This is a development management policy that protects Wirral's biodiversity and geodiversity. Positively, it specifies that all proposals with the potential for Likely Significant Effects on European sites must be accompanied by a Habitats Regulations Assessment. Proposals that result in adverse effects will only be permitted if there are no alternative solutions, Imperative Reasons of Overriding Public Interest (IROPI) are present and compensatory measures are secured. The policy also applies the same requirements to land outside designated site boundaries; i.e. functionally linked land. This policy is positive from an HRA perspective as it secures the integrity of European sites.</p> <p>Policy WD3 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

	<p>E. A Preliminary Ecological Appraisal will be required to identify development proposals which have the potential to affect important ecological features and assets such as: sites of nature conservation importance, Priority Habitats, legally protected species or Priority Species of conservation concern. Where potential significant effects to important ecological features are identified, development proposals must be supported by an Ecological Impact Assessment which will include the ecological baseline, important ecological features, impact assessment and details of avoidance, mitigation and /or compensation measures where appropriate.</p> <p>F. Development proposals must demonstrate that adequate provision has been made over the lifetime of the development for appropriate ongoing access management, habitat management, monitoring, maintenance and enhancement of biodiversity or geodiversity interests which can be secured by planning conditions or legal agreement.</p> <p>G. The policy applies where development proposals in Wirral may directly or indirectly affect sites with known conservation value in a neighbouring authority area.</p> <p>H. This policy will apply to other sites recognised during the Plan period as being of nature conservation or geological importance, including but not limited to land provided as compensation through the mitigation hierarchy, biodiversity net gain compensation areas, newly designated sites of importance for nature conservation, additional areas within the Liverpool City Region Ecological Network and areas identified in the forthcoming Local Nature Recovery Strategy and Nature Recovery Network.</p>	
Policy WD4 – Coastal Protection, Flood Risk, Sustainable Drainage & Natural Water Management		
Policy WD4.1 – Coastal Defence and Erosion	<p>A. Proposals for new coastal protection and sea defence works in line with the adopted Shoreline Management Plan and Wirral Coastal Strategy will be permitted where it is demonstrated that there will be no adverse effects on coastal processes, designated biodiversity or geodiversity assets, heritage assets and water quality. Public access to and along the coast should be preserved where possible, enhanced.</p> <p>B. Development proposals within areas likely to be affected by coastal erosion will only be permitted where it can be demonstrated that erosion or landslip are not likely to occur during the lifetime of the development and it is therefore safe, in line with national policy.</p>	<p>There are no LSEs of Policy WD4.1 on European sites.</p> <p>This is a positive development management policy that addresses coastal defence and erosion throughout Wirral Borough. The policy stipulates that proposals for new coastal defence infrastructure will need to be aligned with the adopted Shoreline Management Plan and Wirral Coastal Strategy,</p>

		<p>ensuring no adverse effects on European sites regarding coastal squeeze.</p> <p>Policy WD4.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WD4.2 – Flood Risk	<p>C. Unless an existing SFRA level 1 and 2 contains the most up to date allowances for climate change in the assessment of flood risk it is the applicant's responsibility to assess climate change flood risk impacts using the most up to date planning guidance and use flood risk modelling where necessary to support their application.</p> <p>D. Development must be located in areas at lowest risk of flooding from all sources, unless the Sequential Test and where appropriate the Exception Test set out in national policy have been passed. Within the site, uses with the greater vulnerability to flooding must be located in areas with lower risk of flooding.</p> <p>E. Development proposals must not:</p> <ol style="list-style-type: none"> 1. increase flood risk from any sources within the site or elsewhere, 2. have adverse effects on ordinary water courses, tidal and fluvial defences. <p>F. Where possible development proposals should reduce the causes and impacts of flooding, including by taking measures to naturalise water courses such as de-culverting.</p> <p>G. In addition to national requirements, a site specific Flood Risk Assessment is required for developments of less than 1 hectare in flood zone 1 where specific surface water flood risks are present. Surface water flood risk must be afforded equal importance and consideration as fluvial and tidal flood risk.</p> <p>H. Development proposals must incorporate an integrated approach to the management of flood risk, surface water and foul drainage.</p> <p>I. Ground floor and basement access levels of all development should be at least a minimum of 600mm above the highest of the following flood levels with an allowance for climate change, including an allowance for tidal risk that accounts for wind and wave height, taking into account the presence of defences and the residual risks of failure of those defences:</p> <ol style="list-style-type: none"> 1. the 1 in 100 annual probability fluvial flood level; or 	<p>There are no LSEs of Policy WD4.2 on European sites.</p> <p>This is a positive development management policy that addresses flood risk in Wirral Borough. It stipulates that development must be located in areas of lowest flood risk, unless Sequential Test and, where appropriate, Exception Test are passed. Developments must incorporate an integrated approach to the management of flood risk, surface water and foul water.</p> <p>Minimising the flood risk in future development sites is positive, because reduces the potential for polluting surface run-off to occur. This will protect Wirral's estuarine sites.</p> <p>Policy WD4.2 has no linking impact pathways. Therefore, it</p>

	<p>2. the 1 in 200 annual probability tidal flood level; or</p> <p>3. a minimum of 300mm above the 1 in 100 annual probability surface water flood level.</p>	is screened out from Appropriate Assessment.
Policy WD4.3 – Sustainable Drainage Systems (SuDS) and Natural Flood Management	<p>J. Applications should be supported by strategies for foul and surface water management.</p> <p>K. Surface water should be managed as close to its source as possible. Measures such as rainwater recycling, green roofs, water butts and permeable surfaces will be expected to be considered to mitigate the impact of potential flood risk and climate change.</p> <p>L. Planning applications for major developments, and other developments where flood risk is likely, must clearly demonstrate how sustainable drainage will manage surface water run off on the site. This must be in line with surface water drainage principles by integrating SuDS into the fabric of development using landscaped spaces and the construction profile of buildings and having regard to technical guidance produced by the Local Lead Flood Authority; unless there is clear evidence that this would be inappropriate. Applicants should consider site topography, any naturally occurring flow paths and any low lying areas where water will naturally accumulate. Resultant layouts should take account of such existing circumstances to ensure the most sustainable drainage and flood resilient solution is achieved.</p> <p>M. Sustainable drainage must be considered early in the design process and integrated with other aspects of site design, especially multifunctional green and blue infrastructure. Landscaping proposals will be expected to be integrated with the strategy for surface water management. This can include hard and soft landscaping to reduce the volume and rate of surface water discharge (for example permeable surfaces and bioretention areas). Applicants will be expected to incorporate site drainage as part of a high quality green and blue environment. Unless a below ground infiltration system is proposed for the management of surface water, applicants will be expected to manage surface water through sustainable drainage features with multifunctional benefits.</p> <p>N. Where the SuDS system will not be adopted by the Water and Sewerage Company or other public body, proposals will need to show that suitable arrangements will be in place for the implementation, operation, maintenance, access to, and management of sustainable drainage systems over the life time of the development. Any communal components must be legally and physically accessible to those who will be served by the system.</p> <p>O. Natural Flood Management techniques must be incorporated to aid with flood alleviation and implementation of suitable SuDS where appropriate.</p> <p>P. Where appropriate, SuDS design should be evolved through a master plan to mimic natural processes and enable full integration with neighbouring property without prejudicing comprehensive development</p>	<p>There are no LSEs of Policy WD4.3 on European sites.</p> <p>This is a positive development management policy that addresses Sustainable Drainage Systems (SuDS) and natural flood management in Wirral Borough. All major developments will be required to incorporate SuDS into the fabric of proposals and mimicking natural processes / deliver greenfield runoff rates. These are requirements that protect the water quality and quantity in Wirral's European sites.</p> <p>Delivering SuDS minimizes flood and water pollution risk in future development sites. This is positive because it will help protect the integrity of Wirral's estuarine sites.</p> <p>Policy WD4.3 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

	<p>of the area as an essential part of land use and development planning, and be considered in conjunction with other aspects of the design. Phasing of development must be carried out to avoid any cumulative impacts of flood risk and ensure that any sites at risk of causing flooding to other sites are developed first.</p> <p>Q. Clean uncontaminated surface water must be discharged in accordance with the following hierarchy:</p> <ol style="list-style-type: none"> 1. infiltration into the ground (where ground conditions allow) 2. into a watercourse or surface water body 3. into a surface water sewer 4. into a combined sewer. <p>R. Outside of Groundwater Source Protection Zones, source control measures, such as rainwater harvesting and permeable paving must be incorporated, where appropriate, to manage rainfall close to where it falls and treat frequent but smaller polluting events.</p> <p>S. SuDS schemes must be designed to manage surface water up to and including the 1 in 100 year six hour event and:</p> <ol style="list-style-type: none"> 1. limit discharge rates and volumes to the greenfield equivalent for green field sites, and as close to greenfield rates with a minimum 50% betterment on brownfield sites; or 2. where it can be clearly demonstrated that it is not feasible to provide volume control through the provision of long term storage/infiltration, events up to the 1 in 100 year critical event must be attenuated and released at a rate no greater than the mean annual flood flow (Qbar) to manage downstream flood risk; 3. Include allowances for climate change and urban creep and assume 100% runoff from impermeable areas; 4. prevent flows from accumulating at low spots (except where designed as temporary storage); 5. ensure surface pathways are linked together in the same way as conventional drainage networks to safely convey exceedance flows off site; and 	
--	---	--

	<p>6. ensure that materials and components are fit for purpose and when reasonably maintained, retain their structural integrity over the design life of the development.</p> <p>T. To derive the maximum benefit, priority must be given to the use of soft SuDS, or where this is clearly not practical utilising a combination of hard and soft components, taking full account of site opportunities and constraints.</p> <p>U. The design of SuDS should be in accordance with CIRIA C753 The SuDs Manual or any subsequent replacement guidance, and have regard to the adoption standards of the Water & Sewage Company (or other adopting body) and ensure the system will operate as intended and manage flood risk for the lifetime of the development and that maintenance charges are economically proportionate.</p>	
Policy WD4.4 – Wider Flood Risk Benefits	<p>V. Development may be supported where it proposes to provide flood risk management benefits for the wider area or catchment over its lifetime, whether alone or in combination with other schemes or projects.</p>	<p>There are no LSEs of Policy WD4.4 on European sites.</p> <p>This is a positive development management policy that supports proposals with flood risk management benefits for the wider area or catchment.</p> <p>Policy WD4.4 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WD5 – Residential Extensions	<p>A. Development proposals for residential extensions should demonstrate that:</p> <ol style="list-style-type: none"> 1. the scale and design of the proposed extension is appropriate having regard to the size of the plot, the relationship with existing buildings on the site and within the street scene, and the impact on amenity of neighbouring properties; and 2. the materials match and/or complement those of the existing building; and 3. design features such as lintels, sills, eaves and roof form and line match or complement those of the existing building; and 	<p>There are no LSEs of Policy WD5 on European sites.</p> <p>This is a development management policy that specifies the requirements for residential extensions, which includes appropriate scale and design, material usage and adequate amenity space.</p>

	<ol style="list-style-type: none"> 4. proposed roof extensions should relate well to the design and scale of the property and be in keeping with both the local context and the established character of the area; and 5. where the property forms part of a uniform street frontage, any two storey side extension will be appropriately set back and have a lower roof ridge line to retain the rhythm of the street; and 6. an adequate area of amenity space, and unobscured vehicular access will be retained; and 7. the extension(s) would otherwise be subordinate to and reflect the character of the original dwelling. 	<p>However, these requirements have no bearing on European sites.</p> <p>Policy WD5 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WD6 – Self-Contained Flats	<p>A. Development proposals for self-contained flats, including for conversions and changes of use, should demonstrate that:</p> <ol style="list-style-type: none"> 1. The location and property is appropriate for higher density development, in terms of the character and setting of the area and access to local services, and is well connected by a choice of means of transport; and 2. reasonable outlook and amenity, including access to sufficient sunlight and daylight is provided for neighbours and future occupiers of the development; and 3. access is provided to individual flats within the main structure of the building; and 4. any new windows required to serve habitable rooms benefit from a reasonable degree of privacy and do not overlook adjoining properties to an unacceptable degree; and 5. any interior vertical partitions do not cut across windows and ceiling height reductions are not visible externally; and 6. any proposed extensions, including roof extensions, should relate well to the design and scale of the property and be in keeping with both the local context and the established character of the area; and 7. ground floor and basement units have a reasonable outlook and are not situated immediately adjacent to parking bays and vehicle access-ways; and 8. habitable rooms have a reasonable outlook and are not lit solely by roof lights, nor in close proximity to high boundary or gable walls; and 9. adequate sound proofing exists between flats and between flats and other uses; and 	<p>There are no LSEs of Policy WD6 on European sites.</p> <p>This is a development management policy that addresses the provision of self-contained flats across Wirral Borough. However, this has no relevance for European sites.</p> <p>Policy WD6 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

	<ol style="list-style-type: none"> 10. shared garden space is provided for each flat, including those on upper floors, with defensible space between the shared area and any ground floor windows to habitable rooms; and 11. where family accommodation with three or more bedrooms will be lost, at least one of the new units to be provided will have three or more bedrooms; and 12. appropriate parking arrangements, secure on-site cycle storage and waste refuse and recycling containers are provided. <p>B. Basement flats will not be permitted on sites located within Flood Zone 2 or Flood Zone 3.</p>	
Policy WD7 – Houses in Multiple Occupation	<p>A. Development proposals for houses in multiple occupation, including for conversions and change of use, should demonstrate that the property is of sufficient size to provide safe, functional and healthy living conditions with a high standard of amenity for existing and future users in accordance with the following:</p> <ol style="list-style-type: none"> 1. The location and property is appropriate for higher density living in terms of the character and setting of the area and access to local services, and is well-connected by a choice of means of transport; and 2. the proposal will not result in a detrimental change in the character of the surrounding area; and 3. the proposal will not result in an over-concentration of houses in multiple occupation in an area such that: <ol style="list-style-type: none"> i. if the property is not detached, adjoining properties are not in single family occupation; and ii. the proposal will not result in a private dwelling having a house in multiple occupation on both sides; and iii. houses in multiple occupation and planning permissions for houses in multiple occupation will not comprise more than 10% of the properties forming the street frontage within a row of properties; 4. reasonable outlook and amenity, including access to sufficient sunlight and daylight is provided for neighbours and future occupiers of the development; and 5. ground floor and basement units have a reasonable outlook and are not situated immediately adjacent to parking bays and vehicle access-ways; and 6. safe and convenient access is available for all units with staircases being provided within the main structure of the building and rear yards/gardens can be entered from the accommodation by each occupier; and 7. any interior vertical partitions do not cut across windows and ceiling height reductions are not visible externally; and 8. adequate sound proofing is provided; and 	<p>There are no LSEs of Policy WD7 on European sites.</p> <p>This is a development management policy that relates to the provision of houses in multiple occupation (HMOs), including to ensure sufficient size to provide a safe and functional living space. This policy has no bearing on European sites.</p> <p>Policy WD7 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

	<ol style="list-style-type: none"> 9. habitable rooms would not be lit solely by roof lights; and windows will provide sufficient daylight with adequate separation distances between adjacent properties and structures to safeguard residential amenity; and 10. any proposed extensions, including roof extensions, should relate well to the design and scale of the property and be in keeping with both the local context and the established character of the area; and 11. appropriate parking arrangements, secure on-site bicycle storage and waste refuse and recycling containers are provided; and 12. the premises will be adequately managed, including external maintenance for the upkeep of the building and its curtilage. <p>B. Basement accommodation will not be permitted on sites within Flood Zone 2 or Flood Zone 3.</p>	
Policy WD8: Specialist Housing	<p>A. Development proposals for specialist housing should demonstrate that the proposal will:</p> <ol style="list-style-type: none"> 1. meet an identified need, including for community housing arrangements, for leavers of institutional care or for older people; and 2. be easily accessible in terms of distance and gradient by people of different ages and abilities by foot and/or wheelchair to local shops, accessible public open space and public transport, in line with the expected needs of the prospective residents; and 3. incorporate high quality, secure, private shared, useable, amenity space for the use and enjoyment of residents within the curtilage of the development; and 4. not have a detrimental impact on the character of the surrounding area or lead to an overconcentration of specialist housing; and 5. be supported by adequate access to appropriate specialist support services within the locality. 	<p>There are no LSEs of Policy WD8 on European sites.</p> <p>This is a development management policy that sets the requirements for specialist housing to be delivered across the borough. However, specialist housing provision has no bearing on European sites.</p> <p>Policy WD8 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WD9 – Accommodation for Gypsies, Travellers and Travelling Showpeople	<p>A. Development proposals for permanent and/or temporary pitches for Gypsies and Travellers or for Travelling Showpeople will be permitted where it can be demonstrated that the proposed development will:</p> <ol style="list-style-type: none"> 1. contribute towards meeting local identified needs; 2. not be located on land unsuitable for general housing, and flood risk and drainage can be adequately mitigated; 	<p>There are no LSEs of Policy WD9 on European sites.</p> <p>This is a development management policy that identifies development requirements for gypsy and traveller sites. However, the</p>

	<ol style="list-style-type: none"> 3. be of an appropriate scale having regard to the setting and surrounding uses; 4. not result in a detrimental change or harm to the character of the area and the built and historic environment and can be integrated with the existing community to provide an attractive, safe and peaceful environment; 5. be designed with high quality landscaping including boundary treatment to relate well in the context with its surroundings and to secure privacy and a high standard of amenity for future occupiers and neighbouring uses; 6. not cause nuisance to neighbouring uses, particularly in relation to vehicle movements, servicing and outdoor activities; 7. provide safe and convenient access for the manoeuvring, parking and storage of caravans and related vehicles into, out and within the site, without causing obstruction or a hazard in the neighbouring area; 8. Provide adequate provision for safe children's play; 9. be served by an adequate water and energy supply, water treatment and waste collection infrastructure; and 10. be within walkable distance of local services and public transport. <p>B. In the case of applications for temporary permission, the applicant should demonstrate how the proposal will incorporate provision to restore the site to a condition consistent with the character of the surrounding area when it ceases to be used.</p> <p>C. Permanent sites will normally be required to provide a warden's office.</p>	<p>policy includes no quanta or geographic location of such sites. Therefore, the policy text has no bearing on European sites.</p> <p>Policy WD9 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WD10 – Non-Residential Uses in Primarily Residential Areas	<p>A. Proposals for non-residential and community uses within the Primarily Residential Areas shown on the Policies Map will be permitted subject to the proposal:</p> <ol style="list-style-type: none"> 1. being of a scale and use appropriate to the surrounding neighbourhood; 2. complementing rather than detracting from the character of the area; 3. not resulting in harm to the amenity of neighbouring residents including privacy; 	<p>There are no LSEs of Policy WD10 on European sites.</p> <p>This is a development management policy that permits proposals for non-residential uses in Primarily Residential Areas, provided that certain conditions are met. However,</p>

	<ol style="list-style-type: none"> 4. not resulting in unacceptable impact on neighbouring uses, such as noise and disturbance, on-street parking and deliveries by vehicle use and other outdoor activities; 5. having satisfactory vehicular access with appropriate provision being made within the site for the vehicles of staff and occupiers; 6. incorporating reasonable provision for the safe setting down and picking up of visitors. Where such arrangements can only take place within the highway, there should be no parking restrictions on the highway fronting the site and it should not be likely to cause a hazard or obstruction to other road users; and 7. incorporating adequate noise insulation and attenuation where appropriate. 	<p>such uses have no bearing on European sites.</p> <p>Policy WD10 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WD11 – Design in Centres	<ol style="list-style-type: none"> A. Development proposals within designated centres will be required to demonstrate that the design has a safe and positive impact on the public realm, and will: <ol style="list-style-type: none"> 1. include active frontage, accessible entrances, trolley storage, security features and signage to prevent dead frontage and enhance appearance of the street scene; 2. relate well in context of the building and with neighbouring shops including the building line, the street level rhythm and size of windows, frames, fascias and doors, and the company colours, logos and signage to enhance and complement the appearance of the commercial frontage; 3. not include solid or perforated/pinhole security shutters with projecting boxes that will result in a blank frontage; 4. retain and/or incorporate existing historic or traditional shop front features, including signboards, corbels, stall risers, cornices, window fanlights, console brackets, transoms, pilasters, canopies and lobbies; 5. enable separate access to upper floor accommodation from the front of the buildings; 6. provide level access for visiting members of the public; and 7. not cause a nuisance, hazard or obstruction in the surrounding area. B. Uses that sell food or drink, including sweets, for consumption off the premises will be required to include measures for litter control and street cleansing, including the provision and installation of public litter bins, as appropriate. 	<p>There are no LSEs of Policy WD11 on European sites.</p> <p>This is a development management policy that clarifies the design criteria for development in centres, including shop frontages, accessibility and high-quality window displays. However, such parameters have no bearing on European sites.</p> <p>Policy WD11 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

	C. Residential conversions from commercial properties should present a complementary design to the surroundings and a coherent façade to the property.	
Policy WD12 – Hot Food and Drink	<p>A. Proposals for hot food take aways will be permitted within centres where it can be demonstrated that the proposal will:</p> <ol style="list-style-type: none"> 1. contribute positively to local environmental quality, including the experience for visitors and users of the area; 2. have a frontage at least 40 metres from the main elevation of any dwelling house and/or a residential institution, when measured along the public highway; 3. include appropriate measures to mitigate the impact of odours, noise and litter to safeguard local amenity; 4. result in no more than 10% of units in a street frontage being in use as a hot food take-away; 5. result in no adjoining hot food take-away in any frontage of up to 10 units; and 6. would not result in other uses having a hot food take-away on both sides. <p>B. Outside designated centres and subject to the above criteria, proposals that result in the sale of hot food over the counter for consumption off the premises will only be approved where it can be demonstrated the premises will not be within 400 metres walking distance of a school.</p>	<p>There are no LSEs of Policy WD12 on European sites.</p> <p>This is a development management policy, stipulating details for hot food and drink proposals in Wirral Borough. However, such establishments have no bearing on European sites.</p> <p>Policy WD12 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WD13 – Telecommunications Development	<p>A. Development proposals for telecommunications apparatus will be approved where it can be demonstrated that:</p> <ol style="list-style-type: none"> 1. free standing apparatus cannot be located on an existing building, mast or structure including sharing masts or buildings with other operators; 2. the proposal is for the minimum amount of equipment needed for efficient operation of the network; 3. the development is sited, designed, and where appropriate camouflaged, to achieve the best environmental solution, prevent clutter and minimise its impact on the appearance and character of the area and the amenity of neighbouring occupiers; 	<p>Likely Significant Effects of Policy WD13 on European sites cannot be excluded.</p> <p>This policy supports the delivery of telecommunications apparatus, provided that a range of conditions are met.</p> <p>The European sites adjoining Wirral are all designated for mobile bird species. The integrity of the bird populations</p>

	<p>4. The development, including requirements for its future servicing and maintenance, will not have an unacceptable impact on highway safety, the safe access to nearby land and premises, and the free flow of pedestrians, cyclists, vehicles and other users of the surrounding roads and streets;</p> <p>5. the apparatus proposed will not cause significant or irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest;</p> <p>6. when operated cumulative exposure would not exceed International Commission guidelines on Non-Ionising Radiation Protection.</p> <p>B. Where necessary in the interests of amenity, the Local Planning Authority will impose conditions requiring the removal of the apparatus at the end of its working life, and the restoration of the site to a standard compatible with the character and appearance of the area.</p>	<p>depends on the ability of individual birds to freely move between foraging / roosting patches in the Dee Estuary SPA / Ramsar, Mersey Narrows and North Wirral Foreshore SPA / Ramsar and Mersey Estuary SPA / Ramsar. Tall structures such as telecommunications have the potential to affect the sight- and flightlines of birds, as well as resulting in disturbance displacement.</p> <p>The following impact pathways are present:</p> <ul style="list-style-type: none"> Disturbance (impacts on sight- and flightlines, displacement) <p>Due to this linking impact pathway, Policy WD13 is screened in for Appropriate Assessment.</p>
Policy WD14 – Pollution and Risk	<p>A. Development proposals that will result in an unacceptable increase in the risk to human health and the environment, impose significant restrictions on the continued operation of existing licenced or controlled processes, or that would lead to an existing use being classified as a statutory nuisance or to the designation of an Air Quality Management Area will not be permitted.</p> <p>B. Development proposals with the potential to give rise to pollution to soil, air or water or from insects, noise or artificial light or increase the risk of accident hazard will not normally be permitted unless it can be clearly demonstrated that:</p> <p>1. all practical measures have been taken to minimise potential risk and harm to human health and safety, nature conservation interests, property and the built and natural environment; and</p>	<p>There are no LSEs of Policy WD14 on European sites.</p> <p>This is a positive development management policy that protects human health and the environment from pollution. The policy protects against pollution to soil, air and water, as well as against noise or artificial light. The policy also stipulates that</p>

	<ol style="list-style-type: none"> 2. all practical measures have been taken to minimise pollution levels and mitigate the impacts of the pollution, including exposure to air pollution; and 3. the residual risk of harm to human health and the environment will be acceptable and will not cause unacceptable harm to the general amenity of neighbouring uses and the character of the area, either individually or cumulatively. <p>C. Development must :</p> <ol style="list-style-type: none"> 1. include satisfactory arrangements for the disposal of foul sewage, trade effluent or contaminated surface water; 2. where appropriate, demonstrate that it will not have a detrimental impact on the quality of bathing and coastal waters; 3. not exacerbate existing problems such as premature or increased frequency of discharges through storm sewer overflows due to inadequate infrastructure or lack of sewer capacity; and 4. where appropriate, demonstrate that it will not lead to spillage or leakage of stored oils or chemicals or other potentially polluting substances. <p>D. Development that would adversely affect the quality or quantity of water in any watercourse, or of groundwater, or cause deterioration in a water body or element classification levels defined in the Water Framework Directive (or in any national regulations covering this matter) will not be permitted. Any planning application that could (without effective mitigation) cause such harm must be accompanied by a Construction Management Plan that sets out how the water environment will be protected during the construction process.</p> <p>E. Development proposals within Groundwater Source Protection Zones must accord with the latest guidance on Groundwater Protection and will be expected to conform to the following:</p> <ol style="list-style-type: none"> 1. provision of a quantitative and qualitative risk assessment and mitigation strategy with respect to groundwater protection to manage the risk of pollution to public water supply and the water environment. This should be based on the source - pathway- receptor methodology. It shall identify all possible contaminant sources and pathways for the life of the development and provide details of measures required to mitigate any risks to groundwater and public water supply during all phases of the development. Subject to the outcome of the risk assessment, the mitigation measures may include the highest specification design for the new foul and surface water systems. 	<p>development must not result in adverse effects on the water quality / quantity of any surface waterbodies, which are inherently in connection with Wirral's estuarine European sites.</p> <p>Policy WD14 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
--	--	--

	<ol style="list-style-type: none"> 2. careful masterplanning is required to mitigate the risk of pollution to public water supply and the water environment. In addition an appropriate management regime will be required for open space features in a groundwater protection zone. 3. construction management plans will be required to identify the potential impacts from all construction activities on both groundwater, public water supply and surface water and identify the appropriate mitigation measures necessary to protect and prevent pollution of these waters. <p>F. Development proposals that have the potential to release hazardous substances to ground, involve effluent discharge to ground or would physically disturb an aquifer will not normally be allowed in any Groundwater Source Protection Zone 1</p>	
Policy WD15 – Contamination and Instability		
Policy WD15.1 – Contamination and Ground Stability	<ol style="list-style-type: none"> A. Development proposals likely to affect land known or suspected to be unstable or contaminated, including by invasive species, must be supported by a contamination and ground stability assessment, as appropriate, that identifies: <ol style="list-style-type: none"> 1. the nature, level and extent of contamination or instability; 2. the implications of contamination or instability for the development of the site and risk to human health, the natural environment, including water bodies and water courses, buildings and other property; 3. a viable method of remediation which will safeguard users or occupiers of the proposed development, neighbouring land uses and the environment from significant risk, and will make the land suitable for the use proposed. B. Planning conditions or a legal agreement will be used where appropriate, to secure a proportionate site investigation and to secure and implement a suitable remediation strategy prior to development or as part of an agreed, phased programme. C. Proposals within areas likely to be affected by contamination and or unstable land will only be permitted where it can be demonstrated that appropriate remedial measures and safeguards will be in place over the lifetime of the development, having regard to the impact on the amenity and character of the area. 	<p>There are no LSEs of Policy WD15.1 on European sites.</p> <p>This is a positive development management policy that addresses contamination (including that arising from invasive species) and instability of land used for development. It requires contamination and ground stability assessments. This is a positive policy as it prevents contaminant release, which would have the potential to reduce the water quality in Wirral's European sites.</p> <p>Policy WD15.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

<p>Policy WD15.2 – Migration of Landfill Gas</p>	<p>D. Development proposals on land liable to be affected by the migration of gas from a nearby landfill waste disposal site will only be permitted if adequate provision has been made for:</p> <ol style="list-style-type: none"> 1. the on-going gas monitoring of the site; and 2. a scheme for the exclusion or control of migrating gas related to any buildings proposed is in place. <p>E. These provisions must be implemented before the development is occupied, and must ensure that suitable precautions are taken in order to prevent migrating gas causing a hazard either during the course of development or during the subsequent use of the site.</p>	<p>There are no LSEs of Policy WD15.2 on European sites.</p> <p>This is a positive development management policy that requires special assessments on development sites that may be affected by migrating landfill gas. However, this has no bearing on European sites.</p> <p>Policy WD15.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
<p>Policy WD16 – Hazardous Installations and Substances</p>		
<p>Policy WD16.1 – New Development</p>	<p>A. Proposals for new development involving the use, storage, manufacture or processing of notifiable hazardous substances or applications for Hazardous Substances Consent at existing developments, will only be permitted when the Local Planning Authority is satisfied that the degree of off-site risk resulting from the proposal is within acceptable limits. In assessing the level of risk, particular regard will be had to:</p> <ol style="list-style-type: none"> 1. the size and nature of the proposed development; 2. the type and volume of hazardous substances involved, both on site and travelling to or from the site; 3. the nature of existing uses within the area, especially the location of residential areas and places where large numbers of people congregate; 4. the extent to which the proposal will add to existing levels of risk generated by hazardous installations or substances; 5. the likelihood of an accident and the extent of its potential consequences; 6. the proximity of surface and ground waters; and 	<p>There are no LSEs of Policy WD16.1 on European sites.</p> <p>This is a development management policy that sets out the requirements for proposals involving hazardous substances. However, this has no bearing on European sites.</p> <p>Policy WD16.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

	<p>7. the wider land-use implications of the proposal, beyond the boundary of the site, including the possibility of the proposal prejudicing the realization of the land-use and other environmental planning objectives set out elsewhere in the Development Plan.</p> <p>B. Hazardous Substances Consent will only be permitted where the resulting consultation zone for the installation or substance involved would not fall across an existing or proposed residential area or place where large numbers of people congregate.</p>	
Policy WD16.2 – Development Near Notifiable Hazards	<p>C. Proposals falling within the consultation zone of a hazardous installation or where toxic, highly reactive, explosive or flammable substances are present, will only be permitted where the Local Planning Authority is satisfied that the level of risk resulting from proximity to the hazardous installation is within acceptable limits. In assessing the level of risk, particular regard will be had to:</p> <ol style="list-style-type: none"> 1. the size and nature of the development proposed, including its compatibility with the existing installation; 2. whether the proposal would lead to a material increase in the number of people working within or visiting the consultation zone; 3. the vulnerability of those people, in terms of ease of evacuation and other emergency procedures; and 4. the nature of the hazard to which those people would be exposed. <p>D. Only proposals that would not expose significant numbers of people to unacceptable levels of risk or require the modification or revocation of an existing Hazardous Substances Consent will be permitted.</p>	<p>There are no LSEs of Policy WD16.2 on European sites.</p> <p>This is a development management policy that sets out the requirements for proposals in the consultation zone of notifiable hazards (e.g. toxic, highly reactive, explosive and flammable substances). However, this has no bearing on European sites.</p> <p>Policy WD16.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WD17 – Safeguarded Areas Around Aerodromes	<p>A. Within the safeguarded areas, as identified on the Policies Map, new development which does not adversely affect the operational integrity or safety of an airport or aircraft operations, radar and navigation systems will normally be supported. In considering proposals for development within a safeguarded area the Council will have particular regard to:</p> <ol style="list-style-type: none"> 1. the height and design of the development: and 2. the likelihood of creating a bird strike risk; and 3. the likely impact on navigational aids, radio waves, radar and telecommunications systems for the purposes of air traffic control and aircraft movements. 	<p>There are no LSEs of Policy WD17 on European sites.</p> <p>This development management policy safeguards areas around airports or aircraft operations to secure their operational integrity. However, this aspect of development has no bearing on European sites.</p>

		Policy WD17 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.
Policy WD18 – Health Impact Assessment	<p>A. A Health impact assessment, in accordance with the Council’s Development Management Validation Checklist will be required for applications for:</p> <ol style="list-style-type: none"> 1. major residential development of 10 dwellings or more; 2. major non residential developments of 1,000 square metres or more; and 3. other development likely to have a significant impact on health and wellbeing. <p>B. If adverse impacts are identified, proposals will need to demonstrate how these will be addressed.</p>	<p>There are no LSEs of Policy WD18 on European sites.</p> <p>This development management policy requires Health Impact Assessments for certain types of development (e.g. residential sites with 10 dwellings or more). However, this policy aspect has no bearing on European sites.</p> <p>Policy WD18 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WD19 – Temporary Buildings, Structures and Uses	Temporary structures and uses will only be permitted in appropriate locations and for a period up to and not exceeding three years unless material considerations indicate otherwise.	<p>There are no LSEs of Policy WD19 on European sites.</p> <p>This development management policy limits the period for temporary structures and uses to a three-year period. However, this has no bearing on European sites.</p> <p>Policy WD19 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

Minerals and Waste		
Policy WM1 – Proposals for Minerals Development	<p>A. Planning permission will only be granted for minerals development where:</p> <ol style="list-style-type: none"> the proposal will not result in any unacceptable impact on the natural, geological or historic environment, water resources, amenity and/or on human health and safety; and if the development involves extraction, the extraction is necessary; and no other viable source is available; and the proposal will not undermine the use of alternative, secondary or recycled materials; and the proposal will not be detrimental to local residents and businesses or to the character of the area as a result of noise, smell, dust, vibration, land stability, contamination or other nuisance or visual impact; and the proposal contains a satisfactory scheme of working which incorporates provision for site security and the containment, storage and management of materials and waste within the boundaries of the site; and If applicable, there is clear provision for the restoration, aftercare and use of the land at the earliest opportunity, to high quality environmental standards which would be compatible with the character and setting and landscape character of the surrounding area and would not prejudice the flight path of Liverpool John Lennon Airport; and The development will not lead to the permanent loss or reduction in quality of best and most versatile agricultural land; and Ecological/nature conservation interests will not be permanently harmed. <p>B. Minerals, equipment and materials should be transferred by the most sustainable form of transport that would have the least impact on local communities and the environment.</p> <p>C. Transportation by road will only be supported if there is no feasible alternative and the highway network and access arrangements can safely accommodate traffic to be generated without unacceptable impact on the environment or the living conditions of local communities along the routes to be used.</p>	<p>There are no LSEs of Policy WM1 on European sites.</p> <p>This development management policy supports minerals developments in principle, provided that certain conditions are met. There are to be no unacceptable impacts on the natural environment and water resources and material / equipment transport is to be primarily by the most sustainable form of transport. However, the policy supports no specific types or geographic locations of such development. Any minerals proposals will be subject to Habitats Regulations Assessment at the planning application stage.</p> <p>Policy WM1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Maintaining a Supply of Aggregates		

<p>Policy WM2.1 – Aggregate Supply</p>	<p>A. In determining proposals for the extraction of aggregate minerals, regard will be given to the following:</p> <ol style="list-style-type: none"> 1. The contribution the proposal would make toward maintaining the sub-regional apportionment of the regional production of aggregates; and 2. The need to maintain a landbank of reserves with permissions within the sub-regional area, in accordance with the latest Local Aggregates Assessment recommendations. 	<p>There are no LSEs of Policy WM2.1 on European sites.</p> <p>This development management policy ensures an adequate maintenance of aggregate production in Wirral Borough. However, this has no bearing on European sites.</p> <p>Policy WM2.1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
<p>Policy WM2.2 – Substitute, Secondary and Recycled Aggregates</p>	<p>B. The Council will encourage the use of substitute, secondary or recycled aggregates and mineral waste as alternative materials to primary land-won minerals, provided this is economically and environmentally acceptable.</p>	<p>There are no LSEs of Policy WM2.2 on European sites.</p> <p>This development management policy supports the use of substitute, secondary and recycled aggregates. However, while positive for the environment, this has no bearing on European sites.</p> <p>Policy WM2.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
<p>Policy WM3 – Safeguarding Mineral Reserves and Infrastructure</p>	<p>A. The mineral reserve for clay extraction in North Wirral will be safeguarded as shown on the Policies Map (MSA-SA8.1). Non-minerals development will only be permitted within the safeguarded area where it can be demonstrated that the mineral cannot be extracted prior to development or is no longer of any economic value or potential use.</p>	<p>There are no LSEs of Policy WM3 on European sites.</p> <p>This development management policy safeguards the mineral</p>

	<p>B. Facilities for landing marine-won sand and gravel will be safeguarded at Riverbank Road, Bromborough (MSA-SA4.1) within the boundaries defined on the Policies Map subject to clause D. below.</p> <p>C. The following minerals infrastructure shown on the Policies Map will also be safeguarded subject to clause D. below:</p> <ol style="list-style-type: none"> 1. Ready-Mix Concrete Plant, Dock Road, Wallasey (MSA-SA1.1) 2. Asphalt Plant, Riverbank Road, Bromborough (MSA-SA4.2) 3. Ready-Mix Concrete Plant, Tarran Industrial Estate, Moreton (MSA-SA5.1) <p>D. Non minerals development will only be permitted within the safeguarded areas identified in clause B. and clause C. if:</p> <ol style="list-style-type: none"> 1. an alternative site can be provided within an acceptable distance, which is at least as appropriate for the use as the safeguarded site; or 2. it can be demonstrated that the infrastructure no longer meets the current or anticipated future needs of the minerals and/or construction industry. 	<p>reserve for clay extraction in North Wirral, providing protection against other forms of development. Furthermore, marine-won sand and gravel use will be safeguarded at Riverbank Road. However, this has no bearing on European sites.</p> <p>Policy WM3 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WM4 – Oil and Gas Development		
Policy WM4.1 – Safety	<p>A. Proposals for oil and gas development will only be permitted where it is clearly demonstrated that the safety of the process and the risk of adverse impacts have been fully addressed and subject to the following criteria.</p>	<p>There are no LSEs of Policy WM4.1 on European sites.</p> <p>This development management policy stipulates that oil and gas developments will only be supported if the risk of adverse effects has been explored. Any oil and gas proposals will be subject to Habitats Regulations Assessment at the planning application stage.</p> <p>Policy WM4.1 has no linking impact pathways. Therefore, it</p>

		is screened out from Appropriate Assessment.
Policy WM4.2 – Exploration and Appraisal	<p>B. Proposals for the exploration and appraisal of hydrocarbons within areas benefiting from a Petroleum Development Licence (PEDL), will only be supported where it has been demonstrated that well sites and associated facilities including any underground working and lateral boreholes are sited in the least sensitive location from which the target reservoir can be accessed.</p> <p>C. Where proposals for exploration and appraisal are approved, there will be no presumption that production from those wells will be permitted.</p>	<p>There are no LSEs of Policy WM4.2 on European sites.</p> <p>This development management policy stipulates that proposals for the exploration and appraisal of hydrocarbons will only be supported in locations of low sensitivity. Any proposals will be subject to Habitats Regulations Assessment at the planning application stage.</p> <p>Policy WM4.2 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Policy WM4.3 – Productivity	<p>D. Proposals for the production of hydrocarbons will only be supported where it has been demonstrated that the further works and the surface facilities are justified as being required to manage the output from the well(s), including facilities for the utilisation of energy, where relevant, and that they are sited in the least sensitive location from which the target reservoir can be accessed. Proposals should also be supported by a full appraisal programme for the hydrocarbon resource.</p>	<p>There are no LSEs of Policy WM4.3 on European sites.</p> <p>This development management policy provides further guidance regarding hydrocarbons exploitation. However, this has no bearing on European sites.</p> <p>Policy WM4.3 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

<p>Policy WM4.4 – Overall Assessment</p>	<p>E. Proposals for the exploration, appraisal and production of hydrocarbons will only be granted approval where it has been clearly demonstrated that there are no unacceptable adverse impacts on human health, general amenity, the climate, safety, traffic management, water, air quality, ecology, geology, the landscape, archaeology and the natural and historic environment and:</p> <ol style="list-style-type: none"> 1. The extent of the reservoir, boreholes and period of time in which development and operations would take place are clearly identified; and 2. Measures will be in place to prevent adverse impacts from vibration and induced seismicity and the underlying geological structure; and 3. Operational processes and gas flaring, and arrangements for waste disposal, including unwanted gas or oil, will not cause unacceptable impacts on the living conditions of local communities and the operations of existing businesses; and 4. Adequate provision is made for the supply of water and disposal of waste water without unacceptable adverse impacts on surface and groundwater flows, quantity and quality; and 5. Pollution and contamination of the land, ground water, aquifers, and potable water supplies will be prevented; and 6. Satisfactory arrangements will be in place to manage or dispose of any waste materials and returned water from the development; and 7. A full appraisal programme for the gas or oil resource has been completed to the satisfaction of the Mineral Planning Authority; and 8. A management plan with a comprehensive economic assessment and monitoring arrangements will be in place for all operations and mitigation measures. <p>F. All proposals must include restoration and aftercare measures for each of the stages of development, including the treatment of any boreholes.</p>	<p>There are no LSEs of Policy WM4.4 on European sites.</p> <p>This development management policy stipulates that proposals for the exploration, appraisal and production of hydrocarbons will only be supported where adverse impacts on human health, water and air quality, and ecology can be excluded. Any hydrocarbon proposals will be subject to Habitats Regulations Assessment at the planning application stage.</p> <p>Policy WM4.4 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
<p>Policy WM5 – Restoration</p>	<p>A. All proposals for mineral working will require the submission of a high quality restoration and aftercare plan for the reclamation of the affected land to secure appropriate after use at the earliest opportunity.</p> <p>B. The plan should include:</p> <ol style="list-style-type: none"> 1. Details of the existing ground levels, top and sub-soil structure, hydrogeology and hydrology and how it will be handled over the course of the proposed development; and 	<p>There are no LSEs of Policy WM5 on European sites.</p> <p>This development management policy stipulates that all minerals development proposals require</p>

	<ol style="list-style-type: none"> 2. Details of the final restoration scheme including remediation, landscaping, ground levels, landform, and the proposed future land use; and 3. Details for the improvements to water quality to be achieved as part of the restoration scheme where feasible; and 4. Details of the timescales for the removal of obsolete development and completion of the restoration scheme; and 5. Details of aftercare arrangements that are to be put in place to ensure the maintenance and management of the site once restoration is complete. 	<p>a high quality restoration and aftercare plan to facilitate the reclamation of the affected land. This is a positive policy for the environment, ensuring that successional ecological processes can take place following resource exploitation. However, it has no bearing on European sites.</p> <p>Policy WM5 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>
Waste Management		
Policy WM6 – Waste Management	<ol style="list-style-type: none"> A. New waste management development will be permitted in accordance with the spatial strategy, policy criteria and site allocations for new waste management development set out in the Joint Waste Local Plan for Merseyside and Halton adopted in July 2013. B. Development proposals that would support improvements in the minimisation, collection, re-use and recycling of waste generated at existing facilities within the site will normally be supported. 	<p>There are no LSEs of Policy WW1 on European sites.</p> <p>This development management policy identifies that waste management development will need to follow the guidance set out in the Joint Waste Local Plan for Merseyside and Halton (adopted 2013). However, this has no bearing on European sites.</p> <p>Policy WW1 has no linking impact pathways. Therefore, it is screened out from Appropriate Assessment.</p>

