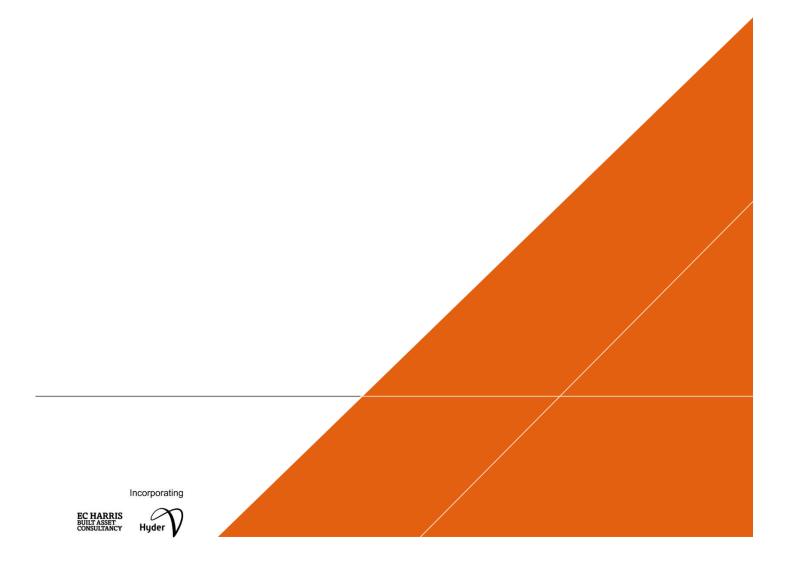


WYRE BOROUGH COUNCIL LOCAL PLAN

Habitats Regulations Assessment Report

AUGUST 2018



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09	28/08/2018	LT/JW	Main modification update	

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1 Introduction and Purpose

- 1.1.1 This Habitats Regulations Assessment (HRA) Report has been prepared by Arcadis Consulting UK (Ltd) on behalf of Wyre Borough Council as part of the statutory HRA of the Wyre Local Plan to 2031 (hereafter referred to as the Wyre Local Plan or the Plan). Future development within Wyre Borough up to 2031 will be guided by the plans and policies within the Wyre Local Plan.
- 1.1.2 The HRA Report has been produced following the recent Court of Justice of the European Union (CJEU) judgement (People over Wind & Sweetman v Coillte Teoranta Case C-323/17), dated 12th April 2018, in Ireland.
- 1.1.3 The ruling stated:
- 1.1.4 'Article 6(3)......... must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of measures intended to avoid or reduce the harmful effects of the plan or project on that site.'
- 1.1.5 The HRA Report was updated to ensure that the HRA of the Wyre Local Plan is legally compliant, and therefore superseded the previous HRA Screening Report (September 2017).
- 1.1.6 This version of the HRA Report has been updated following the examination of the Local Plan to take into account changes resulting from the Main Modifications to the Plan. This report provides the final HRA of the adopted Local Plan (2011-2031).
- 1.1.7 This Report comprises Stage 1 (the initial screening and detailed screening of the Local Plan), and Stage 2 (the Appropriate Assessment of those policies/allocation sites within the Local Plan where potential for adverse impacts on European sites has been identified) of the HRA process. Further details of the HRA stages are provided in Section 3.

1.2 Background to the Habitats Regulations Assessment

- 1.2.1 Under Article 6 of the Habitats Directive (and Regulation 102 of the Habitats Regulations), an assessment is required where a land use plan may give rise to significant effects upon a Natura 2000 site (also known as a 'European site').
- 1.2.2 Within Wyre there are five such European sites; however, within a 20 km radius of the district boundary there are a further eight sites which form part of the Natura 2000 network that could potentially be affected by the Local Plan. Natura 2000 is a network of areas designated to conserve natural habitats and species that are rare, endangered, vulnerable or endemic within the European Community. This includes Special Areas of Conservation (SAC), designated under the Habitats Directive for their habitats and/or species of European importance, and Special Protection Areas (SPA), classified under Directive 2009/147/EC on the Conservation of Wild Birds (the codified version of Directive 79/409/EEC as amended) for rare, vulnerable and regularly occurring migratory bird species and internationally important wetlands.
- 1.2.3 In addition, it is a matter of law that candidate SACs (cSACs) and Sites of Community Importance (SCI) are considered in this process; furthermore, it is Government policy that sites designated under the 1971 Ramsar Convention for their internationally important wetlands (Ramsar sites) and potential SPAs (pSPAs) are also considered.
- 1.2.4 The requirements of the Habitats Directive are transposed into English and Welsh law by means of the Conservation of Habitats and Species (Amendment) Regulations 2017¹.
- 1.2.5 Regulation 61, Part 6 of the Habitats Regulations states that:

'A competent authority, before deciding to undertake, or give consent, permission or other authorisation for, a plan or project which (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and (b) is not directly connected with or necessary to the management of the site, must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.'.

¹ SI 2017/1012: Explanatory memorandum to the Conservation of Habitats and Species Regulations, 2017.

1.2.6 Regulation 62, Part 6 of the Habitats Regulations states that:

'If the competent authority are satisfied that, there being no alternative solutions, the plan or project must be carried out for imperative reasons of overriding public interest (which, subject to paragraph (2), may be of a social or economic nature), they may agree to the plan or project notwithstanding a negative assessment of the implications for the European site or the European offshore marine site (as the case may be).'

1.2.7 Regulation 66, Part 6 of the Habitats Regulations states that:

'Where, in accordance with regulation 62 (considerations of overriding public interest)— (a) a plan or project is agreed to, notwithstanding a negative assessment of the implications for a European site or a European offshore marine site, or (b) a decision, or a consent, permission or other authorisation, is affirmed on review, notwithstanding such an assessment,— the appropriate authority must secure that any necessary compensatory measures are taken to ensure that the overall coherence of Natura 2000 is protected.'

1.2.8 The overarching aim of HRA is to determine, in view of a site's conservation objectives and qualifying interests, whether a plan, either in isolation and/or in combination with other plans, would have a significant adverse effect on the European site. If the Screening (the first stage of the process, see Section 3 for details) concludes that significant effects are likely, then Appropriate Assessment must be undertaken to determine whether there will be adverse effects on site integrity.

1.3 Legislation and Guidance

- 1.3.1 This HRA Report has drawn upon the following legislation and guidance:
 - The Conservation of Habitats and Species Regulations 2017. In 2012, these Regulations were amended to transpose more clearly certain aspects of the Habitats Directive. In 2017, the Conservation of Habitats and Species Regulations 2017 (the "Habitats Regulations 2017") consolidated and updated the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations 2010").
 - European Commission, Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC.
 - European Commission, Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC.
 - Department for Communities and Local Government (2006) Planning for the Protection of European Sites: Appropriate Assessment. Guidance for Regional Spatial Strategies and Local Development Documents.
 - DTA Publications Limited, The Habitats Regulations Assessment Handbook².

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² DTA Publications Limited (June 2016) The Habitats Regulations Assessment Handbook.

2 The Local Plan

2.1 Background and Purpose

- 2.1.1 Wyre is a predominantly rural Borough occupying the northern part of the Fylde peninsula in western Lancashire and extending inland to the edge of the Bowland Fells to the east of the M6 corridor. It is bounded to the north by Lancaster City Council, to the east by Ribble Valley Borough Council, to the south by Fylde Borough Council and Preston City Council and to the west by the densely populated urban area of Blackpool and the sea (refer to Figure 1 in Appendix B).
- 2.1.2 The Wyre Local Plan will provide the locally specific part of the development plan for Wyre, whilst the National Planning Policy Framework (NPPF) provides the national framework against which all development in Wyre will be assessed. Once adopted, the Wyre Local Plan will supersede the Saved Policies of the Wyre Local Plan, 1999 and Fleetwood-Thornton Area Action Plan (AAP).
- 2.1.3 Future development within Wyre will be guided by the plans and policies within the Wyre Local Plan, which runs from 2011 to 2031.
- 2.1.4 The Wyre Local Plan includes site allocation policies related to sites for new homes, employment land and a site for travelling show people or a mixture of such uses and includes subject policies for housing, the economy, leisure, retail, tourism and community use (The site allocations are shown on Wyre Borough Council's Local Plan Policies map). The Wyre Local Plan also comprises Core Development Management policies, which will inform decisions on planning applications; together with policies to protect the natural and built environment and heritage assets.

2.2 Overall planning strategy

- 2.2.1 The overall strategy for Wyre is one of growth within environmental limits, with the overarching aim to raise economic performance, average wage levels and Gross Value Added (GVA) generation, while minimising or eliminating net environmental impact. The plan is set out in the following policies:
 - a) Strategic Policies
 - b) Core Development Management Policies
 - c) Subject Policies
 - d) Allocation Policies

2.3 Settlement hierarchy

2.3.1 Within policy SP1, the settlement hierarchy is laid out, where possible, settlements higher up the hierarchy will take more new development than settlements lower down the hierarchy. The hierarchy is detailed in Table 1.

Table 1: Settlement hierarchy

Hierarchy	Settlement(s)
Urban Town	Fleetwood, Poulton-le-Fylde, Cleveleys, Thornton, and Normoss ³
Key Service Centre	Garstang
Rural Service Centres	Knott End, Great Eccleston, Hambleton, and Catterall
Main Rural Settlement	Bilsborrow, Pilling, Barton, St Michaels, Bowgreave, Inskip, Stalmine, Forton, Pressall, and Scorton
Small Rural Settlement	Cabus, Churchtown/Kirkland, Hollins Lane, Calder Vale, and Dolphinholme (Lower)
Other undefined rural set	tlamanta

Other undefined rural settlements

³ Normoss is considered part of Blackpool Urban Area

2.4 Policies within Wyre Local Plan

2.4.1 The policies within the adopted Wyre Local Plan 2011-2031 are listed below:

Strategic Policies

- Policy SP1- Development Strategy
- Policy SP2 Sustainable Development
- Policy SP3- Green Belt
- Policy SP4- Countryside Areas
- Policy SP5-Forest of Bowland AONB
- Policy SP6 -Viability
- Policy SP7-Infrastructure Provision and Developer Contributions
- Policy SP8- Health and Well-being

Core Development Management Policies

- CDMP1-Environmental Protection
- CDMP2-Flood Risk and Surface Water Management
- CDMP3-Design
- CDMP4- Environmental Assets
- CDMP5- Historic Environment
- CDMP6- Accessibility and Transport

Housing Policies

- HP1- Housing Land Supply
- HP2- Housing Mix
- HP3-Affordable Housing
- HP4- Rural Exceptions
- HP5-Residental Curtilages
- HP6- Replacement Dwellings in the Countryside
- HP7-Rural Workers Accommodation in the Countryside
- HP8- Accommodation for Gypsy, Travellers and Travelling Showpeople
- HP9- Green Infrastructure in new Residential Developments
- HP10 Houses in Multiple Occupation

Economic Growth Policies

- EP1-Employment Land Supply
- EP2-Exisiting Employment Areas
- EP3-Existing Employment Sites
- EP4-Town, District, Local and Neighbourhood Centres
- EP5-Main Town Centre Uses
- EP6-Development in Defined Primary and Secondary Shopping Frontages
- EP7-Local Convenience Stores
- EP8- Rural Economy
- EP9-Holiday Accommodation
- EP10-Equestrian Development
- EP11-Protection of Community Facilities
- EP12-Renewable Energy
- EP13-Telecommunications

- EP14-Outdoor Advertisements and Directional Signs
- EP15-Security Shutters

Site Allocations

- SA1-Residential Development
- SA2-Employment Development
- SA3-Mixed Use Development
- SA4-Hillhouse Technology Enterprise Zone
- SA5-Port of Fleetwood
- SA6-Travelling Showpeople Site
- SA7-Brockholes Employment Expansion Site

Monitoring the Local Plan

LPR1-Wyre Local Plan Review

2.5 Consultation

2.5.1 Consultation with Natural England has been carried out throughout the development of the Wyre Local Plan. Each iteration of the report has taken Natural England's comments in to consideration, and incorporated additional information as required. Following the recent HRA CJEU judgement (April 2018), Natural England were again consulted (June 2018) to agree the most appropriate approach to the addressing the ruling, and the HRA was updated to move allocations and policies where mitigation had been incorporated (in order to reduce or avoid impacts on European sites) from the Screening Stage into the Appropriate Assessment Stage, as required. The updates included within this HRA Report did not affect the overall outcome of the Publication version HRA Report (September 2017), but ensures that the document is legally compliant.

3 The Habitats Regulations Assessment Process

3.1.1 This section provides an outline of the stages involved in HRA and the specific methods that have been used in preparing this report.

3.1 Stages in HRA

- 3.1.1 The requirements of the Habitats Directive comprise four distinct stages:
 - 1. Stage 1: Screening is the process which initially identifies the likely impacts upon a European site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts may have a significant effect on the integrity of the site's qualifying habitats and/or species. It is important to note that the burden of evidence is to show, on the basis of objective information, that there will be no significant effect; if the effect may be significant, or is not known, that would trigger the need for an Appropriate Assessment. There is European Court of Justice case law to the effect that unless the likelihood of a significant effect can be ruled out on the basis of objective information, and adopting the precautionary principle, then an Appropriate Assessment must be made. The April 2018 CJEU judgement determined that mitigation to avoid or reduce harmful effects of the plan or project on a European site cannot be taken into account at the screening stage (Stage 1). Where such measures are required, a plan or project will require Appropriate Assessment to be undertaken (Stage 2).
 - 2. Stage 2: Appropriate Assessment is the detailed consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's conservation objectives and its structure and function. This is to determine whether or not there will be adverse effects on the integrity of the site. This stage also includes the development of mitigation measures to avoid or reduce any possible impacts.
 - 3. Stage 3: Assessment of alternative solutions is the process which examines alternative ways of achieving the objectives of the project or plan that would avoid adverse impacts on the integrity of the European site, should avoidance or mitigation measures be unable to cancel out adverse effects.
 - 4. Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain. At Stage 4, an assessment is made with regard to whether or not the development is necessary for imperative reasons of overriding public interest (IROPI). If it is, this stage also involves detailed assessment of the compensatory measures needed to protect and maintain the overall coherence of the Natura 2000 network.

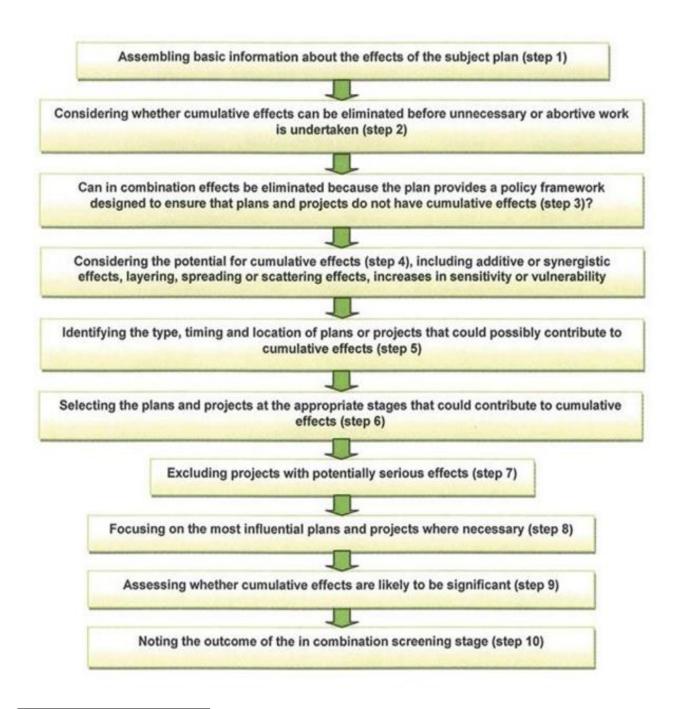
3.2 Approach to the HRA Report

- 3.2.1 This HRA Report takes into account the requirements of the Habitats Regulations and relevant guidance produced by David Tyldesley Associates⁴.
- 3.2.2 The following stages have been completed:
 - Identification of all European sites potentially affected (including those outside of the Local Plan area):
 - A review of each site, including the features for which the site is designated, the Conservation
 Objectives, and an understanding of the current conservation status and the vulnerability of the
 individual features to threats;
 - A review of the policies which have the potential to affect the European sites, and whether the
 sites are vulnerable to these effects (this has included a categorisation of the potential effects of
 the Policy, in line with current guidance);
 - A consideration of any potential impacts in combination with other plans or projects
 - An Appropriate Assessment of those policies/ allocation sites where likely significant effects could
 not be ruled out at the screening stage either alone or in combination; and
 - Where potential effects are identified, avoidance or mitigation measures have been considered in order to avoid significant effects.

⁴ DTA Publications Limited (June 2016) The Habitats Regulations Assessment Handbook.

3.3 In combination Effects

- 3.3.1 As outlined in Section 3.1, it is necessary for HRA to consider in combination effects with other plans and projects.
- 3.3.2 Where an aspect of a plan could have some effect on the qualifying feature(s) of a European site, but the effects of that aspect of the plan alone would not be significant, the effects of that aspect of the plan will need to be checked in combination, firstly with other effects of the same plan, and then with the effects of other plans and projects.
- 3.3.3 The flow chart below (and subsequent text in paragraphs 3.3.4 to 3.3.7) is taken from DTA Publications Limited, *The Habitats Regulations Assessment Handbook*⁵, and illustrates the outline methodology for the in combination assessment.



⁵ DTA Publications Limited (June 2016) The Habitats Regulations Assessment Handbook.

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- 3.3.4 If the prospect of cumulative effects cannot be eliminated in steps 2 and 3 in the flowchart above, it is necessary to consider how the addition of effects from other plans or projects may produce a combined adverse effect on a European site that would be significant. Taking the effects which would not be likely to be significant alone, it is necessary to make a judgement as to whether these effects would be made more likely or more significant if the effects of other plans or projects are added to them. Most cumulative effects can be identified by way of the following characteristics. Could additional effects be cumulative because they would:
 - a. Increase the effects on the qualifying features affected by the subject plan in an additive, or synergistic way
 - b. Increase the sensitivity or vulnerability of the qualifying features of the site affected by the subject plan?
 - c. Be felt more intensely by the same qualifying features over the same area (a layering effect), or by the same qualifying feature over a greater (larger) area (a spreading effect), or by affecting new areas of the same qualifying feature (a scattering effect)?
- 3.3.5 In accordance with DTA Publications Limited, *The Habitats Regulations Assessment Handbook*⁶, it will be necessary to look for plans or projects at the following stages:
 - a. Applications lodged but not yet determined.
 - b. Projects subject to periodic review e.g. annual licences, during the time that their renewal is under consideration.
 - c. Refusals subject to appeal procedures and not yet determined.
 - d. Projects authorised but not yet started.
 - e. Projects started but not yet completed.
 - f. Known projects that do not require external authorisation.
 - g. Proposals in adopted plans.
 - h. Proposals in finalised draft plans formally published or submitted for final consultation, examination or adoption.
- 3.3.6 Plans under consideration may range from neighbouring authorities' planning documents down to sector-specific strategic plans on such topics as flood risk.
- 3.3.7 A review has been undertaken of plans and projects with the potential for an in combination effect with the Local Plan, and these are listed in Table 2.

Table 2: Plans and projects considered for in combination effects

Authority	Relevant Plan/Project				
	The Local Plan Part 1: Core Strategy sets a total requirement for 4,200 dwellings and 31.5ha of employment land to 2027.				
Blackpool Council	The Local Plan Part 2: Site Allocations and Development Management document is currently being developed.				
	The Blackpool Airport Enterprise Zone has been designated.				
Fylde Council	A new Local Plan for Fylde is currently being developed.				
	A Lancashire Enterprise Zone has been designated at Warton.				
	A new Local Plan for Lancaster is currently being developed.				
Lancaster City Council	Morecambe Bay Area Action Plan				
-	 HRA of Morecambe Bay Area Action Plan concluded no likely significant effect on European sites alone or in combination. 				

⁶ DTA Publications Limited (June 2016) The Habitats Regulations Assessment Handbook.

Authority	Relevant Plan/Project				
Preston City Council	The Local Plan sets a total requirement of 8,637 dwellings from 2014 – 2026. 2,837 will be delivered after 2026. 99.52 ha of employment land, 2.1 ha at North West Preston. – HRA of current Plan concluded no likely significant effect on European sites alone or in combination.				
Ribble Valley Council	The Core Strategy sets a total requirement for 5,600 dwellings and 8ha of employment land to 2028. A Housing and Economic Development DPD for Ribble Valley is currently being developed. A Lancashire Enterprise Zone has been designated at Samlesbury.				
Lancashire County Council	The Lancashire Minerals and Waste Local Plan Site Allocations and Development Management Policies Local Plan are currently under review.				
Dong Energy	Walney Offshore Wind Farm - active Walney Extension – under construction West of Duddon Sands Offshore Wind – active Project-level HRA has been carried out for these projects.				
National Grid - North West Coastal Connections	Construction of a new nuclear power station at Sellafield. Power will be transmitted via a crossing under Morecambe Bay to the new Middleton substation at Heysham, Lancashire. Project-level HRA will be carried out for this project.				

3.4 Consideration of Effects

Definition of Significant Effects

- 3.4.1 A critical part of the HRA screening process is determining whether or not the proposals are likely to have a significant effect on European sites and, therefore, if they will require an Appropriate Assessment. Judgements regarding significance should be made in relation to the qualifying interests for which the site is of European importance and also its conservation objectives. A useful definition of 'likely' significant effects is as follows:
 - '…likely means readily foreseeable not merely a fanciful possibility; significant means not trivial or inconsequential but an effect that is potentially relevant to the site's conservation objectives?'.
- 3.4.2 In considering whether the plan is likely to have a significant effect on a European site, a precautionary approach must be adopted:
 - The plan should be considered 'likely' to have such an effect if the plan making authority is unable (on the basis of objective information) to exclude the possibility that the plan could have significant effects on any European site, either alone or in combination with other plans or projects.
 - An effect will be 'significant' in this context if it could undermine the site's conservation objectives.
 The assessment of that risk must be made in the light of factors such as the characteristics and specific environmental conditions of the European site in question.

⁷ Welsh Assembly Government Annex to Technical Advice Note 5: Nature conservation and planning. The Assessment of Development Plans in Wales Under the Provision of The Habitats Regulations' (October 2006).

Categorising Effects

- 3.4.3 All elements of the Local Plan have been screened for likely significant effects on European sites and categorised in accordance with DTA Publications Limited, *The Habitats Regulations Assessment Handbook*⁸
- 3.4.4 As per the HRA handbook, the effects associated with the Local Plan can be allocated into one of 12 categories according to the ways in which the option, policy or proposal could affect the European site. These are described in Table 3, below.

Table 3: Screening Assessment Categories

Category	Description
Category A:	General statements of policy/general aspirations. Policies which are no more than general statements of policy or general political aspirations should be screened out because they cannot have a significant effect on a site.
Category B:	Policies listing general criteria for testing the acceptability/sustainability of proposals. These general policies cannot have any effect on a European site and should be screened out.
Category C:	Proposal referred to but not proposed by the plan. Screen out any references to specific proposals for projects, such as those which are identified, for example, in higher policy frameworks such as the Wales Spatial Plan or National Policy Statements, relating perhaps to nationally significant infrastructure projects. These will be assessed by the Secretary of State or Welsh Ministers. A useful 'test' as to whether a project should be screened out in this step is to ask the question:
category c.	'Is the project provided for/proposed as part of another plan or programme and would it be likely to proceed under the other plan or programme irrespective of whether this subject plan is adopted with or without reference to it?'
	If the answer is 'yes' it will normally be appropriate to screen the project out in this step.
Category D:	Environmental protection/site safeguarding policies. These are policies, the obvious purpose of which is to protect the natural environment, including biodiversity, or to conserve or enhance the natural, built or historic environment, where enhancement measures will not be likely to have any adverse effect on a European Site. They can be screened out because the implementation of the policies is likely to protect rather than adversely affect European sites and not undermine their conservation objectives.
Category E:	Policies or proposals that steer change in such a way as to protect European sites from adverse effects. These types of policies or proposals will have the effect of steering change away from European sites whose qualifying features may be affected by the change and they can therefore be screened out.
Category F:	Policies or proposals that cannot lead to development or other change. Policies that do not themselves lead to development or other change, for example, because they relate to design or other qualitative criteria for development, such as materials for new development. They do not trigger any development or other changes that could affect a European site and can be screened out.
Category G:	Policies or proposals that could not have any conceivable adverse effect on a site. Policies which make provision for change but which could have no conceivable effect on a European site, because there is no causal connection or link between them and the qualifying features of any European site, and can therefore be screened out.

 $^{^{8}}$ DTA Publications Limited (June 2016) The Habitats Regulations Assessment Handbook.

Category	Description
Category H:	Policies or proposals the (actual or theoretical) effects of which cannot undermine the conservation objectives (either alone or in combination with other aspects of this or other plans or projects). Policies or proposals which make provision for change but which could have no significant effect on a European site, either alone or in combination with other aspects of the same plan, or in combination with other plans or projects, can be screened out. These may include cases where there are some potential effects which (and theoretically even in combination) would plainly be insignificant and could not undermine the conservation objectives.
Category I:	Policies or proposals with a likely significant effect on a site alone. Policies or proposals which are likely to have a significant effect on a European site alone, should be screened in.
Category J:	Policies or proposals not likely to have a significant effect alone. These aspects of the plan would have some effect on a site, but the effect would not be likely to be a significant effect so they must be checked for in combination (cumulative) effects. They will then be re-categorised as either Category K (no significant effect in combination) or Category L (likely to have a significant effect in combination), as explained below.
Categories K	Policies or proposals not likely to have a significant effect either alone or in combination (K), or likely to have a significant effect in combination (L) after the in combination test. Where an aspect of a plan could have some effect on the qualifying feature(s) of a European site, but the effects of that aspect of the plan alone would not be significant, the effects of that aspect of the plan will need to be checked in combination firstly, with other effects of the same plan, and then with the effects of other plans and projects.
and L:	i.e. policies or proposals which will have no likely significant effect alone or in combination are classified as Category K. Policies or proposals which are likely to have a significant effect in combination are classified as Category L. Category L policies or proposals will require further consideration in terms of potential in combination effects. Firstly, this will be with regard to other aspects of the Plan itself, and subsequently with other separate plans or projects, for example neighbouring Local Plans.

3.5 Potential Impact Pathways

- 3.5.1 During the HRA screening stage, the likely nature, magnitude, frequency, timing, duration, location and spatial extent of changes resulting from implementation of the Local Plan will be assessed. As a part of this, mechanisms through which the Local Plan could impact upon European sites will be considered. Further details on the potential impact pathways are presented in Section 6.2.
- 3.5.2 The main impact pathways could be:
 - Direct habitat and species loss associated with European sites.
 - Habitat degradation as a result of increased air pollution.
 - Changes in water quality where sites are hydrologically linked to European sites.
 - Loss of habitat functionally linked to a European site (i.e. used by overwintering or passage birds for foraging).
 - Disturbance/displacement to species as a result of construction activities/ operational stage.
 - Disturbance to habitats and species through increased recreational activity, during operational stage.

4 The European Sites

4.1 Approach to Identifying Sites

4.1.1 There are European sites located within and on the Borough boundary which need to be taken into consideration in this assessment. In addition, European sites outside of the Borough may be affected by activities undertaken in Wyre if they are connected through an impact pathway, for example, hydrological links, or, if mobile species (i.e. birds) use land which is functionally linked to a European site, for example for foraging.

4.2 European Sites within and surrounding Wyre

4.2.1 Four European sites have been identified within the Wyre Borough boundary. A further seven European sites and one cSAC have been identified within 20 km of the borough. The European sites are listed in Table 4. Figure 2 in Appendix B also shows the locations of the European sites within and adjacent to the borough boundary.

Table 4: Summary of European Sites

Name of Site	Identification Number	Status	Distance from district boundary (approximate km)	
Morecambe Bay and Duddon Estuary	UK9020326	SPA	Within the borough boundary	
Morecambe Bay	UK11045	Ramsar Site	Within the borough boundary	
Morecambe Bay	UK0013027	SAC	Within the borough boundary	
Bowland Fells	UK9005151	SPA	Within the borough boundary	
Liverpool Bay SPA	UK9020294	SPA	0.5 km (off-shore)	
Shell Flat and Lune Deep	UK0030376	cSAC	5 km (off-shore)	
Ribble and the Alt Estuaries	UK9005103	SPA	6.5km	
Ribble and the Alt Estuaries	UK11057	Ramsar	6.5km	
Calf Hill and Crag Woods	UK0030106	SAC	7.5km	
North Pennines Dales meadows	UK0014775	SAC	12km	
Morecambe Bay Pavements	UK0014777	SAC	13km	
Sefton Coast	UK 0013076	SAC	19km	

4.2.2 Appendix A provides further information regarding the European sites including current conditions, pressures/threats (obtained from Natural England Site Improvement Plans) and the results of Sites of Special Scientific Interest (SSSI) condition surveys.

4.3 Conservation objectives of the European Sites

4.3.1 Under the Conservation of Habitats and Species Regulations 2017 the appropriate statutory nature conservation body (in this case Natural England) has a duty to communicate the conservation objectives for a European site to the relevant/competent authority responsible for that site. The information provided must also include advice on any operations which may cause deterioration of the features for which the site is designated.

The conservation objectives for a European site are intended to represent the aims of the Habitats and Birds Directives in relation to that site. To this end, habitats and species of European Community importance should be maintained or restored to 'favourable conservation status' (FCS), as defined in Article 1 of the Habitats Directive below:

- 4.3.2 The conservation status of a natural habitat will be taken as 'favourable' when:
 - Its natural range and the area it covers within that range are stable or increasing;
 - 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;
 - Conservation status of typical species is favourable as defined in Article 1(i).
- 4.3.3 The conservation status of a species will be taken as favourable when:
 - Population dynamics data on the species concerned indicate that it is maintaining itself on a longterm basis as a viable component of its natural habitats;
 - The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future;
 - There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.
- 4.3.4 Guidance from the European Commission⁹ indicates that the Habitats Directive intends FCS to be applied at the level of an individual site, as well as to habitats and species across their European range. Therefore, in order to properly express the aims of the Habitats Directive for an individual site, the conservation objectives for a site are essentially to maintain (or restore) the habitats and species of the site at (or to) FCS.
- 4.3.5 Conservation Objectives¹⁰ for the European sites screened into the detailed assessment (comprising: Morecambe Bay and Duddon Estuary SPA, Morecambe Bay SAC and Ramsar site, Ribble and Alt Estuaries SPA and Ramsar site), are provided in Appendix A. Supplementary Advice is also available for Morecambe Bay SAC and this will be used when assessing potential impacts on the Conservation Objectives of the site. There is currently no Supplementary Advice documentation associated with Morecambe Bay and Duddon Estuary SPA and therefore the overarching Conservation Objectives will be used.

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⁹ Managing Natura 2000 sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC. (European Commission 2000).

¹⁰ http://www.naturalengland.org.uk/ourwork/conservation/Europeanareas/sac/northwest.aspx.

5 Screening

5.1 Context

5.1.1 The Wyre Local Plan contains a vision and strategy that sets out how the Council would like Wyre to develop over the Plan period. It seeks to not only ensure that new homes, jobs and services required by communities are located in the most sustainable locations, but also that the framework for delivering the necessary infrastructure, facilities and other development will be provided to make this possible.

5.2 Screening Approach

- 5.2.1 The screening process has been split into two distinct stages, initial screening and detailed screening.
- 5.2.2 The initial screening stage has provided a high-level screening assessment to determine if the Local Plan could possibly lead to significant adverse effects on European sites identified in Section 4. The purpose of this was to eliminate those policies and sites from the assessment which very clearly would not affect European sites in order to focus on those policies and sites where there was potential for effects or uncertainty about potential effects.
- 5.2.3 When identifying the elements of the Local Plan that could potentially affect European sites, it was important to focus upon those elements that would have the greatest likelihood of impacting the sites. The definition of significance identified in Section 3.4 was very important for the detailed screening.
- 5.2.4 The Local Plan is intended to be read as a single document rather than a series of separate policies, and has been assessed as such. Proposals in one area of the Local Plan may mitigate potentially damaging activities promoted in another area and should be understood in the wider context of the Plan's aims and purposes.
- 5.2.5 The sections below outline the initial and detailed screening of the Local Plan.

5.3 Initial Screening of the Local Plan

- 5.3.1 An initial Screening exercise has been undertaken to determine if there are any European sites, or policies/allocation sites within the Local Plan which can be scoped out of the detailed assessment. The initial Screening is shown in Table 5. The notations below were used to indicate if further detailed assessment screening is required:
 - ✓ Further detailed screening is required to determine the nature of effects on the European site.
- 5.3.2 * No further screening is required as no effects are predicted on the European site.

European sites

- 5.3.3 European sites screened out in the initial screening comprised those European sites where there was no clear link, or conceivable impact pathway between the European sites and the policies/sites set out within the Local Plan.
- 5.3.4 Those European sites with the potential for LSE as a result of implementation of the Local Plan, or those European sites for which impacts were uncertain, were carried forward into the more detailed screening assessment.

Policies and allocation sites

Policies screened out in the initial screening were generally those that could not lead to 'direct development', or could have no impact pathway to any of the European sites identified. This included policies which directly seek to protect the local historic and natural environment, or those which support the implement other policies and therefore could not directly affect European sites. All of the policies screened out of the detailed assessment are not directly linked to allocation sites.

Table 5: Initial Screening of the Local Plan

	Policies (Further assessment required: ≭/√)						
European Sites	Strategic Development Housing Grow		Economic Growth Policies	Site Allocations	Comments		
Morecambe Bay and Duddon Estuary SPA	×	*	*	*	✓	Further assessment is required as to whether development of the site allocations would lead to any likely significant effects on the Morecambe Bay Ramsar / SAC/ Morecambe Bay and the Duddon Estuary SPA/ Ribble and Alt Estuaries SPA/Ramsar site. The current conditions and	
Morecambe Bay Ramsar site	×	*	×	*	✓	threats to these European sites (as set out within Appendix A) will be taken into consideration in the further assessment. There would be no impacts on the great crested newt populations associated with Morecambe Bay (qualifying feature of the Morecambe Bay	
Morecambe Bay SAC	*	*	×	sc	✓	SAC). The great crested newt population is located at Sandscale Haws, more than 30 km to the north of Wyre. In addition, there would be no impacts on the natterjack toad populations associated with the Ribble and Alt Estuary Ramsar site. The natterjack population is located on the	
Ribble and the Alt Estuaries	×	×	×	*	✓	dune slack habitat, more than 25 km to the south of Wyre. Development within Wyre would not have any likely significant effect on these distant populations. These species will not be considered further in the assessment.	
SPA Ribble and the Alt Estuaries Ramsar site	*	*	*	*	✓	There are no likely significant effects identified between the European sites and the Strategic Policies, Core Development Management Policies, Housing Policies and Economic Growth Policies. These will not be considered in the detailed assessment. Detailed justification for screening out these policies is provided in Table 7 below.	
						Although this SPA is located within the east of the borough, it is unlikely that any elements of the Local Plan would lead to any likely significant effects on the SPA.	
						There are ten potential pressures/threats which have been identified for this European site within the Site Improvement Plan for Bowland Fells ¹¹ (as detailed within Appendix A). Those which could be relevant to this assessment comprise: hydrological changes (lesser black-backed gull, hen harrier and merlin), public access/disturbance (hen harrier only), and air pollution: atmospheric nitrogen deposition (hen harrier only).	
						There are no allocations within the Bowland Fells SPA and therefore potential impacts associated with direct habitat loss can be ruled out. All allocations within the Local Plan are located to the west of the M6 corridor, with the closest allocations at Hollins Lane being over 3 km to the west of the SPA (refer to Map 7 within Appendix B).	
						All allocations within the Local Plan are located downstream of the SPA, therefore potential impacts associated with hydrological change can be ruled out.	
Bowland Fells SPA	*	×	×	×	×	Current air quality guidance suggests that any construction sites within 50 m of a European site; and any European site within 200 m of the main access roads used by HGVs accessing the site could lead to significant effects on European sites during the construction phases of new development. Given that all allocations are more than 3 km away (refer to Map 7 within Appendix B), and that none of the allocations are located on land outside of the SPA which is considered suitable for use by the breeding population of hen harrier associated with the SPA, then potential impacts associated with atmospheric nitrogen deposition during the construction phase can be ruled out. In addition, during the operational phase of the potential developments within Wyre, there are no large-scale industrial allocations which would contribute to an increase in nitrogen which would be detrimental to hen harrier breeding within Bowland Fells SPA, and Policy CDMP1 would ensure that any new development does not have a detrimental impact on air quality (Policy CDMP1 states that planning permission will only be granted if the development 'will not give rise to a deterioration of air quality in a defined Air Quality Management Area or result in the declaration of a new AQMA, unless the harm caused is significantly and demonstrably outweighed by other planning considerations and a comprehensive mitigation strategy can be secured; where appropriate an air quality impact assessment will be required.') Therefore, potential impacts associated with atmospheric nitrogen deposition during the operational phase can be also be ruled out	
						The qualifying features of the SPA comprise breeding hen harrier, merlin, and lesser black-backed gull. Hen harrier and merlin would not be expected to utilise habitats which would be affected by the Local Plan (i.e. land in close proximity to existing development/roads) during the breeding season and therefore no effects on these qualifying features are anticipated.	
						Although some records of lesser black-backed gull within the district could relate to birds associated within the SPA given that they can travel large distances from their breeding grounds to forage, it is not possible to determine where the LBBG records identified from the extensive bird records provided by Fylde Bird Club originate. However, the Bird Club records show that there are no significant aggregations of LBBG (i.e. more than 1% of the breeding population of LBBG associated with the Bowland Fells SPA (1% equates to 260 birds, taking a breeding population of 13,000 pairs (JNCC, 2001)) in the vicinity of the allocations to the east of the Wyre Estuary.	
						The only areas where larger numbers of LBBG have been recorded is on the Urban Peninsula, in the vicinity of Skippool Creek and the Wyre Estuary at Fleetwood (refer to Map 1 within Appendix B). At Skippool Creek there were 99 records of LBBG, 10 of which comprised numbers over 1% of the SPA breeding population, with a peak count of 1,200 birds in 2012. More than 1% of the SPA population has been recorded consistently between 2011 and 2014, indicating that the area around Skippool Creek would be considered FLL. However, the nearest allocations	

¹¹ Natural England. Site Improvement Plan Bowland Fells SPA

		Policies (Fur	ther assessme	nt required: ≭/√)		
European Sites	Strategic Policies	Core Development Management Policies	Housing Policies	Economic Growth Policies	Site Allocations	Comments	
						to Skippool Creek are SA1/7 (over 500m to the south west beyond existing development) and SA1/2 (over 600 m north west). Given the distance of these sites from the Creek, significant effects on the foraging LBBG at Skippool Creek would not occur.	
						At Fleetwood, the majority of the allocations are located within existing industrial locations and are not suitable for large aggregations of foraging LBBG (there are no Bird Club records associated with these industrial sites). Map 1 within Appendix B shows the locations of the allocations within Fleetwood. The Bird Club records of LBBG from Fleetwood are associated with the Promenade and the landfill site at Jameson Road (as shown on Map 1 within Appendix B). There was one record of 250 birds in 2011 at the Ferry Promenade and three records from the landfill (comprising: 400 and 500 birds in 2010, and 400 birds in 2013). Although there are only three records of LBBG for the landfill site, given that they are all of more than 1% of the SPA population of LBBG, and there is evidence from the ornithological assessment carried out for the Fleetwood WwTW wind turbine site (and adjacent land) ¹² that LBBG use the landfill site, the landfill site is considered to be FLL. The Hillhouse Technology Enterprise Zone allocation (Site Ref: SA4) is approximately 850 m south of the landfill site and Fleetwood Docks and Marina (Site Ref: SA3/1) is approximately 450 m to the north of the landfill (refer to Map 1 within Appendix B). Given the distances of these sites from the landfill in addition to the fact that LBBG will be habituated to noise disturbance from landfill activities, no impacts on the foraging LBBG at the landfill are anticipated as a result of development of the two allocation sites. In addition, there are also 50 records of LBBG for Fleetwood Marsh/Fleetwood Marsh Nature Park, adjacent to site Fleetwood Docks and Marina (Site Ref: SA3/1), with a peak count of 135 birds in 2010 (with the remaining records all of less than 55 birds, however, this is below the 1% threshold for being considered a significant number of birds. Both the Hillhouse Technology Enterprise Zone and Fleetwood Docks and Marina site were taken through into the AA, and include mitigation for disturbance to adjacent land (including specific re	
Ohall Flat and Luna Dans						Potential effects on this European site can be screened out. No likely significant effects are predicted on these two European marine sites. The qualifying features of Shell Flat and Lune Deep cSAC	
Shell Flat and Lune Deep cSAC	*	*	×	sc	*	comprise: sandbanks and reefs. The qualifying features of Liverpool Bay SPA comprise: red-throated diver and common scoter.	
Liverpool Bay SPA	*	x	*	*	3 ¢	Given the distance of the Shell Flat and Lune Deep cSAC from the borough boundary (approximately 5km), no elements of the Local Plan would add to the potential pressures/threats identified for the qualifying features set out within Appendix A. Although the Liverpool Bay SPA is within 0.5km of the borough boundary, given that the qualifying birds are exclusively marine species, no elements of the Local Plan would add to the potential pressures/threats identified for the qualifying features set out within Appendix A.	
Calf Hill and Cragg Woods SAC	×	×	×	×	*	This SAC is approximately 7.5km from the district boundary. The qualifying features comprise old sessile oak woods and alluvial forests. Given the distance of the SAC from the borough boundary, no elements of the Local Plan would add to the potential pressures/threats identified for the qualifying features set out within Appendix A.	
North Pennine Dales Meadows SAC	×	×	×	×	*	This SAC is approximately 12km from the district boundary. The qualifying features comprise mountain hay meadows and <i>Molinia</i> meadows on calcareous, peaty / clayey-silt-laden soils. Given the distance of the SAC from the borough boundary, no elements of the Local Plan would add to the potential pressures/threats identified for the qualifying features set out within Appendix A.	
Morecambe Bay Pavements SAC	×	×	×	×	×	This SAC is approximately 13km from the district boundary. The qualifying features comprise woodland, heathland and calcareous grassland habitats. Given the distance of the SAC from the borough boundary, no elements of the Local Plan would add to the potential pressures/threats identified for the qualifying features set out within Appendix A.	
Sefton Coast SAC	×	×	×	×	×	This SAC is approximately 19km from the district boundary. The qualifying features comprise important dune systems, and populations of Petalwort and great crested newt. Given the distance of the SAC from the borough boundary, no elements of the Local Plan would add to the potential pressures/threats identified for the qualifying features set out within Appendix A.	

¹² Fleetwood WwTW Fleetwood, Lancashire Ornithological Assessment TEP Report Ref: 3175.010 July 2013 Version 1

Initial Screening of European Sites

- 5.3.5 Table 5, above, provides the initial Screening of the European sites. Twelve European sites have been identified within, and up to 20km from the Wyre district boundary. Of these, seven can be ruled out completely on the basis that there are no potential impact pathways which are likely to give rise to likely significant effects on these sites:
 - North Pennine Dales Meadows SAC
 - Shell Flat and Lune Deep cSAC
 - Liverpool Bay SPA
 - Bowland Fells SPA
 - Morecambe Bay Pavements SAC
 - Calf Hill and Cragg Woods SAC
 - Sefton Coast SAC
- 5.3.6 For the remaining five European sites, likely significant effects cannot be ruled out at this initial screening stage. The sites that will be taken through into the detailed screening assessment comprise the following:
 - Morecambe Bay and Duddon Estuary SPA
 - · Morecambe Bay Ramsar site
 - Morecambe Bay SAC
 - · Ribble and the Alt Estuaries Ramsar site
 - Ribble and the Alt Estuaries SPA

Initial Screening of Policies within the Local Plan

5.3.7 In addition to Screening out seven of the European sites, Table 6 identified the policies under each of the policy headings which have been screened in or out of the detailed assessment.

Table 6 Initial Screening of the Local Plan

	Strategic Policies	Core Development Management Policies	Housing Policies	Economic Growth Policies	Site Allocations
Policies Screened In	-	-	-	-	SA1, SA2, SA3, SA4, SA6, SA7
Policies Screened out	SP1, SP2, SP3, SP4, SP5, SP6, SP7, SP8	CDMP1, CDMP2, CDMP3 CDMP4, CDMP5, CDMP6	HP1, HP2, HP3, HP4, HP5, HP6, HP7, HP8, HP9, HP10	EP1, EP2, EP3, EP4, EP5, EP6, EP7, EP8, EP9, EP10, EP11, EP12, EP13, EP14, EP15	SA5

- 5.3.8 All of the policies contained within four of the policy headings in the plan can be screened out completely from further assessment, on the basis that no identifiable impact pathway exists linking the policies with the European sites and/or because there will be no foreseeable adverse impact on European sites through Policy implementation.
- 5.3.9 Table 7 (below) provides a justification for the policies screened out of further assessment. All of the policies within the policy heading 'site allocations' have been screened into the detailed screening assessment (refer to Section 6) with the exception of policy SA5, which is a safeguarding policy and as such would not have any likely significant effects on European sites (refer to Table 7 below).

Table 7 Policies screened out of further assessment

Policy	Justification	Assessment Category
	Policy SP1 outlines the settlement hierarchy. New development is required to be of appropriate type and scale to the character of the settlement in the hierarchy. The policy also does not exclude development within the area of separation. However, this policy itself does directly lead to change, there would be no impacts on European sites as a result of implementation of this policy. SP2 relates to sustainable development and would not lead directly to any impacts on European sites. Whilst Policies SP3 and SP4 do not exclude development within the green belt or countryside areas, the policies themselves do not directly lead to change. Policy SP4 (which relates to development in the countryside) includes reference to complying with other polices in the local plan, including Policy CDMP4 (which serves to protect European sites). There would be no impacts on European sites as a result of implementation of these policies.	F
Strategic policies: SP1, SP2, SP3, SP4, SP5, SP6, SP7, SP8	Policy SP5 serves to protect the AONB from development, although the policy states that if harm is outweighed by the benefits in the public interest development could occur in exceptional circumstances. However, there are no allocations within the AONB in the current Local Plan assessed within this HRA Report (the closest allocation being approximately 2 km away from the edge of the AONB). Bowland Fells SPA (which lies within the AONB) is more than 3 km away from the nearest allocation site. The policy includes reference to compliance with the Core Development Management Policies, specifically Policy CDMP4 (which serves to protect European sites; see below). There would be no impacts on Bowland Fells SPA as a result of implementation of this policy.	Н
	Policy SP6 relates to the criteria for testing the financial viability of a new development. There would be no impact on European sites as a result of implementation of this policy.	В
	Policy SP7 details how infrastructure will be maintained and supported and how developers will need to contribute; however, the policy itself would not directly lead to change. This policy states that any new infrastructure will comply with other polices in the local plan, including Policy CDMP4 (which serves to protect European sites). There would be no impacts on European sites as a result of implementation of this policy.	G
	Policy SP8 relates to health and well-being. The policy aims to encourage development to help maximise opportunities to improve quality of life and to make it easier for people in Wyre to lead healthy, active lifestyles. The policy is aspirational and does not provide for change, there would be no impacts on European sites as a result of implementation of this policy.	A
Core development management policies: CDMP1, CDMP2, CDMP3, CDMP4, CDMP5, CDMP6	Policy CDMP1 relates to protecting the environment from contamination by development. This policy outlines the requirement for air quality impact assessments to support development proposals where appropriate. Policy CDMP2 relates to flood risk and surface water management and Policy CDMP5 relates to retaining and protecting historical assets. The implementation of these policies is considered to have no adverse impacts and potentially some beneficial effects on the European sites.	D

Policy	Justification	Assessment Category
	Policy CDMP3 relates to the design of new development. Innovative design appropriate to the local context will be supported and will be expected to demonstrate an understanding of the wider context and make a positive contribution to the local area. Implementing this policy would not lead to any impacts on European sites.	F
	Policy CDMP4 details the protection of environmental assets, specifying that where significant harm to European sites resulting from development cannot be avoided, mitigated or as a last resort replaced or compensated, the development would not be permitted. A project specific HRA may be required. There is also a requirement for new residential developments within 3.5 km of Morecambe Bay to prepare a Home Owners Pack, highlighting the sensitivities of Morecambe Bay to recreational disturbance. International (European) and national sites are given greater protection than Wyre specific sites. The implementation of this policy is considered to have no adverse impacts and potentially some beneficial effects on the European sites.	D
	Policy CDMP6 details how developers ensure that new developments are viable, safe and sustainable in terms of transport and that developers contribute to any changes to the local infrastructure. Footpaths are promoted; however, these will include footpaths within new development and linking new development to urban locations (rather than new footpaths in the wider countryside). There would be no impacts on European sites as a result of implementation of this policy.	G
Housing policies HP1, HP2, HP3, HP4, HP5, HP6, HP7, HP8, HP9, HP10	Policy HP1 explains how many dwellings need to be provided and the rate that provision is required during the time of the plan. Policy HP2 details the mixture of housing required and HP3 details where affordable housing will be located. Policy HP5 relates to residential curtilages and serves to protect the character and amenity of the landscape. Policy HP8 details the provision of accommodation for Gypsy, Travellers and Travelling Show people. Specifically, this policy details that land within the local plan may be developed for this purpose, as there is an identified need for Travelling Showpeople and sets criteria for determining planning applications for Gypsy and Traveller and Travelling Showpeople. The policy includes reference to compliance with the Core Development Management Policies, specifically Policy CDMP4 (which serves to protect European sites; see above). Policy HP10 details how conversion of buildings into multiple occupancy units will be undertaken. As these buildings are already in existence this will not impact upon European sites. None of these policies are anticipated to have any impacts on European sites.	G
	Policy HP4 allows for development outside settlement boundaries, but only in exceptional circumstances. Where a new dwelling(s) are permitted under this policy, they would be located on land immediately adjoining the existing boundary of a settlement. Isolated new build dwellings in the countryside will not be acceptable under this policy. Policy HP6 relates to replacement dwellings in the countryside. These developments would only be permitted provided the size of the proposed dwelling does not result in an increase in the scale of the property.	Н

Policy	Justification	Assessment Category
	Any developments permitted under these policies would be small in scale and therefore would not lead to likely significant effects upon the European sites. The policies also include reference to compliance with the Core Development Management Policies, specifically Policy CDMP4 (which serves to protect European sites).	
	No impacts on European sites are anticipated as a result of implementation of these policies.	
	Policy HP7 details how dwellings for rural worker accommodation must meet specific criteria. As these are very stringent, this will control development in the countryside.	E
	No impacts on European sites are anticipated as a result of implementation of this policy.	
	Policy HP9 details the requirement for incorporating green infrastructure into residential developments of 11 units of more, the policy relates to the design and required standards for different sizes of development. This includes provision of open space on site, or where appropriate, a financial contribution towards improving the quality and accessibility of a nearby existing open space (accepted in lieu of onsite provision). The amount of public open space to be provided increases with the size of the development, therefore larger allocations would be expected to include a significant proportion of public open space which would need to accommodate a range of activities including parks and gardens (suitable for use by dog walkers), amenity greenspace and children/young people play areas.	В
	The policy itself does not provide for change, there would be no impacts on European sites as a result of implementation of this policy.	
	Policy EP1 lists the areas and hectares where employment land will be located, however, the policy itself would not directly lead to change. There would be no impacts on European sites as a result of implementation of this policy.	A
	Policies EP2 and EP3 specifically relate to the protection and appropriate redevelopment (e.g. gyms, canteens, crèches etc.) of existing employment areas and maintaining the viability of employment sites. As these buildings are already in existence this will not impact upon European sites.	
Economic growth policies EP1, EP2, EP3, EP4, EP5, EP6, EP7, EP8, EP9, EP10, EP11, EP12, EP13, EP14, EP15	Policy EP8 allows proposals that diversify the rural economy. However, the policy states these must not be detrimental to the scale and nature of the character of the area.	
	Policy EP9 promotes the extension of existing holiday accommodation and new short stay touring caravan and camping sites. However, the policy states that such development should be of appropriate scale and appearance to the local landscape.	
	Policy EP10 relates to equestrian development of private or commercial equestrian facilities outside settlement boundaries. These would be small-scale and in close proximity to existing development. The Policy also states that 'The development as a whole (including access roads or tracks, ménages, storage, lighting, hardstanding, fencing and other paraphernalia) are well screened from the surrounding countryside'.	Н
	Policy EP12 relates to renewable energy development. Such developments have the potential to impact on European sites. Within the policy, a clause states the policy must comply with the Core Development Management Policies, specifically Policy CDMP4. Paragraph 10 in Policy CDMP4 states that 'Where significant harm to European sites resulting from development cannot be avoided, adequately mitigated or, as a last resort, replaced or compensated, the development will not be permitted. A project specific Habitat Regulation Assessment (HRA) may be required.' There are currently no allocations within the Local Plan associated with energy generation. Any such plans which could come forward during the plan period would need to	

Policy	Justification	Assessment Category
	ensure compliance with CDMP4 prior to planning permission being granted. Therefore, no impacts on European sites are anticipated as a result of implementation of this policy.	
	Policy EP13 details the criteria for installation of new telecommunications equipment.	
	All of these policies include reference to compliance with the Core Development Management Policies, specifically Policy CDMP4 (which serves to protect European sites).	
	There will be no impact on European sites as a result of implementation of these policies.	
	Policy EP4 lists the hierarchy for town, district and local centres.	
	Policy EP5 details the criteria for new retail development and other main town centre uses within the town, district, local and neighbourhood centres.	
	Policy EP6 details the shopping frontages and what is acceptable development within these.	
	Policy EP7 defines the criteria for the development of local convenience stores.	В
	Policy EP14 details criteria for outdoor advertisement and signage.	
	Policy EP15 details where security shutters are permitted.	
	None of these policies are anticipated to have any impacts on European sites.	
	Policy EP11 protects facilities for the community in rural locations.	
	There would be no impacts on European sites as a result of implementation of this policy.	G
Site Allocations SA5	Policy SA5 is associated with the Port of Fleetwood. This policy specifically relates to safeguarding the old Ferry Terminal site for future port-related development. Any future port-related development at this site (such as bringing the Ferry Terminal back into use) is outside of the scope of the Local Plan. Any such development would be considered separately with its own feasibility studies and HRA if required. Therefore, this policy itself does not provide for change, and there would be no impacts on European sites as a result of implementation of this safeguarding policy.	В
Monitoring the Local Plan LPR1	Policy LPR1 outlines the review mechanism for the Local Plan. It does not introduce any new development and any changes to the allocations within the Local Plan arising from the review process will be subject to HRA screening.	

6 Detailed Screening of the Local Plan

6.1 Overview

- 6.1.1 The detailed screening of the policies/allocation sites in relation to the European sites is presented in Tables 10 and 11, and is based on the findings of the initial screening exercise.
- 6.1.2 The detailed screening of the Local Plan policies and sites contains details of the potential impacts (detailed in Section 6.2), the European sites potentially affected (identified in paragraphs 5.3.6), and whether further Appropriate Assessment would be required. Each policy and site also includes a categorisation of the potential effects in line with current guidance¹³ (refer to Table 3, in Section 3.4).
- 6.1.3 The detailed screening of sites presented in Table 11 also takes into consideration ongoing consultation with NE. Additional ecological information has been obtained to provide a more robust assessment (refer to Section 6.5).

6.2 Potential Impact pathways

- 6.2.1 The following potential impacts have been considered in the detailed assessment. They were identified through a review of the current pressures/threats to the European sites considered in this assessment (which comprise Morecambe Bay SPA/Ramsar site/SAC, Morecambe Bay and the Duddon Estuary SPA and the Ribble and the Alt Estuaries SPA/ Ramsar site, refer to paragraphs 5.3.5 and 5.3.6):
 - Direct habitat and species loss associated with European sites.
 - Habitat degradation as a result of increased air pollution.
 - Changes in water quality where sites are hydrologically linked to European sites.
 - Loss of habitat functionally linked to a European site (i.e. used by overwintering or passage birds for foraging).
 - Disturbance/displacement to species as a result of construction activities/ operational stage.
 - Disturbance to habitats and species through increased recreational activity, during operational stage.
- 6.2.2 Each potential impact pathway is described in more detail below. The description includes an explanation as to why each of the potential impact pathways has been scoped in or out of the detailed assessment for the European sites considered in the detailed screening of the Local Plan policies and sites.

Direct habitat and species loss associated with European sites

- 6.2.3 Construction work could result in the direct destruction of habitats, leading to a net loss in the extent of habitat area Morecambe Bay and Duddon Estuary SPA /Morecambe Bay Ramsar site and are located on the northern coast of the borough. The Ribble and Alt Estuaries SPA/Ramsar/SAC site is located 6.5 km south of the borough boundary. None of the land allocations are within a European site, therefore, direct habitat loss is not anticipated as a result of implementation of the Local Plan.
- 6.2.4 This potential impact pathway has been screened out of the detailed screening assessment.

Habitat degradation as a result of increased air pollution

- 6.2.5 Changes in air quality from increased traffic and development could have impacts on European sites. Changes in air quality due to increased nitrogen deposition could occur as a result of the following:
 - Construction activities in the vicinity of European sites.
 - Increased population and road traffic may increase nitrogen deposition on sensitive habitats.

¹³ DTA Publications Limited (June 2016) The Habitats Regulations Assessment Handbook.

- 6.2.6 The Site Improvement Plan for Sefton Ribble¹⁴ identified the risk of atmospheric nitrogen deposition as a potential threat to the European sites. The plan states that:
 - 'Nitrogen deposition exceeds critical loads and causes rapid growth of vegetation on transitional dune habitats; leading to loss of early successional vegetation communities and associated habitats and species.'
- 6.2.7 However, given that the Ribble and Alt Estuaries SPA/Ramsar site is 6.5 km to the south of the borough boundary, there would be no impacts on air quality at this European site as a result of development within Wyre.
- 6.2.8 The Site Improvement Plan for Morecambe Bay¹⁵ also identified the risk of atmospheric nitrogen deposition as a potential threat to the European sites. The plan states that:
 - 'Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection and hence there is a risk of harmful effects, but the sensitive features are currently considered to be in favourable condition on the site.'
- 6.2.9 In relation to construction activities near to Morecambe Bay, current air quality guidance suggests that any construction sites or routes used by construction vehicles within 50 m of a European site¹⁶; and any European site within 200 m of the main access roads used by HGVs accessing the site¹⁷ could lead to significant effects on European sites during the construction phases of new development.
- 6.2.10 Only two allocations within the Local Plan are within 200m of a European site, with the majority of the allocations more than 3-5 km from the European sites. Fleetwood Docks and Marina and the Hillhouse Technology Enterprise Zone (EZ) are both adjacent (in part) to the Morecambe Bay Ramsar site and the Morecambe Bay and Duddon Estuary SPA. In addition, the nearest allocation to the Morecambe Bay SAC is 290 m away from the European site, with the main access road being 240 m away and separated from the SAC by existing housing. However, all of the proposed allocation sites on the Fleetwood peninsula comprise regeneration of existing development and, as such, any construction phase impacts in addition to that which is currently experienced by the adjacent SAC/Ramsar site/SPA, would be negligible and not significant.
- 6.2.11 In relation to operational phase impacts associated with new development within Wyre, Wyre Council can confirm that all employment site allocations within the Local Plan are allocations for B Use Classes, specifically Use Class B1, B2 and B8 only. B use classes are defined as follows: B1- business (comprising offices, premises for Research and Development and light Industrial processes which can take place within a residential area without damaging the amenity of that area); B2 general Industry (for the use of carrying out an industrial process other than one falling within class B1); and B8 storage and distribution (applies to properties and land which are used for storage or as a distribution centre). The employment sites are not allocated for Sui-Generis use class which includes uses, such as waste management processes/incinerators and coal fired power stations.
- 6.2.12 Although it is not possible, at this strategic level, to confirm exactly which businesses would develop on the employment allocations within the Local Plan, given that the B1, B2 and B8 use classes do not include the types of businesses which are likely to cause significant increases in air pollution, any increase in industrial air pollution as a result of new employment sites within Wyre would be negligible. In addition, any developments would have to accord with relevant legislation ensuring any emissions meet appropriate guidelines and comply with all relevant policies within the Local Plan (including Policy CDMP1 (d) which specifically refers to protection of air quality. The policy states that developments 'Will not give rise to a deterioration of air quality in a defined Air Quality Management Area or result in the declaration of a new AQMA, unless the harm caused is significantly and demonstrably outweighed by other planning considerations and a comprehensive mitigation strategy can be secured; where appropriate an air quality impact assessment will be required'. This policy will ensure air quality is taken into consideration during the planning application stage and prevent damaging development

¹⁴ Natural England. Site Improvement Plan Sefton Ribble (including the Ribble and Alt Estuary).

¹⁵ Natural England. Site Improvement Plan Morecambe Bay (including Morecambe Bay SPA/Ramsar site and SAC).

¹⁶ Institute of Air Quality Management (IAQM), Guidance on the assessment of dust from demolition and construction (2014)

¹⁷ Design Manual for Roads and Bridges, Volume 11, Section 3, Part 1, HA 207/07 – Air Quality, Highways Agency, 2007.

- from being permitted. This would also benefit European sites minimising the potential for any air quality threats.
- 6.2.13 New housing within Wyre is located within or immediately adjacent to existing centres of development, with the majority of new housing sites located more than 3 5 km away from the European sites. Given the distance of the new sites from Morecambe Bay any increases in air pollution as a result new housing sites within Wyre are considered to be negligible.
- 6.2.14 This potential impact has been **screened out** of the detailed screening assessment alone. The potential for in combination effects in relation to this impact is presented in Section 6.8.

Changes in water quality where sites are hydrologically linked to European sites

- 6.2.15 Changes in water quality as a result of new development could have impacts on European sites. For example, increased risk of potential pollution incidents, and potential increases in suspended sediments resulting in ecological effects, such as the direct loss of habitats caused by re-deposition of suspended sediment, and the consequential health or mortality effects on prey species, particularly invertebrates associated with the intertidal mudflats.
- 6.2.16 There are no hydrological links between the Ribble and Alt Estuaries SPA/Ramsar site and potential allocation sites within Wyre. Therefore, there would be no impacts on water quality at the Ribble and Alt Estuaries SPA/Ramsar site as a result of development within Wyre.
- 6.2.17 The Site Improvement Plan for Morecambe Bay18 identified that:
 - 'Diffuse pollution and/or uncontrolled release of pollutants from terrestrial sources could alter or damage the habitats and species found within the estuary.'
- 6.2.18 Morecambe Bay SAC/ Ramsar site and the Morecambe Bay and Duddon Estuary SPA have been identified as being hydrologically linked to watercourses within Wyre. There are two allocation sites on the Fleetwood peninsula which are directly adjacent to the SPA/Ramsar site (and hydrologically linked to the SAC), and a further three allocation sites which are hydrologically linked to the Morecambe Bay SAC/ Ramsar site and the Morecambe Bay and Duddon Estuary SPA further inland upstream.
- 6.2.19 The Fleetwood Docks and Marina and Hillhouse Technology EZ allocations are adjacent to the Morecambe Bay Ramsar site/Morecambe Bay and Duddon Estuary SPA. Contamination from emissions to water as a result of increased industrial use or increased housing density could result due to an increase in pollution *per se* or an increase in the number of pollution sources, or both. Further consideration of this potential impact at the Appropriate Assessment stage is therefore required for these two allocation sites.
- 6.2.20 Land at Garstang Road, Poulton (Site Ref: SA1/6 (site has planning permission)) is adjacent to Skippool Creek, 1.5 km from the Wyre Estuary. South of Kepple Lane (Site Ref: SA1/18 (site has planning permission) is adjacent to the River Wyre and Land of Calder House Lane (Site Ref: SA1/21 (site has planning permission) is adjacent to the Little Calder River, a tributary of the River Wyre, however, both of these small sites are more than 10 km from the boundary of the European sites. Although all three of these sites are hydrologically linked to the European site, given the distances involved, and the fact that hydrological issues have not been identified as issues for these site during the planning process, it is unlikely that there would be any impacts on European sites as a result of changes in water quality as a result of future development at these sites.
- 6.2.21 Wyre Council have also confirmed that an Infrastructure Delivery Plan (IDP) and drainage strategy which includes coverage of drainage requirements will be produced to support the Local Plan. This will include details of the infrastructure identified by the council, and other service and infrastructure providers, to support the delivery of development within the Local Plan. Wyre Council have confirmed that, from their ongoing discussions, they have received no objections to the Local Plan from United Utilities, the Environment Agency or the Lead Local Flood Authority to date. The Local Plan includes two policies (Policy CDMP1- Environmental Protection and Policy CDMP2 Flood Risk and Surface

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¹⁸ Natural England. Site Improvement Plan Morecambe Bay (including Morecambe Bay SPA/Ramsar site and SAC).

- Water Management) which offers protection over water supply/waste and environmental pollution. As stated, there are currently no capacity issues known at this strategic level; however, should such issues emerge at a later date, these polices provide a safety net to ensure that any such capacity issues would be dealt with prior to planning permission being granted.
- 6.2.22 This potential impact pathway has been **screened in** for further assessment, but only in relation to Fleetwood Docks and Marina and Hillhouse Technology EZ allocations, it has been **screened out** for all other allocation sites alone. The potential for in combination effects in relation this impact is presented in Section 6.8.

Direct loss of habitat functionally-linked to a European site (i.e. used by overwintering or passage birds for foraging)

- 6.2.23 Functionally-linked land is considered to be any land outside of the European site, which is regularly used by birds in significant numbers, that are qualifying interest features of that European site. In relation to this HRA Report, this includes land (comprising farmland, or other wetland habitat) used by qualifying bird species associated with Morecambe Bay Ramsar site/ Ribble and Alt Estuaries SPA/Ramsar site/ Morecambe Bay and Duddon Estuary SPA during the winter and on passage for foraging or roosting, such as pink-footed geese. A number of the allocation sites are located within, or adjacent to land which could potentially constitute functionally-linked land.
- 6.2.24 Loss of functionally-linked land would only be related to those qualifying species which are known to regularly use habitats outside of the European sites for foraging or roosting. In relation to the this HRA Report this comprises the following species associated with the European sites, set out within Table 8 below. All other qualifying species associated with the European sites (which forage exclusively at sea, such as common eider and little tern) can be ruled out of this potential impact pathway as they do not regularly use functionally-linked land outside of the European site.
- 6.2.25 The species listed in Tables 8 are, in part, based on the distances set out within Appendix E (information provided by NE).

Table 8: Qualifying bird species included withn the detailed screening assessment in relation to loss of functionally-linked land

European Site	Qualifying species included within the detailed assessment		
Morecambe Bay and	Species which could regularly use farmland outside of the European site in significant numbers: pink-footed geese, lapwing, golden plover, curlew, Bewick's swan (plus black-tailed godwit, and other goose, swan, or gull species associated with the waterbird assemblage).		
Duddon Estuary SPA/ Morecambe Bay Ramsar site	Species which could use other habitat outside of a European site (such as wetland habitat, including Fleetwood Marsh Nature Reserve): All waterbird species listed as qualifying species, and/or which form part of the waterbird assemblage associated with this European site.		
	[Note: All species which feed exclusively at sea, have been scoped out of this potential impact pathway.]		
Ribble and Alt Estuaries SPA/Ramsar site	and whooper swan		
	[Note: species based on buffer zones detailed in Appendix E]		

6.2.26 This impact pathway will therefore be considered in the detailed screening assessment alone within Section 6.4 below (in relation to those qualifying species set out within Table 8 above). The potential for in combination effects in relation this impact is presented in Section 6.8.

Disturbance/displacement to species as a result of construction activities/ operational stage

- 6.2.27 There is the potential to disturb and/or displace qualifying species associated with European sites, in particular birds, during the construction and operational phases of new developments in proximity to the site's boundary. Disturbance/displacement could occur as a result of the following:
 - Two of the allocation sites are located on the Fleetwood peninsula adjacent to the Wyre Estuary (which lies within the Morecambe Bay and Duddon Estuary SPA/ Morecambe Bay Ramsar site). These developments could lead to significant effects, in terms of noise, visual vibration and lighting disturbance during both the construction and operational phase of new developments. This could result in potential loss of fitness and the consequential health or mortality effects on birds and their prey species.
 - A number of the allocation sites are also located adjacent to land which could potentially
 constitute functionally-linked land. These developments could also lead to significant effects, in
 terms of noise, visual vibration and lighting disturbance during both the construction and
 operational phase of new developments.
 - Fragmentation effects could also cause a barrier to the movement and dispersal of species, thereby limiting access to foraging opportunities.
- 6.2.28 In relation to development within Wyre, no fragmentation effects are considered likely. Given the discreet nature of the allocations across the whole borough, the proximity of the allocations to existing development, and the highly mobile nature of the birds associated with the Morecambe Bay Ramsar site/ Ribble and Alt Estuaries SPA/Ramsar site/ Morecambe Bay and Duddon Estuary SPA; none of the allocation sites would form a barrier to movement of birds within and across the borough. This HRA Report will therefore focus on the potential effects associated with disturbance/ displacement only. Potential impacts associated with fragmentation have been screened out of the detailed screening assessment.
- 6.2.29 The species listed within Table 9 (below) comprises the qualifying species associated with the European sites which could be affected by disturbance/displacement associated with development within Wyre. All other qualifying species associated with the European sites (which forage exclusively at sea) can be ruled out of this potential impact pathway as they do not regularly use coastal habitats in the vicinity of the potential development within Wyre.
- 6.2.30 The species listed in Table 9 are, in part, based on the distances set out within Appendix E (information provided by NE).

Table 9: Qualifying bird species included withn the detailed screening assessment in relation to disturbance

European Site	Qualifying species included within the detailed assessment		
	All waterbird species listed as qualifying species, and/or which form part of the waterbird assemblage associated with this European site.		
Morecambe Bay and Duddon Estuary SPA/ Morecambe Bay	[Note: All species which feed exclusively at sea, have been scoped out of this potential impact pathway.]		
Ramsar site	Given that the Duddon Estuary is 25 km from the allocations within Wyre, there would be no disturbance/displacement impacts on birds using this part of the Morecambe Bay and Duddon Estuary SPA.		
Ribble and Alt Estuaries SPA/Ramsar site	Given the distance of this European site from the allocations within Wyre, there would be no disturbance/displacement impacts on the Ribble and Alt Estuaries SPA/Ramsar site.		

6.2.31 This impact pathway will therefore be considered in the detailed screening assessment alone within Section 6.4 below (in relation to those qualifying species associated with Morecambe Bay

SPA/Ramsar site and Morecambe Bay and Duddon Estuary SPA, set out within Table 8 above). The potential for in combination effects in relation to this impact is presented in Section 6.8.

Disturbance/displacement to habitats and species through increased recreational activity, during operational stage

- 6.2.32 There is the potential to disturb and/or displace qualifying species associated with European sites, in particular birds, during the construction and operational phases of new developments in proximity to the site's boundary. Recreational disturbance/displacement could occur as a result of the following:
 - Increase in use of footpaths (as a result of new housing developments) across land which is considered to be functionally-linked to the Morecambe Bay SPA/Ramsar site and Morecambe Bay and Duddon Estuary SPA. This could lead to disturbance/displacement of birds using functionally-linked land associated with these European sites.
 - Unofficial access to land adjacent to developments which may be functionally-linked to Morecambe Bay SPA/Ramsar site and Morecambe Bay and Duddon Estuary SPA.
 - Increase in recreational disturbance/ displacement to birds associated with the Morecambe Bay SPA/Ramsar site and Morecambe Bay and Duddon Estuary SPA as a result of an increase in visitors to the coast.
 - Increase in recreational pressure as a result of an increase in visitors to the coast leading to degradation of habitats associated with Morecambe Bay SPA/Ramsar site and Morecambe Bay and Duddon Estuary SPA, and the Morecambe Bay SAC.
- 6.2.33 The Site Improvement Plan for Morecambe Bay identified public access/disturbance as a potential pressure/threat to the site. The plan states that:
 - 'There is recreational disturbance to all features from various activities from individuals (e.g. dog walkers) to organised groups occurring throughout Morecambe Bay. In some cases, (e.g. wind and kite surfing) activities are increasing. Previous attempts at developing 'codes of conduct', and good practice have not been successful. New access points are being created or old tracks widened etc., and there are long term/historical issues. There are boat moorings at Foulney (Roa Island) that are on or near seagrass beds, with no clear management of the placement or number of moorings. This has been discussed with the Boat Club but part of the land is owned by Boughton Estate. The scale of recreational disturbance is currently unknown but considered to be both localised and widespread. Activities require regulation to ensure birds are not disturbed and habitats are not damaged.'
- 6.2.34 The Site Improvement Plan for Sefton/Ribble also identified public access/disturbance as a potential pressure/threat to the site. The plan states that:
 - 'Disturbance of bird populations through terrestrial and marine recreation (walkers, joggers, dog walkers, off-road vehicles, sand yachting, kite surfing, jet ski, boating, angling) and disturbance to dune and foreshore species and habitats through these recreational activities. Localised nutrient enrichment of dune flora by dog fouling and disturbance of dune slacks by dogs.'
- 6.2.35 An increase in population (as a result of new development and improved road infrastructure) could result in increased recreational pressure as a result of additional people in an area and the consequent increases in people visiting the European sites. A Recreational Disturbance Study carried out by Footprint Ecology for the Morecambe Bay Partnership¹⁹ identified that visitors to Morecambe Bay who were on a day-trip/short visit from home travelled a median distance of 3.454 km to get to the European site. Morecambe Bay SAC/ Ramsar and Morecambe Bay and Duddon Estuary SPA is within close proximity for residents of Wyre. Therefore, increased disturbance to birds (as a result of recreational pressure) at these European sites could occur. However, this will only be relevant to new housing allocation sites and mixed-use allocations (which include an element of residential dwellings within the proposals).
- 6.2.36 Employment sites are considered less likely to lead to increased recreational pressure; however, for sites located in close proximity to the European sites some increase in use may occur [note: there are

¹⁹ Liley, D., Underhill-Day, J., Panter, C., Marsh, P. & Roberts, J. (2015). Morecambe Bay Bird Disturbance and Access Management Report. Unpublished report by Footprint Ecology for the Morecambe Bay Partnership

no large retail outlet developments allocated within the Local Plan, and these can therefore be scoped out of the detailed assessment.] Taking an average walking pace, a person could cover 3 km in 30 minutes continuous walking (the UK average lunch break is approximately 28 minutes)²⁰. Taking this into consideration, there are three employment sites within a 1.5 km buffer (as the crow flies) of the Morecambe Bay Ramsar site/SAC/ Morecambe and Duddon SPA (comprising Fleetwood Docks and Marina (Site Ref: SA3/1), Hillhouse Technology EZ (Site Ref: SA4), and Carrfield Works (Site Ref: SA2/1) (refer to Map 6, within Appendix B). Given their proximity and size potential impacts of recreational pressure associated with Fleetwood Docks and Marina and Hillhouse Technology EZ will be considered separately in the detailed assessment. For the other site, recreational pressure is considered unlikely. Carrfield works is a small site (0.34 ha) that is allocated to support the expansion of an existing business that operates as a builders' merchants. The site benefits from full planning permission (16/01054/FUL) that was approved for B8 Storage (Natural England were consulted on the application and in a response dated 6/12/16 did not raise an objection). This small, additional storage site would not lead to the additional employment of a large number of people within the area. To add to this, it is estimated that less than 20% of UK workers take a walk at lunchtime21, and as such, only a small proportion of the workers at these three sites would be expected to take a walk at lunchtime. Therefore, given the small size of these allocations and the small number of people that could reasonably be expected to access the estuary during a break from work (should they wish to), it is considered unlikely that there would be a significant disturbance effect associated with recreational pressure from these new employment sites in Fleetwood. Employment sites are therefore screened out of the detailed assessment.

- 6.2.37 The potential for disturbance/displacement to birds on the coast and along the Wyre Estuary associated with Morecambe Bay Ramsar site/ Morecambe Bay and Duddon Estuary SPA as a result of increased visitor numbers in relation to housing and mixed-use developments and Fleetwood Docks and Marina, and Hillhouse Technology EZ will be considered in the detailed assessment.
- 6.2.38 There is also the potential to damage habitats associated with Morecambe Bay Ramsar site/SAC and Morecambe Bay and Duddon Estuary SPA, associated with increased recreational pressure. However, the only habitats within these European sites which are particularly sensitive to recreational pressure are the dune systems (which are a qualifying feature of the Morecambe Bay SAC). The majority of the dune systems are located in Cumbria (more than 30 km away), with only a small area at the mouth of the Wyre to the north of Fleetwood. Given the distance of the dunes within Cumbria from potential development in Wyre, no potential impacts as a result of increased recreational pressure upon the dunes in Cumbria are considered likely. The dunes north of Fleetwood are considerably closer; however, only a small amount of additional housing would be located within 3.5 km of this area (this equates to two housing allocations comprising SA1/1 West of Broadway (25 dwellings) and SA3/1 Fleetwood Docks and Marina (120 dwellings), which would be a total of 145 dwellings within the 3.5 km buffer). This is considered unlikely to lead to a significant increase in the number of people visiting the area where the dune systems are located. Given that public access/disturbance is included as a potential threat to the SAC, potential impacts as a result of increased recreational pressure upon the habitats associated with Morecambe Bay SAC will be considered in the detailed assessment.
- 6.2.39 Given the distance of the new allocations within Wyre to the Ribble and Alt Estuaries SPA/Ramsar site (the closest allocations at Poulton-le-Fylde and Inskip are approximately 10 km to the north of the SPA/Ramsar site, with the majority of the allocations over 15 km away), it is considered unlikely that residents in Wyre would regularly travel such distances in significant numbers such that they could have any likely significant effect on the qualifying features of the Ribble and Alt Estuaries SPA/Ramsar site. Recreational pressure on the Ribble and Alt Estuaries has therefore been screened out of the detailed screening assessment.
- 6.2.40 In addition, there is also the potential for increased recreational use of land outside of the European site, but which is functionally-linked to the European site, as a result of new housing developments within Wyre (for example, at Fleetwood Marsh Nature Reserve, or farmland which could be regularly used by significant numbers of SPA species). There is a network of footpaths across the borough

²⁰ https://www.hrgrapevine.com/content/article/2016-09-23-the-exact-duration-of-the-average-uk-lunchtime-revealed

²¹ http://officeteam.rhi.mediaroom.com/lunchbreaks

including the Lancaster Coastal Way and the Wyre Way. A number of allocations are close to existing footpaths, however, only a small proportion of these link directly to the Wyre Way and Lancaster Coastal Path which follow the coastline around the Morecambe Bay SAC/Ramsar site / Morecambe and Duddon Estuary SPA. In addition, two small areas of open access land were identified, one along a section of the Wyre Way on the eastern bank of the estuary near Hambleton and the other at Carr House Green Common near Inskip. Both of these areas have existing public footpaths within them and have therefore been included within the assessment of public rights of way.

- 6.2.41 In terms of unofficial access to sites, at this strategic level it is not possible to identify all potential areas that are/could be accessed without permission of the landowners. A review of aerial photography of sites where functionally-linked land was present in the vicinity of allocations did not identify any particularly well-used and obvious unofficial paths/desire lines (however, this does not rule out the possibility of unofficial use but such detail cannot be reasonably obtained at this strategic level).
- 6.2.42 Recreational pressure will be considered in the detailed screening assessment within Section 6.4 below, but only in relation to: increased use of footpaths across areas of land which could constitute functionally-linked land, increased use of wetland habitat outside of the European site at Fleetwood; potential increase in visitor numbers to the Morecambe Bay SAC/ Ramsar site and Morecambe Bay and Duddon Estuary SPA from new housing developments, Fleetwood Docks and Marina and Hillhouse Technology EZ.
- 6.2.43 Recreational pressure in relation to employment and retail sites have been scoped out of the detailed assessment for all employment sites with the exception of Fleetwood Docks and Marina and Hillhouse Technology EZ. Similarly, potential impacts of recreational pressure on the Ribble and Alt Estuaries SPA/Ramsar site have also been screened out. The potential for in combination effects in relation to this impact is presented in Section 6.8.

6.3 Potential impacts considered in the detailed screening of the Local Plan policies and sites

- 6.3.1 The potential impact pathways carried through into the detailed screening assessment comprise the following:
 - Loss of habitat functionally linked to a European site (in relation to those qualifying species set out within Table 8 only).
 - Disturbance to species as a result of construction activities/operational stage (in relation to those qualifying species set out within Table 9 only).
 - Disturbance to habitats and species through increased recreational activity, during operational stage (in relation to potential impacts from new housing developments on Morecambe Bay SAC/Ramsar site and Morecambe Bay and Duddon Estuary SPA only).
 - Changes in water quality (in relation to the Fleetwood Docks and Marina and Hillhouse Technology EZ allocations).

6.4 Detailed Screening of the Local Plan Policies

- 6.4.1 The screened in Local Plan policies/allocation sites were examined in detail to determine the need for further Appropriate Assessment.
- 6.4.2 Table 10 provides the screening of the over-arching policies. The detailed assessment of each of the allocation sites associated with these policies is provided in Table 11.

Table 10: Detailed Screening of the Screened In Policies within the Local Plan

Strategic Policy	European site Potentially Affected	Potential Effect	Detailed Assessment	Assessment Category	Conclusion
SA1 Residential Developments	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA	This policy details the sites which are allocated for new housing throughout Wyre. New housing development has the potential to impact European sites through increased recreational pressure, loss of habitat functionally-linked to a European site, and disturbance to species as a result of construction activities/ operational stage.	Detailed screening of the sites associated with this policy (comprising SA1/1 to SA1/27 is provided in Table 11. Detailed screening of these sites confirmed no LSE on the European sites considered in this assessment for allocation sites, with the exception of SA1/12. Further AA is therefore required for these sites (refer to Section 8). The potential for in combination effects with all residential developments within 3.5km of Morecambe Bay in relation to recreational pressure have been identified. Further AA of this potential impacts is required	I and J	No likely significant effect in relation to sites for all allocation sites with the exception of SA1/12. Further Appropriate Assessment alone required for SA1/12. Further in combination assessment required for all residential developments within 3.5km of Morecambe Bay
SA2 Employment Development	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA	This policy details the sites which are allocated for new employment throughout Wyre. New employment development has the potential to impact European sites through loss of habitat functionally-linked to a European site, and disturbance to species as a result of construction activities/ operational stage.	Detailed screening of the sites associated with this policy (comprising SA2/1 to SA2/4 is provided in Table 11. Detailed screening of these sites confirmed no LSE on the European sites considered in this assessment. In addition, no significant in combination effects have been identified (refer to Section 6.6 and 6.7). The potential for LSE as a result of this policy can therefore be ruled out.	Н	No likely significant effect.
SA3 Mixed Use Development	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA	This policy details the sites which are allocated for mixed residential and employment development throughout Wyre. New mix use development has the potential to impact European sites through increased recreational pressure, loss of habitat functionally-linked to a European site, and disturbance to species as a result of construction activities/ operational stage.	Detailed screening of the sites associated with this policy (comprising SA3/1 to SA3/5 is provided in Table 11. Detailed screening of sites SA3/2, SA3/4 and SA3/5 confirmed no LSE on the European sites considered in this assessment. The potential for in combination effects with all residential developments within 3.5km of Morecambe Bay in relation to recreational pressure have been identified. Further AA of this potential impacts is required Detailed screening of sites SA3/1 (Fleetwood Docks and Marina) and SA3/3 (Great Eccleston Extension) confirmed the potential for LSE on the European sites considered in this assessment. Further AA of these sites is therefore required (refer to Section 8). The potential for LSE as a result of this policy could not be screened out in relation to site S3/1 and SA3/3. All other allocations associated with this policy have been screened out.	I for SA3/1 and SA3/3 K for SA3/2, S3/4 and SA3/5 J for all allocation sites with an element of residential development within 3.5 km of Morecambe Bay	No likely significant effect in relation to sites SA3/2, SA3/4 and SA3/5. Further Appropriate Assessment required for SA3/1 and SA3/3. Further in combination assessment required for all residential developments within 3.5km of Morecambe Bay
SA4 Hillhouse Technology Enterprise Zone	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA	This policy sets out the commitment of Wyre Council to support development in this Enterprise Zone (EZ). The Local Plan requires the EZ to deliver housing and employment and supports other complementary commercial uses. Including small scale convenience retail store. Development within the EZ has the potential to impact European sites through increased recreational pressure, and disturbance to species as a result of construction activities/ operational stage.	Detailed screening of SA4 Hillhouse Technology EZ is provided in Table 11. Detailed screening of the site associated with this policy confirmed the potential for LSE on the European sites considered in this assessment. Further AA of this site is therefore required (refer to Section 8).	I	Further Appropriate Assessment required
SA6 Traveling Showpeople Site	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA	This policy details the site which has been allocated for Travelling showpeople within Wyre. This policy has the potential to impact European sites through increased recreational pressure, loss of habitat functionally-linked to a European site, and disturbance to species as a result of construction activities/ operational stage.	Detailed screening of the site associated with this policy (Land at Conway, West of the A6, Garstang (SA6)) is provided in Table11. Detailed screening of this site confirmed no LSE on the European sites considered in this assessment. The potential for LSE as a result of this policy can therefore be ruled out.	Н	No likely significant effect.

Strategic Policy	European site Potentially Affected	Potential Effect	Detailed Assessment	Assessment Category	Conclusion
SA7 Brockholes Employment Expansion Site	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA	This policy relates to potential development at the Brockholes Employment Expansion Site (site SA7). Development within Brockholes has the potential to impact European sites through loss of habitat functionally-linked to a European site, and disturbance to species as a result of construction activities/ operational stage.	Detailed screening of the Brockholes Employment Expansion Site (SA7) is provided in Table 11. Detailed screening of this site confirmed no LSE on the European sites considered in this assessment. The potential for LSE as a result of this policy can therefore be ruled out.	Н	No likely significant effect.

6.5 Detailed Screening of the Local Plan Sites

- 6.5.1 The Local Plan allocation sites were examined in detail to determine the need for further assessment (Table 11 below). As outlined within Section 2, the detailed screening of the sites also takes into consideration consultation with NE (refer to Section 2.5). Additional ecological information has been obtained to provide a more robust assessment. Further details of how the ecological information has been interpreted is presented below.
- 6.5.2 Following the review of the potential impacts, and the additional information available to inform the assessment, a conclusion has been drawn as to whether any of the individual sites could have a likely significant effect upon European sites either alone or in combination.

Ecological Information

- 6.5.3 The following data sources have been considered during the detailed screening exercise:
 - Fylde Bird Club Records.
 - NE pink-footed goose distribution squares, and functionally-linked land Impact Risk Zone (IRZ) buffer.
 - WeBS data.
 - Local Records Centre.
 - Morecambe Bay Wader Roost Study.
 - Additional ecological information from reports provided by Wyre Council.
- 6.5.4 Each of these data sources is described in further detail below.

Fylde Bird Club Records (Geographic Information System (GIS) Data)

- 6.5.5 Fylde Bird Club provided data comprising almost 50,000 bird records from the most recent five years available (January 2010 to January 2015). The records included a combination of individual sightings (i.e. location specific) and tetrad data (i.e. records within a 2x2 km grid square).
- 6.5.6 All of the records were plotted onto GIS by the Ordnance Survey (OS) grid reference, or by the tetrad location. Where records related to a tetrad, further interrogation of the data was carried out, as required, to determine if additional location information was available. All of the records had supporting location information associated with them indicating either a specific location or the nearest settlement. Many of the records also included secondary location details which provided greater resolution to the actual location of the records within an area. In addition to the interrogation of the location information, a review of aerial photographs was undertaken to provide further context to the records and therefore establish whether the records related to areas within the allocation sites or other areas nearby. Where location information was not sufficiently detailed to identify specific locations, it has been noted that records could relate to allocation sites and assessed accordingly.
- 6.5.7 Given the extensive coverage of bird data supplied for the Wyre and Fylde districts, it is considered unlikely that areas supporting significant numbers of qualifying bird species would remain un-surveyed. As such, relying on the bird data provided (in addition to the other sources of ecological information reviewed and an assessment of the suitability of the habitats) for this HRA is considered to be appropriate and proportionate for classifying areas of functionally-linked land. It is accepted that a lack of bird records does not necessarily indicate a lack of birds; however, in a region with such extensive coverage by local bird club recorders, significant, regular aggregations of birds would reasonably be expected to be recorded.

NE pink-footed goose distribution squares²² and functionally-linked land IRZ buffer (GIS Data)²³

6.5.8 A five-point scale has been devised by NE to reflect the relative abundance of geese recorded in a 1km square, called the 'Goose Index'. The 'Goose Index' covers a large proportion of the north-east

²² Pink-footed geese, Morecambe Bay. A draft map showing the distribution of feeding pink-footed geese produced by Natural England (2015).

²³ SSSI IRZs Full Dataset – External, available through the Natural England Huddle Workspace

around Morecambe Bay, including Wyre. Each square, where geese have been recorded feeding, has been weighted according to how many times they have been recorded, as well as how many birds were counted. Figure 3 in Appendix B shows the 'Goose Index' squares in the vicinity of the allocation sites.

6.5.9 NE have used the Goose Index squares to produce an IRZ buffer. The agricultural land within the buffer is considered likely to form functionally-linked land to adjacent SPAs/Ramsar sites (including Morecambe Bay Ramsar site and the Morecambe Bay and Duddon Estuary SPA). These buffer zones are also shown on Figure 3 in Appendix B, as pink shading.

Wetland Bird Survey (WeBS) data

- 6.5.10 The location of WeBS core count areas was reviewed against the land allocation sites (the WeBS count zones are shown on Figure 4 in Appendix B). The majority of core count areas did not have recent survey data (i.e. had not been counted in the last five years). These included the following:
 - Cockerham and Winmarleigh Moss (Ref: 57342). Last counted 1981.
 - Pilling Dam (Ref: 57022). Last counted 1991.
 - Little Tongues Lake (Little Tongues Lake) (Ref: 57343). Last counted 1991
 - Preesall Flashes (Ref: 57262). Last counted 1991.
 - Brine Wells (Ref: 57028). Last counted 1991.
- 6.5.11 Data from the above count zones have not been requested given the historical nature of the data.
- 6.5.12 There are four core count zones (listed below) between Knot End and Pilling which have been counted in the last five years. However, there are no allocations located near to the northern boundary of the borough in this locality, therefore it was not deemed necessary to obtain data for these count zones.
 - Knott End to Fluke Hall (Ref: 57902). Last counted 2016/17.
 - Fluke Hall (Ref: 57903). Last counted 2016/17.
 - Lane Ends (Ref: 57904). Last counted 2016/17.
 - Lane Ends to Bank End (Ref: 57905) Last counted 2016/17.
- 6.5.13 There are a further 14 count zones around the Fleetwood Peninsula which have been counted in the last five years (listed below). However, given that the data obtained from Fylde Bird Club coincided with these WeBS core count zones, it was not deemed necessary to obtain any additional WeBS data. Sufficient information could be determined from the Fylde Bird Club data such that obtaining the WeBS data would not change, or add to the conclusions of this HRA Report.
 - Resell Point excluding GC and Lakes (Ref: 57406). Last counted 2015/16.
 - Rossall Point Golf Course Pool (Ref: 57409). Last counted 2015/16.
 - Fleetwood Marine Lakes (Ref: 57408). Last counted 2015/16.
 - Fleetwood Docks (Ref: 57463) Last counted 2012/13.
 - Fleetwood Marsh Nature Park (Ref: 57464). Last counted 2015/16.
 - Fleetwood Tip Lagoon (Ref: 57465). Last counted 2015/16.
 - ICI Pools (Ref: 57466). Last counted 2012/13.
 - Fleetwood Marsh (Ref: 57411). Last counted 2015/16.
 - ICI Reservoir (Ref: 57467). Last counted 2015/16.
 - Wyre Estuary Arm Hill (Ref: 57414). Last counted 2016/17.
 - Wyre Estuary Wardleys (Ref: 57435). Last counted 2016/17.
 - Wyre Estuary Ramper Pot (Ref: 57437). Last counted 2016/17.
 - Wyre Estuary Skippool Creek (Ref: 57436). Last counted 2016/17.
 - Wyre Estuary Shard Bridge (Ref: 57438). Last counted 2016/17.

Local Records Centre

6.5.14 Given the extent of bird records received from the local bird club, data held by the local records centre was considered unlikely to provide additional information. The Local Records Centre was therefore not contacted.

Morecambe Bay Wader Roost Study²⁴

- 6.5.15 The Morecambe Bay Wader Roost Study identifies and describes important wader roost sites around Morecambe Bay. The Study has been reviewed in relation to the locations of the allocation sites. There are nine roost sites in the vicinity of allocations (as shown on Figure 4 in Appendix B). These comprise the following:
 - · Fleetwood Marsh wader roost.
 - Tiger's tail wader roost.
 - Fleetwood Marine Lakes wader roost.
 - Burrows Marsh wader roost.
 - Arm Hill wader roost.
 - Barnaby's Sands wader roost.
 - Rossall Point (excluding GC Pool and Lakes).
 - · Rossall Point Golf Course Pool.
 - Knott End East (Willow Close).

Interpretation of ecological information

- 6.5.16 The detailed screening is presented in Table 11. The format of these tables was agreed in consultation with NE (February 2017), refer to Section 2.2. The tables comprise: details of the European sites potentially affected; the type of development (including a site description); details of the bird data review (including a summary of the relevant Fylde Bird Club information, whether the site is within a pink-footed goose square, and a detailed description of whether the site constitutes functionally-linked land); the Assessment Category (based on Table 3), potential impacts; and finally whether the site is likely to have a significant effect either alone or in combination.
- 6.5.17 To aid interpretation, the four bird data review columns are colour-coded amber or green. Where the column is green, detailed interpretation of the bird data has concluded no potential impact has been identified (and a justification for this provided, where appropriate). Where the column is amber, a potential impact has been highlighted, and the potential impact associated with that information is presented in the 'potential impacts' column.
- 6.5.18 Due to the large number of records, and the nature of the data, the bird data has not been provided as Figures/Maps within this Report. The data comprises a combination of individual records and tetrad data, which has been uploaded into a searchable GIS format, of which the secondary information associated with the records is not easily reproducible in paper format. However, all relevant bird records to inform the assessment has been included within Table 11. Pink-footed goose data has been mapped on Figure 3 (Appendix B), but this only provides an indication of where the records are in relation to the NE goose index and functionally-linked land buffer, rather than records themselves.
- 6.5.19 When interpreting the ecological information, a number of assumptions have been made. These comprise the following:
 - With respect to footpaths and access to FLL, it is assumed that new residents would only access adjacent fields considered to be FLL if there is an official footpath. As described in Paragraph 6.2.43 although it is feasible that people could access FLL even if there are no official footpaths, the review of aerial photography of sites adjacent to FLL did not identify any particularly well-used and obvious unofficial footpaths/desire lines, although the potential for unofficial access still remains. In the absence of any obvious unofficial paths/desire lines, an assumption has been

²⁴ Marsh, Roberts, (2013) Morecambe Bay Wader Roost Study Heritage Lottery funding.

- made that it was reasonable to assume that new home owners would only use existing footpaths, and would not trespass onto land which they do not have permission to use [note no common land that has been identified lies within 500 m of any of the site allocations.]
- The definition of FLL used in this assessment is: 'land which is regularly used by significant numbers of birds'. Where SPA species are using a site, but there is not a significant number of birds regularly using that site, it has been defined as follows [as agreed with NE during consultation in relation to HRA work for adjacent Local Councils]:
 - 'the site could be used by SPA birds but not regularly and not in significant numbers so it is not considered to be FLL'
 - However, the final determination of whether a site is considered to be FLL also takes into consideration other factors, such as habitat type, proximity to existing development, and distance from the European site.

Table 11: Detailed screening of policies/allocation sites within the Wyre Local Plan

				Ecological Information								
Local Plan Sites	European Sites Potentially Affected	Area (ha)	Planning Status (as at 31 March 2018)	Fylde Bird Club Data (Summary of relevant records)	Pink-footed Goose Square from IRZ layer?	Morecambe Bay Wader Roost Study (refer to Section 6.5). Roost within 1 km	Functionally Linked Land (FLL) for bird species associated with the European sites considered in this assessment	Assessment Category	Potential Impacts	Potential for significant effect alone?	Potential for significant in combination effects with other sites in the Plan?	Conclusion
SA1 Residential	Developments											
West of Broadway Site Ref: SA1/1 A flat site formerly a school playing field situated in a residential area.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (800 m)	1.05ha	No current planning applications associated with this site. Total allocation for 25 dwellings.	This site lies within a tetrad containing bird data, but there are no individual bird records for the site, or within 300m. The site lies within tetrad 34I which contains 494 bird records. The majority of the records are associated with Fleetwood Marsh Nature Park or Fleetwood Docks, both over 1 km from the site and separated from the site by existing development. The other records within the tetrad (closer to the site) comprised a small number of gulls recorded at Fleetwood Memorial Park, approximately 400 m to the east.	Although the site lies with the FLL buffer, given its urban location, pink-footed geese are unlikely to use the site.	Y - Rossall Point Golf Course Pool – 850 m to north	This small site comprises a single green field surrounded on all sides by development. The site is not considered to constitute FFL. The closest land to the allocation that could constitute FLL is located to the east of the site at Fleetwood Marsh Nature Park (more than 1 km away). There are no footpaths linking the site to the coast.	Н	None anticipated.	N	Y (site within 3.5 km of Morecambe Bay)	No Likely Significant Effect
Lambs Road/ Raikes Road Site Ref: SA1/2 Green field site on eastern edge of Thornton with development to north, west and south and road to the east.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (420 m)	19.67ha	South west part of the site is covered by a planning application (14/00553) for 165 dwellings (August 2014), the reserved matters (17/00050) application has been approved for 157 dwellings (September 2017). Project-level HRA Screening concluded no LSE on European sites. NE agreed with this conclusion. A parcel to the West of the site is covered by a pending application (17/00951) for 66 dwellings. NE consulted and confirmed no LSE on European sites with appropriate mitigation measures that include home owner packs and inclusion of recreational multi-use green space. Remaining area provides allocation for 235 dwellings, of which there is no current/pending application for the 169 dwellings. Total allocation for 400 dwellings.	This site lies within two tetrads containing bird data, but there are no individual bird records for the site, or within 300m. The site lies within two tetrads; 34L to the north containing 446 records and 34K to the south containing 1,617 records. The site is located just over 400 m from the Wyre Estuary. Secondary location data associated with 34K indicates that the majority of the records are from Skippool Creek which is 750 m to the south and Carleton 1 km to the south. Records associated with 34L were from Ramper Pot, 1 km to the east (on the opposite side of the Estuary) and Stanah which is 500 m to the northeast. Of more than 2,000 records associated with these tetrads, only 47 records related to Thornton or Little Thornton which are closer to the allocation. Of these one related to 300 pink-footed geese, one to 290 golden plover and one to 200 lapwing with remaining records being of much smaller flocks of a range of species (less than 80 birds) or individual birds.	N	N	The site comprises six green fields which could support SPA bird species; however, the bird data suggests it is not regularly used and/or birds are not present in significant numbers within these fields. In addition, the site is surrounded on three side by existing development and a road. The site itself is therefore is not considered to be FLL. The locations associated with the bird records suggest the fields to the east, beyond Raikes Road and closer to the Wyre Estuary would constitute FLL.	Н	Part of the site has been granted planning permission and NE agreed with the conclusions of no LSE upon European sites. In combination effects with other allocations identified within the plan that may not have been identified at the time of the project level HRA. Given the proximity of the site to the Wyre Estuary, there is the potential for additional recreational pressures upon the adjacent FLL and Wyre Estuary through an increase in use of public footpaths. The Wyre Way footpath follows the estuary and is linked by footpaths to the site. This is an established footpath and the presence of 400 additional dwellings nearby would not be expected to lead to a significant rise in the number of people using the footpath such that a significant effect upon the European site or FLL would occur. In addition, part of the site is held in trust by Wyre Council as open space which should be integrated into the overall masterplan, therefore providing alternative open space for recreation.	N (As agreed with NE for part of the site)	Y (site within 3.5 km of Morecambe Bay)	No Likely Significant Effect

				Ecological Information								
Local Plan Sites	European Sites Potentially Affected	Area (ha)	Planning Status (as at 31 March 2018)	Fylde Bird Club Data (Summary of relevant records)	Pink-footed Goose Square from IRZ layer?	Morecambe Bay Wader Roost Study (refer to Section 6.5). Roost within 1 km	Functionally Linked Land (FLL) for bird species associated with the European sites considered in this assessment	Assessment Category	Potential Impacts	Potential for significant effect alone?	Potential for significant in combination effects with other sites in the Plan?	Conclusion
Land between Fleetwood Rd North and Pheasant Wood Site Ref: SA1/3 Green field site on northern edge of Thornton with development to the west, south and east.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (880 m)	8.48ha	No current planning applications associated with this site. Total allocation for 153 dwellings.	This site lies within two tetrads containing bird data, but there are no individual bird records for the site, or within 300m. The site is within tetrad 34H containing 304 records. 185 of the tetrad records related to pink-footed goose (peak count 2500 birds), all of which related to Fleetwood Farm, adjacent to the north of the site. This is consistent with the locations of the individual records for pink-footed goose within the wider area. None of the tetrad records related to the site. There are fifteen individual sightings of pink-footed goose (peak count 4000) within fields to the north west of the site at Fleetwood Farm, the closest being 335 m from the site.	PFG square level 5, red and FLL buffer	N	The site is adjacent to existing development to the west, public open space and housing to the south, a road and existing development/vacant scrub land within the Hillhouse Technology EZ allocation to the east. Only the northern edge of the allocation is adjacent to green fields. The site and adjacent fields to the north comprise green fields which could be used by SPA birds. However, given that the bird records indicate regular use of the adjacent fields with no use of the allocation site itself and the proximity of the allocation to existing development, the site itself is not considered to constitute FLL. The fields to the north, at Fleetwood Farm where large numbers of SPA birds have been regularly recorded is considered to be FLL. Map 5 and the aerial photos in Appendix B shows the location of the site.	Н	Disturbance to birds using adjacent land which could be functionally linked to the Morecambe Bay SPA/Ramsar site There is the potential for disturbance to birds using the FLL with large numbers of pink-footed geese and other SPA species identified within the fields adjacent to the northern boundary of the site. There are no footpaths directly linking the site with the FLL to the north, as such potential for impacts upon this area would be negligible. Whilst there is the potential for an effect upon the adjacent land during construction and operation of the development, given the relatively small scale and its location adjacent to existing residential development and existing employment, any impacts are considered unlikely to be of sufficient scale to lead to a significant effect upon the European sites.	N	Y (site within 3.5 km of Morecambe Bay)	No Likely Significant Effect
South East Poulton Site Ref: SA1/5 Green field site on the southeastern edge of Poulton-le-Fylde. Existing development to the north, west and east and a farm along part of the southern boundary with the rest open to farmland. Railway passes through farmland to south and adjacent to eastern edge.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (2.2km)	7.83ha	Two planning applications totalling 236 net dwellings are associated with the site. One parcel for 130 (16/01043) has outline planning permission (April 2017). The second parcel for 106 (net) dwellings (16/00742) has been approved (February 2018). NE consultation on the two planning applications associated with this allocation confirmed no adverse effects upon statutory European sites.	There are no individual bird records within the site or within 300 m The site lies within tetrad 33P containing 70 bird records. Over half of the records related to gull species within the town centre. Ten records related to pink-footed goose (peak count 765), all of which were recorded flying over Poulton le Fylde. Secondary information indicates the majority of the records outside of the town centre are associated with Moorland Road over 800 m to the north of Garstang Road, and Main Dyke, 300 m to the east. None of the tetrad records were within the site.	Eastern edge of the site lies within the FLL buffer, with the closest goose index square beyond the railway line.	N	The site and fields to the south comprise green fields which could be used by SPA birds; however, given the lack of bird data for the site adjacent fields and its proximity to existing development, the site and adjacent fields do not constitute FLL. Bird records for the fields to the east, beyond the railway indicate that this area would be considered to constitute FLL. There is a footpath which crosses the site and fields to the south; however, there are no direct links from the allocation across the railway to FLL to the east.	Н	None anticipated	N	Y (site within 3.5 km of Morecambe Bay)	No Likely Significant Effect
Land at Garstang Road Site Ref: SA1/6 Green field site comprising three fields on the eastern edge of Poulton-le-	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA	24.8ha	This site has planning permission (15/00298), granted for 516 houses (February 2017). NE consulted and agreed no LSE on European sites.	There are four individual records of pink-footed Goose (peak count 1200+) two records are within the site, the other three within 200m. All of the records are from January 2015 and therefore does not indicate that the area is regularly used by this species. Two other individual records relate to the site - lesser black-backed gull and shelduck comprising 2 birds for each record.	Most of the site lies within the FLL buffer, but is not located within a goose index square.	N	The site comprises green fields which could support SPA birds; however, the bird data indicates that the site is not regularly used with only limited records for the most recent 5-year period available. Given the limited records and the proximity of the site to existing development, the site itself does not constitute FLL.	Н	The site has been granted planning permission and NE agreed with the conclusions of no LSE upon European sites. Recreational disturbance associated with potentially FLL to	N	Y (site within 3.5 km of Morecambe Bay)	No Likely Significant Effect

				Ecological Information								
Local Plan Sites	European Sites Potentially Affected	Area (ha)	Planning Status (as at 31 March 2018)	Fylde Bird Club Data (Summary of relevant records)	Pink-footed Goose Square from IRZ layer?	Morecambe Bay Wader Roost Study (refer to Section 6.5). Roost within 1 km	Functionally Linked Land (FLL) for bird species associated with the European sites considered in this assessment	Assessment Category	Potential Impacts	Potential for significant effect alone?	Potential for significant in combination effects with other sites in the Plan?	Conclusion
Fylde with existing development to the west and the A586 and an industrial estate to the south.	(1.6km)			The site also lies within two tetrads 33P (described above for South East Poulton) and 33U containing 1775 records. The records for 33U are mostly associated with Singleton and Little Singleton, indicating that the fields to the south east of the site, beyond the industrial estate are regularly used. There are 133 pink-footed goose (2000) and 20 whooper swan (23) records associated with the tetrad. Whilst location data is not available for every record, only one record of 208 curlew was identified at Little Poulton which could relate to the site. None of the location data associated with tetrad 33P is within close proximity to the site.			Fields to the north and east, beyond Skippool Creek and to the south, beyond the industrial estate support more regular use by SPA birds and are considered to constitute FLL. There is a footpath which crosses the site and fields to the north.		the north and east in combination with other sites within the Plan. Although there is the potential for increased use of the footpath passing through potentially FLL to the north and east of the allocation site as a result of development at this site, no other sites within the Plan would lead to increased recreational disturbance upon the same areas of FLL and therefore no in combination effects are anticipated.			
Land South of Blackpool Road Site Ref: SA1/8 Green field site between Carleton to the north and Poulton-le-Fylde to the south. Existing development to the north, east and south. There is a railway line which bisects the allocation and run along the southern boundary.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (1.7 km)	19.54ha	South East part of the site is covered by a pending application (17/00632) for 35 dwellings. No comment from NE. Remaining area provides allocation for 265 dwellings with no current/pending applications. Total allocation for 300 houses.	There are no individual bird records within the site or within 300 m The site lies within two tetrads. The eastern part of the site falls within tetrad 33P as described above for South East Poulton. The west of the site falls within tetrad 33J containing 161 bird records. including: Black-headed gull (57), common tern (1), cormorant (1), goldeneye (1), herring gull (23), lapwing (22), lesser black-back gull (5), mallard (35), pink-footed goose (500), shelduck (2), teal (44) and wigeon (1). The majority of the records are associated with Carleton Crematorium, Robin's Lane, Carleton and Bispham, all over 450 m to the west of the allocation. The remaining records relate to areas further to the south west over 1 km from the site.	PFG square Level 1, green.	N	Although this is a large, green field site that could support SPA birds, the bird data indicates that it is not regularly used and given its proximity to existing development to the north, south and east, the site is not considered to constitute FLL. The closest FLL is considered to be adjacent to the western edge of the allocation which lies within a pink-footed goose index square (Level 1), although the majority of the bird records indicate the areas to the north and west of Blackpool Road, over 250 m from the site and screened by existing development, are more regularly used.	Н	Recreational disturbance associated with potentially FLL to the west Although there is the potential for increased use of the footpath passing through potentially FLL to the west of the allocation site as a result of development at this site, the limited value of the FLL compared with land to the north and west of Blackpool Road, any increase in use would not be expected to give rise to any significant impacts upon the species associated with the European sites.	N	Y (site within 3.5 km of Morecambe Bay)	No Likely Significant Effect
South Stalmine Site Ref: SA1/9 Green field site with Strickland's Lane and housing to the south and east, and the village of Stalmine to the north.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (1.8 km)	9.07ha	Part of the site has outline and reserved matters planning permissions for 77 houses (14/00226 and 17/0026) (August 2014 and March 2017) and is under construction. Application (17/00995) pending for revised layout to provide additional 5 dwellings. No comment from NE on application. Total allocation for 180 houses	There are no individual bird records within the site. There are two individual records of pink footed goose, the closest being 280m to the south west comprising 300 birds, the other being 190 m to the west comprising 500 birds, both from 2011. The site lies within tetrad 34S containing 79 bird records. 28 of the records related to pink-footed goose, with a peak count of 5000 on one occasion in 2013 located to the north east of Stalmine, over 700 m from the allocation. The secondary location data for all of the remaining pink-footed goose records associated with the tetrad relate to areas to the north and west of Stalmine, over 400 m from the site. Other records include five records of whimbrel (100) and two records of whooper swan (38), again all located to the north and west of Stalmine.	Although the site lies within Level 4 and Level 1 PFG squares, the bird records indicate, PFG are regularly using fields to the south and west and are not likely to be present within the site	N	The Allocation site is split into several small fields by hedgerows, creating reduced sight lines and is already to be subject to human disturbance due to the proximity to a residential area and primary school. Therefore, the site does not constitute FLL. The nearest FLL is approximately 200m to the west, beyond a road and screened by dense hedgerow/tree adjacent to Carr End Lane. There are no footpaths directly linking the site with the FLL to the west.	Н	None anticipated	N	Y (site within 3.5 km of Morecambe Bay)	No Likely Significant Effect
North of Garstang Road	Morecambe Bay	1.63ha	This site has outline planning permission	There are no individual bird records within the site or within 300 m.	Although the site lies within a	N	This redevelopment site comprises hard standing and existing buildings, and is therefore not FLL.	н	None anticipated.	N	Y (site within 3.5 km of	No Likely Significant Effect

				Ecological Information								
Local Plan Sites	European Sites Potentially Affected	Area (ha)	Planning Status (as at 31 March 2018)	Fylde Bird Club Data (Summary of relevant records)	Pink-footed Goose Square from IRZ layer?	Morecambe Bay Wader Roost Study (refer to Section 6.5). Roost within 1 km	Functionally Linked Land (FLL) for bird species associated with the European sites considered in this assessment	Assessment Category	Potential Impacts	Potential for significant effect alone?	Potential for significant in combination effects with other sites in the Plan?	Conclusion
Site Ref: SA1/10 Small area of hardstanding in Stake Pool (former concrete works).	Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (1.6 km)		(14/00526) for 40 houses (May 2015). NE consulted (July 2014) and concluded that the application is not likely to have a significant effect on European sites. Reserved matters (18/00138) application pending.	The site lies within tetrad 44D, containing 134 bird records. 49 of the records relate to whooper swan (peak count 339), 22 records of pink-footed goose (peak count 8000) and 12 Bewick's swan records (peak count 14). None of the records relate to the site or its immediate surroundings, with the location data identifying the areas to the west at Pilling Moss and south at Scronkey being the most regularly used area.	Level 3 PFG square, the site comprises redevelopment, PFG are not likely to be present within the site.		The adjacent fields to the east and west of the site has the potential to support SPA birds, however, the larger fields to the north of the site (closer to the Estuary) are more likely to provide suitable FLL (away from existing disturbance associated with Stakepool).				Morecambe Bay)	
North of Norcross Lane Site Ref: SA1/11 Redevelopment of brownfield site comprising hardstanding, scrub and managed grassland between existing residential housing and the A585.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (2.46 km)	13.58ha	Outline planning application associated with the majority of the site (13/00200) approved for 220 dwellings (December 2015). Full planning application (17/00122) covering southern site approved for retail (December 2017). No comment from NE. Total allocation for 300 houses.	This site lies within a tetrad containing bird data, but there are no individual bird records for the site, or within 300m. The allocation site lies within tetrad 34F containing 670 records. All but seven of the records related to Kincraig Lake or west of Carleton, both over 800 m to the south of the site. The other seven records related to Norcross or Carleton, however, secondary information associated with the records shows these corresponded to farmland to the south of Norcross Lane and north of Carleton (both to the south of the site). Of these closer records, six related to pinkfooted geese with a peak count of 500.	N	N	The site comprises an area of scrub, managed grassland and hardstanding/buildings and is not considered to constitute FLL. The closest land to the allocation that could constitute FLL is located to the south of the site, approximately 100m away (beyond Norcross Hall). There are no footpaths linking the site to the FLL.	Н	Disturbance to birds using adjacent land which could be functionally linked to the Morecambe Bay SPA/Ramsar site There is the potential for disturbance to birds using the FLL located approximately 100 m to the south of the site (i.e. fields south of Norcross Lane and north of Carleton). However, given that the allocation comprises redevelopment of a brownfield site and the short-term nature of any construction disturbance impacts, the potential effects upon the adjacent fields is considered to be negligible. In addition, the fields adjacent to Norcross Lane (to the south) are regularly used for car boot sales, therefore birds are likely to be utilising the fields further to the south, away from the allocation. There are no footpaths linking the site to the FLL, therefore, no recreational disturbance impacts upon adjacent FLL would be anticipated.	N	Y (site within 3.5 km of Morecambe Bay)	No Likely Significant Effect
Land at Arthurs Lane Site Ref: SA1/12 Two arable fields and a small area of grassland to the east of Hambleton.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (1km)	10.78ha	Planning application (16/00217) approved for 165 dwellings (February 2018). The scheme includes mitigation for the loss of FLL that includes: offset land, enhanced open space on site and residents' education/signage. NE removed their objection to the scheme 9/2/17. Reserved matters (18/00393) application pending for 165 dwellings.	There are no individual bird records within the site or within 300 m. This site lies within tetrad 34R containing 441 bird records. Of these, 22 were located at Hambleton with no additional location information, it is possible that these records could relate to the site. Two of the records related to pink-footed goose with flocks of 20 and 60 both from 2010 and two records were for black-headed gull with flocks of 900 and 1000. The remaining records were all of single birds. The remaining tetrad records were all located at Skippool Creek, Wardley's Creek, Stannah, Staynall and Hambleton Marsh, all of which are to the north or west of Hambleton and as such separated from the allocation by the existing settlement.	This site lies within the FLL buffer	N	The project level HRA identified the site as supporting habitats suitable for SPA species which could constitute FLL, further AA required.	I	Potential for adverse effects on bird species associated with the SPA/Ramsar site due to the presence of fields that could constitute FLL. Further AA required.	Y further AA required	Y (site within 3.5 km of Morecambe Bay	Potential for LSE, further AA required (refer to Section 8)
Inskip Extension Site Ref: SA1/13	Morecambe Bay Ramsar site/SAC	9.46ha	One part of the site has planning permission (16/00481 and 17/00631)	There are no individual bird records within the site or within 300 m. The site is located within two tetrads containing bird records. The northern edge	This site lies within the FLL buffer however records	N	The site comprises three parcels of land, Two small parcels are located on green fields to the west, one a small field to the north of the road (1.9ha) and one to the south	Н	None anticipated	N	N	No likely significant effect

				Ecological Information								
Local Plan Sites	European Sites Potentially Affected	Area (ha)	Planning Status (as at 31 March 2018)	Fylde Bird Club Data (Summary of relevant records)	Pink-footed Goose Square from IRZ layer?	Morecambe Bay Wader Roost Study (refer to Section 6.5). Roost within 1 km	Functionally Linked Land (FLL) for bird species associated with the European sites considered in this assessment	Assessment Category	Potential Impacts	Potential for significant effect alone?	Potential for significant in combination effects with other sites in the Plan?	Conclusion
Two discrete areas to the south and west of Inskip comprising green field sites.	(12km) Morecambe Bay and Duddon Estuary SPA (7.2 km)		for 55 dwellings (February 2017). No comment from NE on application. Total allocation for 155 dwellings.	of the allocation falls within Tetrad 43U to the north east (containing 244 records), the southern part of the allocation is within tetrad 43T to the south east (containing 150 records). The records associated with tetrad 43U are all associated with Sowerby, over 800 m to the north apart from a single record of two teal at Inskip. The majority of the records associated with 43T relate to Carr House Green Common, over 330 m to the south east. One of the records related to 8000+ pink-footed geese in pasture to the north west of the Common, and therefore in slightly closer proximity to the allocation site (although this record was dated 2013). A further seven records related to pink-footed goose, however, only two of which (17 and 156 birds) were associated with foraging birds at Carr House Green Common, the other five were for geese flying over the area.	indicate this area is not regularly used.		of the road (comprising 3 fields totalling approximately 4.8 ha) with the village to the east The third parcel lies to the south of Inskip comprising a single field of <3.5 ha with development to the north and a road to the west and south and hedgerow boundaries. Whilst the site could support SPA birds, given the proximity to existing development and the limited bird records within the area it is not considered to be FLL. The closest land to the allocation sites that could constitute FLL is located to the south east of the allocation, more than 300m away.					
North of New Holly Hotel and Bodkin Cottage, Hollins Lane Site Ref: SA1/14 Single green field between the A6 and Hollins lane.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (4 km)	2.13ha	Application (16/00835) for 38 dwellings for the whole site approved (November 2017). Consultation with NE (October 2016) on 16/00835 confirmed that the application was unlikely to affect a statutory site. Total allocation for 38 dwellings.	This site lies within one tetrad containing bird data, but there are no individual bird records for the site, or within 300m. This site is within tetrad 45V containing nine bird records, six associated with Forton, 800 m to the north west and three with Lancaster Canal, 900 m to the south west. The only record of note is for 1000+ pink-footed geese although these were recorded flying over and not directly utilising the habitats.	N	N	The site comprises a green field and could support birds associated with the SPA; however, given the site is located between the A6 and existing housing along Hollins Lane, has very limited bird records within the vicinity and lies outside the FLL buffer zone the site and surrounding area is not considered to constitute FLL.	Н	None anticipated	N	N	No Likely Significant Effect
Land East of Hollins Lane Site Ref: SA1/15 Two green fields between the railway and Hollins lane.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (4.2 km)	2.47ha	One planning application approved (15/00968) on part of the site for 8 dwellings (September 2016). Planning application (17/00233) for 43 dwellings on residual area approved (January 2018). Consultation with NE (April 2017) confirmed that the application was unlikely to affect a statutory site. Total allocation for 51 dwellings.	This site lies within one tetrad containing bird data, but there are no individual bird records for the site, or within 300m. This site is within tetrad 45V as described above for North of New Holly Hotel and Bodkin Cottage, Hollins Lane.	N	N	The site comprises a green field and could support birds associated with the SPA; however, given the site is located between the A6 and existing housing along Hollins Lane, has very limited bird records within the vicinity and lies outside the FLL buffer zone the site and surrounding area is not considered to constitute FLL	Н	None anticipated	N	N	No Likely Significant Effect
West of Cockerham Road Site Ref: SA1/16 Seven fields adjacent to the north-west	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon	14.52ha	No current planning applications associated with this site. Total allocation for 260 dwellings.	This site lies within one tetrad containing bird data, but there are no individual bird records for the site, or within 300m. The site is within tetrad 44Y containing 18 bird records. All of the records are for small numbers of birds and are located around Cabus or Winmarleigh, both over 1 km to the north of the site.	This site lies within the FLL buffer	N	Although this is a green field site that could support SPA birds, the bird data indicates that it is not regularly used and given its proximity to existing development being adjacent to housing to the north east and south and a road to the west, the site is not considered to constitute FLL.	н	None anticipated	N	N	No Likely Significant Effect

				Ecological Information								
Local Plan Sites	European Sites Potentially Affected	Area (ha)	Planning Status (as at 31 March 2018)	Fylde Bird Club Data (Summary of relevant records)	Pink-footed Goose Square from IRZ layer?	Morecambe Bay Wader Roost Study (refer to Section 6.5). Roost within 1 km	Functionally Linked Land (FLL) for bird species associated with the European sites considered in this assessment	Assessment Category	Potential Impacts	Potential for significant effect alone?	Potential for significant in combination effects with other sites in the Plan?	Conclusion
edge of Garstang with development, the A6 and Cockerham Road to the north, east and south and Croston Barn Lane to the east.	Estuary SPA (5.7 km)						The closest FLL is considered to be over 1 km to the west of the site.					
Land South of Prospect Farm, West of the A6 SA1/17 Two narrow fields at the south of Garstang adjacent to the A6 with existing development to the north and east.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (7.9 km)	2.66ha	No current planning applications associated with this site. Total allocation for 70 dwellings.	This site lies within one tetrad containing bird data, but there are no individual bird records for the site, or within 300m. The site is within tetrad 44X containing five bird records, the largest flock size recorded was 10 mallard.	This site lies within the FLL buffer	N	Although this is a green field site that could support SPA birds, the bird data indicates that it is not regularly used and given its proximity to existing development to the north and the A6 to the east the site is not considered to constitute FLL. The closest FLL is considered to be over 1 km to the west of the site, towards Nateby.	н	None anticipated	N	N	No Likely Significant Effect
Garstang Road, Bowgreave Site Ref: SA1/20 Two small fields surrounded by large hedgerows /trees with development to the west, and south and a school to the north.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (8.7 km)	2.36ha	Application (15/00420) - minded to approve subject to signing S106 agreement for 46 dwellings (March 2017). No comment from NE.	This site lies within one tetrad containing bird data, but there are no individual bird records for the site, or within 300m. The site is within tetrad 44W containing seven bird records, including one record of 600 pink-footed geese flying over Catterall (400 m to the south west). The remaining records relate to Churchtown 1.4 km to the south west.	N	N	The site and land to the east comprise green fields which could be used by SPA birds; however, given the lack of bird data for the site and adjacent fields and its proximity to existing development, the site and adjacent fields do not constitute FLL. The closest open farmland to the allocation sites that could constitute FLL is located to the south of the site (east of Catterall), and to the west of the allocation, adjacent to the River Wyre (beyond the golf course).	Н	None anticipated.	N	N	No Likely Significant Effect
South of Kepple Lane Site Ref: SA1/18 Two fields, farm buildings and a traveller site on the southern edge of Garstang. Bounded to south by River Wyre.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (7.3 km)	4.31ha	Part of the site (west) has planning permission (14/00053) for 75 dwellings (April 2014). Reserve Matters application (17/00305) pending. No comment from NE on application. Part of the site (east) has planning permission (17/00579) for 50 dwellings (March 2018). Consultation with NE (June 2017) confirmed that the application was unlikely to affect a statutory site.	This site lies within one tetrad containing bird data, but there are no individual bird records for the site, or within 300m. The site is within tetrad 44X as described above for Land South of Prospect Farm, West of the A6.	This site lies within the FLL buffer	N	Although this is a green field site that could support SPA birds, the bird data indicates that it is not regularly used and given its proximity to existing development to the north, including a school adjacent to the eastern boundary, the site is not considered to constitute FLL The closest open farmland to the allocation sites that could constitute FLL is located to the south of the site, adjacent to the River Wyre (beyond the golf course). Although there is a footpath across the site, there are no footpaths directly linking the site to the fields beyond the River Wyre.	Н	None anticipated.	N	N	No Likely Significant Effect

				Ecological Information								
Local Plan Sites	European Sites Potentially Affected	Area (ha)	Planning Status (as at 31 March 2018)	Fylde Bird Club Data (Summary of relevant records)	Pink-footed Goose Square from IRZ layer?	Morecambe Bay Wader Roost Study (refer to Section 6.5). Roost within 1 km	Functionally Linked Land (FLL) for bird species associated with the European sites considered in this assessment	Assessment Category	Potential Impacts	Potential for significant effect alone?	Potential for significant in combination effects with other sites in the Plan?	Conclusion
			Total allocation for 125 dwellings									
Bowgreave House Farm Site Ref: SA1/19 Single field to the rear of housing west of Bowgreave.	Morecambe Bay Ramsar	1.32ha	Planning application approved (15/00040) for 30 dwellings (29 net) (November 2016). Reserve Matters application (17/00013) for 28 (27 net) dwellings approved (August 2017). No comment from NE on application.	This site lies within one tetrad containing bird data, but there are no individual bird records for the site, or within 300m. The site is within tetrad 44W as described above for Garstang Road, Bowgreave.	N	N	Both sites comprise amenity grassland and would not constitute FLL. The closest open farmland to the	Н	None anticipated.	N	N	No Likely Significant Effect
Garstang Country Hotel and Golf Course Site Ref: SA1/22 Single field on the western edge of Bowgreave with golf course to the west and hotel to the south.	Morecambe Bay Ramsar site/SAC Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (8.4 km) 4.7	4.7ha	Planning application (15/00891) for whole site approved for 95 dwellings (January 2018). Reserved matters (18/00059) application pending. No comment from NE on application.	This site lies within one tetrad containing bird data, but there are no individual bird records for the site, or within 300m. The site is within tetrad 44W as described above for Garstang Road, Bowgreave.	N	N	allocation sites that could constitute FLL is located to the west of the allocations (beyond the golf course), in the vicinity of the River Calder and Wyre. There are no footpaths directly linking the sites to the fields to the west.	Н	None anticipated.	N	N	No Likely Significant Effect
Daniel Fold Farm, Daniel Fold Lane Site Ref: SA1/23 Three small fields on western edge of Catterall with development to the north, east and south and a small field and the A6 to the west beyond.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon	5.02ha	The site has outline planning application (14/00681) approved for 122 dwellings (May 2016). Reserve Matters application approved for 117 dwellings (June 2017) No comment from NE.	This site lies within one tetrad containing bird data, but there are no individual bird records for the site, or within 300m. The site is within tetrad 44W as described above for Garstang Road, Bowgreave. Although one record related to Caterall it	N	N	Although both allocations comprise green fields, and therefore could be used by SPA birds, given the limited bird data (indicating that the area is not regularly used) and that the allocations are surrounded on all sides by existing development and the A6 (and are subject to existing disturbance from dog walkers from nearby producing) to specific to the second control of	Н	None anticipated	N	N	No Likely Significant Effect
Daniel Fold Farm phase 2, Daniel Fold Lane Site Ref: SA1/24 One small field on western edge of Catterall with development to	A6 to	3.56ha	Application (16/00144/OUTMAJ) for up to 66 dwellings minded to approve subject to signing S106 agreement (March 2017). No comment from NE on application.	was of geese flying over and therefore, not utilising the habitats within the area.			not considered to constitute FLL. The closest open farmland to the allocation sites that could constitute FLL is located over 1.5 km to the west of the allocations, beyond the River Wyre.			N	N	No Likely Significant Effect

				Ecological Information								
Local Plan Sites	European Sites Potentially Affected	Area (ha)	Planning Status (as at 31 March 2018)	Fylde Bird Club Data (Summary of relevant records)	Pink-footed Goose Square from IRZ layer?	Morecambe Bay Wader Roost Study (refer to Section 6.5). Roost within 1 km	Functionally Linked Land (FLL) for bird species associated with the European sites considered in this assessment	Assessment Category	Potential Impacts	Potential for significant effect alone?	Potential for significant in combination effects with other sites in the Plan?	Conclusion
the east and south and the A6 to the west.												
Land off Garstang Road Site Ref: SA1/25 Small pastoral and rough grassland fields between the A6 and railway line on western edge of Barton.		3.65ha	The site has signed S106 agreement and planning permission (16/00625) for 72 dwellings (January 2018). No comments from NE on application.				The fields are small and separated	Н		N	N	No Likely Significant Effect
Land Rear of Shepherds Farm Site Ref: SA1/26 Small pastoral and rough grassland fields between the A6 and railway line on western edge of Barton.		2.35ha	This site has a planning application for 34 dwellings (16/00807) minded to approve subject to signing S106 agreement (March 2017). No comment from NE on application.	These sites lie within one tetrad containing bird data, but there are no individual bird records for the sites, or within 300m. All of these sites are within tetrad 53D containing 38 bird records. The majority of the records relate to Hollowsforth, over 800 m to the west. 8 records relate to Barton, of these there was only one record of note being 200 pink-footed geese, which could have been in close proximity to the allocation.	N	N	by hedgerows and large trees (creating reduced sightlines) and the allocations are in close proximity of existing development. Given the location and size of the fields, the sites do not constitute FLL. The closest open farmland to the allocation sites that could support SPA birds is located to the west of the allocations, adjacent to the Lancaster Canal, beyond the railway line. However, given the distance from the European sites	н	None anticipated	N	N	No Likely Significant Effect
Land rear of 867 Garstang Road, Barton Site Ref: SA1/27 Single field on western edge of Barton. Development to north, east and south and railway line to west with farmland beyond.	(12 km)	0.93ha	This site has a planning application for 26 dwellings (16/00090) minded to approve subject to signing S106 agreement (April 2017). No comments from NE on application				and the limited amount of bird records for the area, it is considered unlikely that the farmland in this area would constitute FLL.	н		N	N	No Likely Significant Effect
Land South of Calder House Lane Site Ref: SA1/21 Single field on south-eastern edge of Bowgreave. Development to	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA	3.69ha	This site has an outline planning approval (15/00928) for 45 dwellings agreement (March 2017). No comment from NE on application.	This site lies within one tetrad containing bird data, but there are no individual bird records for the sites, or within 300m. The site is within tetrad 44W as described above for Garstang Road, Bowgreave.	N	N	The site and land to the south and east comprise green fields which could be used by SPA birds; however, given the lack of bird data for the site and adjacent fields and its proximity to existing development, the site and adjacent fields do not constitute FLL. The closest open farmland to the allocation sites that could	Н	None anticipated	N	N	No Likely Significant Effect

				Ecological Information								
Local Plan Sites	European Sites Potentially Affected	Area (ha)	Planning Status (as at 31 March 2018)	Fylde Bird Club Data (Summary of relevant records)	Pink-footed Goose Square from IRZ layer?	Morecambe Bay Wader Roost Study (refer to Section 6.5). Roost within 1 km	Functionally Linked Land (FLL) for bird species associated with the European sites considered in this assessment	Assessment Category	Potential Impacts	Potential for significant effect alone?	Potential for significant in combination effects with other sites in the Plan?	Conclusion
the north and west with River Calder and farmland to the south and east.	(12 km)						constitute FLL as indicated by the bird records is over 2 km to the west of the site.					
SA2 Employmen	t Developments											
Carrfield Works Site Ref: SA2/1 Very small rough grassland field adjacent to existing development	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (1.4 km)	0.34ha	The site has planning permission (16/01054) (February 2017). NE consulted and confirmed no LSE on European sites.	There are no individual bird records within the site or within 300 m The site is within tetrad 34T containing 212 bird records. The majority of the records are associated with Preesall Flashes 600 m to the north west or other areas over 1 km to the north. 10 records were associated with Preesall Park, in close proximity to the allocation, including two records of 250 pink-footed geese both from 2014, whilst these may have been close to the allocation the site itself does not provide suitable foraging habitat.	Y	N	The site comprises a very small rough grassland field. Given that the site is surrounded by hedgerows and is directly adjacent to existing employment development, it would not constitute FLL. The fields to the west could constitute FLL. However, these would be screened from any future development at the site by the existing hedgerows surrounding the site.	Н	None anticipated.	N	N	No likely Significant Effect.
Riverside Industrial Park Extension Site Ref: SA2/3 Greenfield located adjacent to existing industrial estate to north, A6 located to west and SA1/24 to east.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (10km)	3.42ha	Outline planning permission (16/00955) for B2 building approved (July 2017) for whole site. NE consulted and submitted no comment on the application.	This site lies within one tetrad containing bird data, but there are no individual bird records for the site, or within 300m. The site is within tetrad 44W as described above for Garstang Road, Bowgreave. Although one record related to Catterall it was of geese flying over and therefore, not utilising the habitats within the area.	N	N	Although the allocation and adjacent fields comprise green fields, and therefore could support SPA birds, given that it is surrounded by existing development and the A6 (and are subject to existing disturbance from dog walkers from nearby housing), the site is not considered to constitute FLL. The closest open farmland to the allocation sites that could constitute FLL is located to the west of the allocation, adjacent to the River Wyre (beyond the A6 and existing housing).	н	None anticipated.	N	N	No Likely Significant Effect
South of Goose Lane Site Ref: SA2/4 Small green field bounded by A6 to south west, Garstang Road to east and Goose Lane to north, small fields with Catterall beyond to the north and an industrial estate to the east. SA3 Mixed Use I	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (10km)	1.46ha	Outline planning permission for the whole site (16/00513) minded to approve subject to signing S106 agreement (June 2017). NE consulted and no comment	There is no bird data for this site. The nearest tetrad containing data is adjacent to the south of the site. This tetrad identified two records of pink-footed goose (2000 and 3000) located 1 km to the south of the allocation.	N	N	This site comprises a small green field. Given that it is surrounded by roads on all sides and an existing industrial estate to the east, the site is not considered to constitute FLL. The closest open farmland to the allocation sites that could constitute FLL is located over 600 m to the south of the allocation (beyond the A6).	Н	None anticipated.	N	N	No Likely Significant Effect

				Ecological Information								
Local Plan Sites	European Sites Potentially Affected	Area (ha)	Planning Status (as at 31 March 2018)	Fylde Bird Club Data (Summary of relevant records)	Pink-footed Goose Square from IRZ layer?	Morecambe Bay Wader Roost Study (refer to Section 6.5). Roost within 1 km	Functionally Linked Land (FLL) for bird species associated with the European sites considered in this assessment	Assessment Category	Potential Impacts	Potential for significant effect alone?	Potential for significant in combination effects with other sites in the Plan?	Conclusion
Fleetwood Docks and Marina Site Ref: SA3/1 See paragraph 8.3.1 for site description	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (adjacent)	32.67ha	Planning application (15/00457) for southern part of the site for new Fish Park minded to approve subject to signing S106 agreement (December 2015). Project-level HRA undertaken. NE consulted and confirmed no LSE (with mitigation in place). Total allocation for 120 dwellings and 7.5ha employment.	There are 24 individual records within the allocation and a further 128 records within 300m. The site also lies within a tetrad containing bird data. The site is within tetrad 34l containing 494 records (as described above for West of Broadway). Records associated with Fleetwood Docks, including the individual records are likely to be within the allocation site. The site also lies adjacent to Fleetwood Marsh Nature Park where the majority of the more sensitive species are located. Development could therefore impact upon species associated with the European sites. Refer to Section 8.3 for further details.	The site lies within the FLL buffer	Y - 5 wader roost sites within 1 km, the closest being 100m to the north west (refer to Section 8.3 for further details)	The site comprises redevelopment. Although the Fleetwood Docks lie within the boundary of the site, the Docks themselves will not be affected by any proposed development within the allocation site. Therefore, there would be no loss of functionally-linked land under the footprint of any future development at this site. The site lies adjacent to Fleetwood Marsh Nature Park and several important wader roost sites within the Wyre Estuary.	I	Disturbance to birds using adjacent land which could be functionally linked to the Morecambe Bay SPA/Ramsar site Given the location of the site, there is the potential to disturb birds using the adjacent Estuary and functionally-linked land. Recreational disturbance to bird using adjacent functionally-linked land This mixed-use development would include some element of residential housing. There is the potential to increase disturbance to birds using areas such as the Fleetwood Marsh Nature Reserve, Lagoon and the edge of the Wyre Estuary. Changes in water quality Given the close proximity of the allocation to the Estuary, there is the potential for water quality issues associated with development at this allocation.	Y further AA required	Y (site within 3.5 km of Morecambe Bay)	Potential for LSE, further AA required (refer to Section 8)
Joe Lane (Land Bounded by Garstang Road, A6 and Joe Lane) Site Ref: SA3/2 Series of six small fields between Catterall to the north and east and the A6 to south and west.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (10km)	9.84ha	The site has planning permission (15/00248) for 242 dwellings and 0.95ha employment (November 2015). Two reserved matters applications (16/01065 and 16/00743) for residential and retail approved (June and November 2017) and currently under construction. No comment from NE on applications.	This site lies within one tetrad containing bird data, but there are no individual bird records for the site, or within 300m. The site is within tetrad 44W as described above for Garstang Road, Bowgreave. Although one record related to Caterall of geese flying over and therefore, not utilising the habitats within the area.	N	N	Although the site comprises green fields, and therefore could be used by SPA birds, given the small size of the fields, and the fact that the site is surrounded on all sides by existing development and the A6 the site is not considered to constitute FLL. The closest open farmland to the allocation sites that could constitute FLL, based on the presence of bird data and habitat suitability is located over 1.5 km to the west of the allocation, adjacent to the River Wyre.	Н	None anticipated	N	N	No Likely Significant Effect
Great Eccleston Extension Site Ref: SA3/3 Large green field site to the west of Great Eccleston, creating in-fill between Great Eccleston and Little Eccleston	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (2.6 km)	33.7ha	South East part of allocation has planning permission (15/00576 (outline) and 16/00973(reserved matters)) for 90 dwellings (January 2016 and February 2017) and is under construction. Remaining allocation for 478 dwellings includes a southern parcel for 93 dwellings that was allowed on appeal (March 2018). NE agreed no LSE on 15/00576 and 16/00650 application and no potential impacts upon wintering birds associated	This site lies within two tetrads containing bird data, but there are no individual bird records for the site, or within 300m. The site is within tetrad 44F to the north containing 25 records and tetrad 43J to the south containing 11 records. Many of the records associated with 44F were to the north of the allocation at Ratten Row, Ratcliffe Moss and Cartford Bridge. 14 records related to Great Eccleston and therefore could relate to the allocation site. These comprised two records of mallard (10 and 18 birds), one record of cormorant (2 birds), two records of lapwing (350 and 12), one record of redshank (1 bird), two records of black-headed gull (5 and 2 birds), two records of lesser-black-backed gull (both 1 bird), one record of shelduck (2 birds), one record of oystercatcher (4 birds) and two records of pink-footed geese (1 bird in 2010	The site lies within the FLL buffer	N	The site and surrounding area comprises green fields which could be used by SPA birds. Although none of the bird records identified within the area related to the site or adjacent fields, in the absence of more details, the potential for effects upon SPA/Ramsar site birds cannot be ruled out.	I	Given the size of the allocation site, and the fact that it is located on a greenfield site, further AA is required	Y further AA required	Y (site within 3.5 km of Morecambe Bay)	Potential for LSE, further AA required (refer to Section 8)

				Ecological Information								
Local Plan Sites	European Sites Potentially Affected	Area (ha)	Planning Status (as at 31 March 2018)	Fylde Bird Club Data (Summary of relevant records)	Pink-footed Goose Square from IRZ layer?	Morecambe Bay Wader Roost Study (refer to Section 6.5). Roost within 1 km	Functionally Linked Land (FLL) for bird species associated with the European sites considered in this assessment	Assessment Category	Potential Impacts	Potential for significant effect alone?	Potential for significant in combination effects with other sites in the Plan?	Conclusion
			with the SPA were identified during the Ecological Assessment undertaken to inform the planning application. Total allocation for 568 dwellings and 1ha of employment.	and 30 birds in 2014). A single record of 3,000 pink-footed geese was recorded to the east of Little Eccleston and therefore, to the north west of the allocation site, but this was a single sighting on one occasion. Given the low numbers of birds recorded within the area and taking into account site specific details relating to the southern part of the allocation site for which part has planning permission (which did not identify any potential impacts upon wintering SPA species), the allocation is not considered to be regularly used by SPA species. The records associated with tetrad 43J all related to Elswick, 800 m to the south of the allocation.								
Forton Extension Site Ref: SA3/4 Five parcels of green field land extending Forton to the east and south.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (3.3 km)	19.5ha	No current planning applications associated with this site at 31 March 2018. Total allocation for 310 dwellings and 1ha of employment.	This site lies within one tetrad containing bird data, but there are no individual bird records for the site, or within 300m. This site is within tetrad 45V containing nine bird records, six associated with Forton and three with Lancaster Canal, 900 m to the south west. The only records of note are two records of pink-footed goose (1000+ and 30 although these were both recorded flying over and not directly utilising the habitats. Remaining records were all of 1 to 13 birds.	N	N	The site and land to the surrounding area comprises green fields which could be used by SPA birds; however, given the lack of bird data for the site and adjacent fields and its proximity to existing development, the site and adjacent fields do not constitute FLL. The closest open farmland to the allocation sites for which bird records indicate regular use and therefore constitute FLL is located over 1 km to the west of the site, beyond the Lancaster canal.	н	None anticipated.	N	N	No Likely Significant Effect
Land West of the A6 (Nateby Crossing) Site Ref: SA3/5 The site comprises agricultural land intersected by hedgerows, lines of trees and some fencing to the west of Garstang. Site is bounded by A6 to east, Croston Barn Lane to north, Nateby Crossing Lane to west and Longmoor Lane to south.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (7km)	16.64ha	Site is covered by two alternative schemes for the whole site: Planning application (14/00458) approved and (16/00241) minded to approve subject to signing section 106 agreement (April 2017 and March 2017). No comment from NE on applications. Total allocation for 270 dwellings and 4.68ha employment.	This site lies within one tetrad containing bird data, but there are no individual bird records for the site, or within 300m. The site is within tetrad 44X as described above for Land South of Prospect Farm, West of the A6.	N	N	Although the site and adjacent fields could be used by SPA birds, given the limited number of bird records for the site and surrounding area and the location of the site adjacent to an existing industrial estate, the site and adjacent fields are not considered to constitute FLL. The closest FLL is considered to be over 1 km to the west of the site, towards Nateby.	Н	None anticipated.	N	N	No Likely Significant Effect

				Ecological Information								
Local Plan Sites	European Sites Potentially Affected	Area (ha)	Planning Status (as at 31 March 2018)	Fylde Bird Club Data (Summary of relevant records)	Pink-footed Goose Square from IRZ layer?	Morecambe Bay Wader Roost Study (refer to Section 6.5). Roost within 1 km	Functionally Linked Land (FLL) for bird species associated with the European sites considered in this assessment	Assessment Category	Potential Impacts	Potential for significant effect alone?	Potential for significant in combination effects with other sites in the Plan?	Conclusion
SA4 Hillhouse Te	echnology Ente	rprise Zone										
Hillhouse Technology Enterprise Zone Site Ref: SA4 See paragraph 8.4.1 for site description	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (adjacent)	137.7ha	A masterplan for the site will be developed which will set out how the site will deliver the dwellings and employment required. Total allocation for 250 dwellings and 13ha employment. NSIP scheme registered and decision pending	There are 64 individual records within the site and the site is within three tetrads containing bird data. All of the individual records relate to Thornton ICI Reservoir located at the northern end of the allocation. The site is also within tetrad 34H containing 304 records (as described above for Fleetwood Rd North and Pheasant Wood), tetrad 34M containing 589 records, and tetrad 34L containing 446 records (as described above for Lambs Road/ Raikes Road). Given the location of the site directly adjacent to the Wyre Estuary, it is likely that a proportion of the records within the tetrad would be related to the site and adjacent land. Refer to Section 8.4 for further details.	The site lies within the FLL buffer	Y - 3 wader roost sites within 1 km, the closest being 720 m to the north (refer to Section 8.4 for further details)	The site comprises redevelopment. Therefore, there would be no loss of functionally-linked land under the footprint of any future development at this site. The site lies adjacent to several important wader roost sites within the Wyre Estuary.	I	Disturbance to birds using adjacent land which could be functionally linked to the Morecambe Bay SPA/Ramsar site Given the location of the site, there is the potential to disturb birds using the adjacent Estuary and functionally-linked land and birds. Changes in water quality Given the close proximity of the allocation to the Estuary, there is the potential for water quality issues associated with development at this allocation. Recreational disturbance to bird using adjacent functionally-linked land and European sites. This mixed-use development would include some element of residential housing. There is the potential to increase disturbance to birds using areas adjacent functionally-linked land and the edge of the Wyre Estuary. (refer to Section 8.4 for further details)	Y further AA required	Y (site within 3.5 km of Morecambe Bay)	Potential for LSE, further AA required (refer to Section 8)
SA6 Traveling Sh	howpeople											
Land at Conway, West of A6 (Travelling showpeople site) Site Ref: SA6 Single green field surrounded by hedgerows adjacent to A6 to the north of Garstang. Site includes existing dwelling and curtilage.	Morecambe Bay Ramsar site/SAC Morecambe Bay and Duddon Estuary SPA (10km)	2.43ha	Planning application (17/01176) pending for whole site (subsequently approved after 31 March 2018 base date). No comments from NE on application. Total allocation for 20 pitches.	There is one individual bird record of 30 lapwing located 40 m to the north of the site. The site also lies within one tetrad containing bird data. The site is within tetrad 44Y described above for West of Cockerham Road. All of the records are for small numbers of birds and therefore whilst they could be from within close proximity to the site, birds are not present in significant numbers.	N	N	Although the site comprises green field, and therefore could be used by SPA birds, given the limited number of bird records, the small size of the field and the presence of hedgerows (creating reduced sightlines) the site and surrounding fields are not considered to represent FLL. The closest FLL is considered to be over 1 km to the west of the site, towards Nateby.	Н	None anticipated	N	N	No Likely Significant Effect
SA7 Brockholes	Employment Ex	pansion Develop	pment Opportunity									
Brockholes Industrial Estate Extension Site Ref: SA7	Morecambe Bay Ramsar site/SAC Morecambe Bay and	32.51ha	No current planning applications associated with this site. The site would be brought forward via a masterplan and it is likely if brought forward, this site would be	There are no individual bird records for the site or within 300m. The southern corner of the site is within a tetrad containing bird records; however, the majority of the site does not have any tetrad data associated with it.	N	N	Although the site and adjacent fields could be used by SPA birds, given the limited number of bird records for the site and surrounding area and the location of the site adjacent to an existing industrial estate and the M6, the	Н	None anticipated	N	N	No Likely Significant Effect

				Ecological Information								
Local Plan Sites	European Sites Potentially Affected	Area (ha)	Planning Status (as at 31 March 2018)	Fylde Bird Club Data (Summary of relevant records)	Pink-footed Goose Square from IRZ layer?	Morecambe Bay Wader Roost Study (refer to Section 6.5). Roost within 1 km	Functionally Linked Land (FLL) for bird species associated with the European sites considered in this assessment	Assessment Category	Potential Impacts	Potential for significant effect alone?	Potential for significant in combination effects with other sites in the Plan?	Conclusion
Large green field site to the south east of Catterall, bounded to south and east by Lancaster Canal with M6 beyond, to north by Stubbins Lane and farmland beyond and to west by existing industrial estate.	Duddon Estuary SPA (11km)		delivered beyond the Plan period.	The southern corner of the site is within tetrad 54A containing eight bird records. Two records related to pink-footed goose (3,000 and 2000 birds); however, location data shows that these were recorded over 800 m to the south, beyond the A6. The remaining records were all of low numbers of birds.			site and adjacent fields are not considered to constitute FLL. The closest FLL is considered to be over 500 m to the south west of the site, beyond the A6.					

6.6 In combination Effects Screening of the Local Plan

6.6.1 The HRA needs to consider not only the 'screened in' policies and sites (strategic and non-strategic) within the Wyre Local Plan where no likely significant effects upon European sites as a result of the policy or site alone have been confirmed, but also those that may have a significant impact in combination either with other policies or sites within the Wyre Local Plan itself or with other plans and projects within the local area (or both).

Wyre Local Plan

Sites within the Fleetwood - Thornton AAP

6.6.2 There is the potential for in combination effects associated with the large-scale developments of the Fleetwood Docks and Marina site and Hillhouse Technology EZ. These two allocations are adjacent to the River Wyre on the Fleetwood peninsula and therefore could affect the same birds using the estuarine habitat and associated lagoons within the SPA/Ramsar site and Fleetwood Nature Reserve functionally linked land. However, given their size and scale, these two allocations have been screened in for further Appropriate Assessment alone and would therefore require mitigation measures to be incorporated should the potential for adverse effect on integrity of the European sites be identified. Further in combination assessment of any residual effects following completion of the Appropriate Assessment will be undertaken to identify any in combination effects.

Other allocation sites within Wyre

Loss of functionally linked land

6.6.3 Only two allocation sites were located on greenfield sites which could constitute functionally-linked land (Land at Arthurs Lane, Site Ref: SA1/12 and Great Eccleston Extension, Site Ref: SA3/3). Both of these sites have been screened in for further Appropriate Assessment and therefore this potential in combination impact is also screened in further assessment.

Disturbance to birds using adjacent functionally-linked land

6.6.4 Where sites were in close proximity to each other, the potential for increased disturbance as a result of construction of sites concurrently has been considered. While a small number of allocations, for example allocations at Inskip, Garstang, Forton and Catterall, are in close proximity to each other, these sites are in areas less regularly used by SPA/Ramsar site birds and are in close proximity to existing development, therefore any in combination effects as a result of concurrent construction across the borough would be negligible and has been screened out of further assessment.

Recreational pressure on functionally linked land

6.6.5 There is also the potential for increased recreational pressure on areas of adjacent functionally-linked land where housing developments are located in close proximity to each other, leading to a cumulative effect of greater numbers of people utilising public rights of way and disturbing birds using the functionally-linked land. Only three of the allocation sites (Lambs Road/Raikes Road (SA1/2), Land at Garstang Road (SA1/6) and Land South of Blackpool Road (SA1/8) have footpaths that directly link the allocation site with land that could be functionally-linked to the SPA/Ramsar sites and/or the Estuary itself. These sites comprise 400, 516 and 300 homes respectively. Local Plan Policy HP9 requires developments of 11 or more units to provide onsite public open space, or where appropriate, a financial contribution towards improving the quality and accessibility of a nearby existing open space (accepted in lieu of onsite provision). The amount of public open space to be provided increases with the size of the development, therefore, larger allocations with greater potential for impacts upon adjacent areas would include larger areas of public open space which would provide for a range of uses including parks and gardens (suitable for use by dog walkers), amenity green space, natural and semi-natural greenspace, children and young people play areas and allotments. It is anticipated that the extent of public open space included in larger developments would be of sufficient scale to encourage the majority of new residents to regularly utilise the local facilities and therefore reduce the potential for regular use of footpaths in the wider area. Therefore, although new housing developments could lead to an increase in the use of existing footpaths, the inclusion of public open space within the

- development area would provide alternative areas for people to use for recreation. Overall, any increase in recreational disturbance to functionally-linked land as a result of development of the housing allocations within the Wyre Local Plan would not be of sufficient scale such that there would be a significant effect upon the European sites considered in this assessment
- 6.6.6 Therefore, there would be no likely significant in combination effects associated with recreational pressure on functionally linked land within the borough and this potential impact has been screened out.

Recreational pressure on European sites

- 6.6.7 There is also the potential for an increase in housing across the Borough to increase recreational pressure on the adjacent Morecambe Bay.
- 6.6.8 The Site Improvement Plan for Morecambe Bay identifies public access as a threat to the European site. The potential effects identified included: disturbance/displacement of the qualifying bird species, and the potential for degradation of the qualifying habitats associated with the Morecambe Bay SAC.
- 6.6.9 The Recreational Disturbance Study carried out by Footprint Ecology for the Morecambe Bay Partnership²⁵ identified that visitors to Morecambe Bay who were on a day-trip/short visit from home travelled a median distance of 3.454 km to get to the European site. The study showed that with greater distance away from the European site, the less likely people were to visit Morecambe Bay. Given that a number of allocations are located close to Morecambe Bay, All allocation sites within 3.5 km (refer to Table 11) of Morecambe Bay will be considered further in the Appropriate Assessment. All sites beyond 3.5 km from Morecambe Bay have been screened out in relation to this effect. Further detail of the Appropriate Assessment is presented in Section 8.

Changes in water quality

- 6.6.10 The only two allocation sites with the potential for in combination effects associated with changes in water quality are Fleetwood Docks and Marina site and Hillhouse Technology EZ. These two allocations are adjacent to the River Wyre on the Fleetwood peninsula and therefore could affect the same waterbodies. These two allocations have been screened in for further Appropriate Assessment alone and would therefore require mitigation measures to be incorporated should the potential for adverse effect on integrity in relation to any potential changes in water quality on the European sites be identified.
- 6.6.11 There are no other allocation sites where in combination effects in terms of water quality are anticipated, and this in combination effects has therefore been screened out for all allocations with the exception of Fleetwood Docks and Marina site and Hillhouse Technology EZ. Further details of the Appropriate Assessment for these two sites is presented in Section 8.

Atmospheric air pollution

6.6.12 As described in paragraph 6.2.10, there are only two allocations within the Local Plan in the vicinity of Morecambe Bay with the potential for impacts associated with air pollution (Fleetwood Docks and Marina and the Hillhouse Technology Enterprise Zone). Both allocation sites comprise redevelopment and therefore any in combination construction phase impacts (should both sites be developed simultaneously) in addition to that which is currently experienced by the adjacent SAC/Ramsar site/SPA, would be negligible and not significant. There are no other allocation sites where in combination effects in terms of air pollution (as per the Wealden District Council v. Secretary of State for Communities and Local Government, Lewes District Council and South Downs National Park Authority [2017] EWHC 351). are anticipated, and therefore this in combination effects has been screened out of further assessment.

²⁵ Liley, D., Underhill-Day, J., Panter, C., Marsh, P. & Roberts, J. (2015). Morecambe Bay Bird Disturbance and Access Management Report. Unpublished report by Footprint Ecology for the Morecambe Bay Partnership.

6.7 Other Plans and Projects

- 6.7.1 In addition to in combination effects of sites within the Wyre Local Plan itself described above, there is the potential for effects upon Morecambe Bay SAC/Ramsar and Morecambe Bay and Duddon Estuary SPA in combination with other plans or projects.
- 6.7.2 Only the effects of other plans or projects which would not be likely to be significant alone, need to be included in the in combination assessment. If the effects of other plans or projects will already be significant on their own, they are not added to those associated with the Wyre Local Plan as they already have their own measures in place to mitigate for those effects.

Other plans and projects scoped out of the in combination assessment

6.7.3 From those listed in Table 2, the plans and projects scoped out of the in combination assessment would comprise: The Minerals and Waste Local Plan for Lancashire, the new off-shore developments at Walney; and the North West Coastal Connections project.

Off-shore developments at Walney and the Northwest Coast Connections project

6.7.4 The North West Coastal Connections project and the large scale-project by Dong Energy at Walney are both Nationally Significant Infrastructure Projects (NSIPs) and would fall within Category C in accordance with DTA Publications Limited *The Habitats Regulations Assessment Handbook*²⁶ (refer to Table 3). Separate project-level HRAs have been carried out for these projects, and appropriate mitigation and compensation will be put in place to off-set any potential impacts on European sites. Given that these projects would already be significant on their own, they will not be considered further in the in combination assessment.

Minerals and Waste Local Plan for Lancashire

6.7.5 The Minerals and Waste Local Plan²⁷ for Lancashire is an over-arching plan which covers all of the other Local Plans listed in Table 2. The allocations shown on the Policies Map coincide with developments already considered within the individual Local Plans. Therefore, to avoid repetition, the sites shown on the policies map²² will be assessed when considering the individual Local Plans below.

Other plans and projects scoped in to the in combination assessment

- 6.7.6 To be relevant to the in combination assessment, the residual effects of other plans or projects will need to be sufficient either to make the unlikely effects of the Wyre Local Plan likely, or insignificant effects of the plan significant, or both. An assessment has therefore been made of the other plans listed in Table 2 (excluding those scoped out in the previous section) with a view to determining whether or not they would result in impacts which, in combination with the policies set out in the Wyre Local Plan, could have likely significant effects on European sites. This includes an assessment of whether any of the sites near the boundary of Wyre would have any significant in combination effects with individual sites on the boundary of neighbouring boroughs.
- 6.7.7 Of the plans reviewed, the main potential impacts which could lead to significant effects comprise: disturbance, loss of functionally-linked land for the birds associated with European sites, and increased recreational pressure.
- 6.7.8 The local plans for Fylde, Lancaster City and Ribble Valley are currently being produced, under review, being updated, or are at the examination stage of their plans. As it is not possible to review all of the information about the emerging Local Plans, the in combination assessment will instead look at the information currently available in the public domain. In contrast, recent Plan-level HRAs have been

²⁶ DTA Publications Limited (June 2016) The Habitats Regulations Assessment Handbook.

²⁷ Minerals and Waste Local Plan for Lancashire: http://www.lancashire.gov.uk/council/planning/local-planning-policy-for-minerals-and-waste.aspx

- undertaken for the new Preston Council Local Plan. These HRA assessments (and associated documentation) have been reviewed as part of the in combination assessment.
- 6.7.9 The in combination assessment with all of these plans (whether based on new or soon-to-be-replaced plans, as appropriate) is presented in the following paragraphs.

Blackpool Local Plan

6.7.10 Blackpool borders Wyre to the southwest of the borough. A new Local Plan for Blackpool was adopted in January 2016. From the information available online, including the Local Plan²⁸ and the HRA Screening Report²⁹, all of the new development within Blackpool is located within urban settings (i.e. within Blackpool itself). Therefore, the potential for significant effects on European sites either alone, or in combination with the Wyre Local Plan are not anticipated.

Fylde Local Plan

6.7.11 Wyre lies directly to the north of Fylde. A new Local Plan for Fylde is currently being developed (and is currently going through examination). From the information currently available online (including the emerging Local Plan³⁰), new development in Fylde would be located on the edge of existing urban developments within the borough. There are a number of potential new allocations on the border between Wyre and Fylde (in the vicinity of Poulton-le-Fylde and Great Eccleston). However, there are no allocation sites in Fylde which would be adjacent to those in Wyre, therefore, no significant in combination effects in respect of concurrent development at the border would occur. The potential in combination effects identified between the Fylde and Wyre Local Plans would be through loss of functionally linked land, disturbance to species using functionally linked land and recreational pressure on functionally-linked.

Lancaster City Local Plan

- 6.7.12 Lancaster is located to the north of Wyre. The Lancaster City Council Local Plan (adopted in 2013) is currently under review. From the information currently available online (including the Sustainability Report, publication stage local plan documents, and publication stage HRA reports for Part One and Part Two of the Local Plan31), new development around Lancaster will be largely focussed on redevelopment in Lancaster City Centre, Heysham and Carnforth, although, allocations within greenfield locations are also proposed within the Part One Land Allocations DPD. The Local Plan is currently undergoing a period of consultation prior to examination and as such the HRAs may be subject to further updates prior to adoption. The HRAs currently include mitigation measures for allocations where likely significant effects cannot be ruled out and these will be incorporated into the plan to ensure no adverse impacts on the European sites considered in the assessments.
- 6.7.13 There are no allocation sites which would be at the boundary of both boroughs, therefore, no significant in combination effects in respect of concurrent development at the border would occur. The potential in combination effects identified between the Lancaster and Wyre Local Plans would be through loss of functionally linked land, disturbance to species using functionally linked land, recreational pressure associated with any greenfield development sites outside of main urban focus of redevelopment and recreational pressure upon Morecambe Bay.

Ribble Valley Local Plan

6.7.14 Ribble Valley is located to the east of Wyre. The Local Plan for Ribble Valley, which was formally adopted in December 2014, is currently under review. From the information currently available online (including the Core Strategy 2008-2028³² and the emerging Housing and Economic Development DPD

²⁸ Blackpool emerging Local Plan: https://www.blackpool.gov.uk/Residents/Planning-environment-and-community/Planning/Planningpolicy/Blackpool-local-plan/New-Blackpool-local-plan/New-Blackpool-local-plan.aspx

²⁹ Blackpool emerging Local Plan HRA: 1/3/17 Habitat Regulations Screening Assessment Blackpool Core Strategy Proposed Submission incorporating Proposed Main Modifications 2015 Bowland Ecology

³⁰ Fylde emerging Local Plan: http://www.fylde.gov.uk/council/planning-policy--local-plan-/local-development-framework/ ³¹ Lancaster City Council: https://www.lancaster.gov.uk/planning/planning-policy/sustainability-appraisal-and-appropriate-assessment

³² Ribble Valley emerging Local Plan: https://www.ribblevalley.gov.uk/info/200364/planning_policy/432/districtwide_local_plan

(HED DPD³³)), new development within Ribble Valley will be small-scale (most developments under 5ha) and located on the edge of existing development within the borough. There are also no allocation sites which would be at the boundary of the both boroughs, therefore, no significant in combination effects in respect of concurrent development at the border would occur. Given the small-scale of the potential development within Ribble, and their distance the Morecambe Bay SPA/Ramsar site (all potential developments in Ribble Valley would be more than 10 km from Morecambe Bay), the potential for likely significant effects on Morecambe Bay SPA/Ramsar site either alone, or in combination with the Wyre Local Plan are not anticipated.

Preston Local Plan

6.7.15 Preston lies to the southeast of Wyre. The current Plan was adopted in 2015. Plan-level HRA of the current Preston Local Plan has been undertaken³⁴. The HRA concluded no likely significant effects on European sites. Additional HRA work (at the request of NE), including further in combination assessment, has also been carried out in relation to large-scale proposals such as the Morecambe Bay Area Action Plan. The further assessment also concluded no likely significant effects on European sites alone or in combination. However, at the time of publication of the HRA for Preston Local Plan, there was not sufficient information about the Wyre Local Plan to carry out an in combination effects assessment. From the information available online, the majority of allocations are located within urban settings of Preston and its suburbs, and as such no potential for significant effects on European sites either alone, or in combination would be likely. The only potential in combination effect could arise from the development of the housing sites at MD1, MD2 and H1³⁵. These are located on greenfield sites and therefore potential for in combination effects with greenfield developments in Wyre (in relation to loss of functionally-linked land) are considered possible.

³³Ribble Valley emerging housing and economic DPD:

https://www.ribblevalley.gov.uk/info/200364/planning_policy/1674/housing_and_economic_development_dpd_hed_dpd/2

³⁴ Preston HRA: http://www.preston.gov.uk/yourservices/planning/planning-policy/preston-local-plan/examination-local-plan

³⁵ Preston Local Plan Policies Map 2015: http://www.preston.gov.uk/yourservices/planning/planning-policy/preston-local-plan/

7 Screening Summary

7.1 Initial Screening

- 7.1.1 Twelve European sites have been identified within, and up to 20km from the Wyre district boundary. Following the initial screening of the Local Plan, seven were ruled out completely on the basis that there are no potential impact pathways which are likely to give rise to likely significant effects on these sites (refer to Table 5). The six remaining European sites considered in the detailed screening assessment comprised:
 - Morecambe Bay SAC.
 - Morecambe Bay Ramsar site.
 - Morecambe Bay and Duddon Estuary SPA.
 - Ribble and Alt Estuaries SPA.
 - · Ribble and Alt Estuaries Ramsar site.
- 7.1.2 In addition to Screening out six of the European sites, all of the policies contained within the policy headings: Strategic Policies, Core Development Management Policies, Housing Policies, and the Economic Policies were screened out completely from further assessment. This is on the basis that no identifiable impact pathway exists linking the policies with the European Sites and/or because there will be no foreseeable adverse impact on European sites through Policy implementation. The justification for screening out these policies is presented in Table 7.
- 7.1.3 All of the policies with associated allocation sites listed within the policy heading 'Site Allocations' were carried forward into the detailed screening assessment with the exception of policy SA5, which is a safeguarding policy and as such would not have any likely significant effects on European sites (refer to Table 7).
- 7.1.4 The potential impacts identified, as outlined in Section 6.2 comprised the following:
 - Direct habitat and species loss within European sites.
 - Habitat degradation as a result of increased air pollution.
 - Changes in water quality where sites are hydrologically linked to European sites.
 - Loss of habitat functionally-linked to a European site (in relation to those qualifying species set out within Table 8 only).
 - Disturbance/displacement to species as a result of construction activities/operational stage (in relation to those qualifying species set out within Table 9 only).
 - Disturbance to habitats and species through increased recreational activity, during operational stage (in relation to potential impacts from new housing developments on Morecambe Bay SPA/Ramsar and Morecambe Bay and Duddon Estuary SPA only).

7.2 Detailed Screening Conclusion

7.2.1 The detailed screening (presented in Tables 10 and 11) looked at the each of the allocation sites listed within policies SA1 to SA7 (excluding SA5) within the Wyre Local Plan. The ecological information, as well as documentation supplied by Wyre Borough Council was reviewed to determine whether any of the allocation sites could have a likely significant effect on the European sites considered in this assessment. A summary of the assessment conclusions is presented in the following paragraphs.

7.2.2 Loss of fields which could constitute functionally linked land

7.2.3 Two allocations (SA1/12 Land at Arthurs Lane and SA3/3 Great Eccleston Extension) were located on a greenfield site which could constitute functionally-linked land. These sites will be considered further within the Appropriate Assessment alone to identify the potential for adverse effects upon the integrity of the Morecambe Bay and Duddon Estuary SPA and Morecambe Bay Ramsar site. The detailed screening concluded that no other allocation sites were considered to be on land which would constitute functionally-linked land (refer to Table 11).

Disturbance/displacement to species as a result of construction activities/operational stage (in relation to those qualifying species set out within Table 9 only).

- 7.2.4 The detailed screening identified five allocation sites with the potential for disturbance to birds during the construction/operational phases of the future development at the allocation sites. Further Appropriate Assessment is therefore required of SA1/12 (Land at Arthurs Lane), SA3/1 Fleetwood Docks and Marina, SA3/3 Great Eccleston Extension and SA4 Hillhouse Technology Enterprise Zone. In addition, two further allocations detailed in Table 11 (Land between Fleetwood Road North and Pheasant Wood (SA1/3) and North of Norcross Lane (SA1/11) were also considered to be located adjacent to functionally-linked land which could be subject to disturbance during the construction phase of the development and/or subsequently displacement due to the presence of new development. Although a proportion of the remaining allocations were in areas which could be considered suitable to support SPA/Ramsar site birds, the review of ecological information used to inform the detailed assessment did not identify that the land was functionally-linked. Construction disturbance/displacement would not be anticipated for the remaining allocation sites.
- 7.2.5 In relation to Land between Fleetwood Road North and Pheasant Wood (SA1/3) and North of Norcross Lane (SA1/11), any disturbance impacts due to construction would be short term in nature. In addition, due to the presence of existing development adjacent to the allocation sites, birds utilising the habitats near-by would already be habituated to a degree of disturbance. Neither of these allocations would extend the location of development closer to the functionally-linked land; therefore, a significant increase in disturbance leading to the displacement of birds utilising the adjacent habitats as a result of the operational developments would not be anticipated. Therefore these allocations sites have been screened out of further assessment with regards to this impact.

Water quality

7.2.6 The Fleetwood Docks and Marina and Hillhouse Technology EZ allocations are adjacent to the Morecambe Bay Ramsar site/Morecambe Bay and Duddon Estuary SPA. Contamination from emissions to water as a result of increased industrial use or increased housing density could result due to an increase in pollution *per se* or an increase in the number of pollution sources, or both. Further consideration of this potential impact at the Appropriate Assessment stage is therefore required for these two allocation sites. This potential impact has been screened out for all other allocation sites.

Recreational pressure on functionally linked land

- 7.2.7 Three of the allocation sites (Lambs Road/Raikes Road (SA1/2), Land at Garstang Road (SA1/6) and Land South of Blackpool Road (SA1/8) have footpaths that directly link the allocation site with land that could be functionally-linked to the SPA/Ramsar sites and/or the Estuary itself. These sites comprise 400, 516 and 300 homes respectively. Local Plan Policy HP9 requires developments of 11 or more units to provide onsite public open space, or where appropriate, a financial contribution towards improving the quality and accessibility of a nearby existing open space (accepted in lieu of onsite provision). The amount of public open space to be provided increases with the size of the development, therefore, larger allocations with greater potential for impacts upon adjacent areas would include larger areas of public open space which would provide for a range of uses including parks and gardens (suitable for use by dog walkers), amenity green space, natural and semi-natural greenspace, children and young people play areas and allotments. It is anticipated that the extent of public open space included in larger developments would be of sufficient scale to encourage the majority of new residents to regularly utilise the local facilities and therefore reduce the potential for regular use of footpaths in the wider area. Therefore, although new housing developments could lead to an increase in the use of existing footpaths, the inclusion of public open space within the development area would provide alternative areas for people to use for recreation, and therefore no additional measures over and above those already included within the Local Plan would be required.
- 7.2.8 Overall, any increase in recreational disturbance to functionally-linked land as a result of development of the housing allocations within the Wyre Local Plan would not be of sufficient scale such that there would be a significant effect upon the European sites considered in this assessment. This potential impact has been screened out of further assessment.

Recreational pressure on Morecambe Bay

7.2.9 The largest development within 3.5 km is allocated for 250 houses (Hillhouse EZ) and this allocation is assessed in more detail in the Appropriate Assessment (Section 8.4). No other individual allocation sites are considered likely to give rise to significant effects on Morecambe Bay as a result of recreational pressure alone. However, all allocations within 3.5 km of Morecambe Bay will be considered in the in combination assessment (Section 8).

7.3 In combination Screening Conclusion

7.3.1 Wyre Local Plan

7.3.2 The in combination assessment determined that the only potential in combination effects with allocation sites/policies within the Local Plan itself were in relation to recreational pressure and loss of land which could be functionally linked to the SPA/ Ramsar site. These potential impacts have therefore been screened in for further Appropriate Assessment (refer to Section 8). All other potential in combination effects within the Local Plan have been screened out of further assessment.

7.3.3 Other Plans and projects

7.3.4 The review of Local Plan information showed that there was the potential for in-combination effects between Wyre and the neighbouring Local Plans in relation: to loss of functionally-linked land, disturbance to bird populations associated with European sites, and increases in recreational pressure on the Morecambe Bay SPA/Ramsar site as a result of increased visitor pressure on the coast.

Disturbance to birds using adjacent functionally-linked land

- 7.3.5 The majority of allocation sites within the Local Plans surrounding Wyre are located within urban settings, with only a small proportion of these with the potential to cause disturbance to birds using adjacent functionally-linked land.
- 7.3.6 As the final locations of the new allocations for the emerging local plans (Fylde, Ribble and Lancaster City) are currently being determined, this amount of land where disturbance could occur is difficult to determine. However, given that the majority of new development is largely situated adjacent to existing development, this makes the sites less likely to be adjacent to land which could constitute functionally-linked land; and thus the potential for allocations within all of the Local Plans to affect cause disturbance to birds associated with the European sites is significantly reduced.
- 7.3.7 Where large-scale projects on greenfield sites, or adjacent to functionally-linked land are included within a Local Plan, such as those associated with MD1 and MD2 within the Preston Local Plan, project-level HRA would be carried out and potential for significant effects adequately mitigated for. Therefore, the only sites where potential for in-combination effects could occur between the neighbouring Local Plans and Wyre would be for those smaller sites on or adjacent to functionally-linked land which are not significant alone. As only a small proportion of the developments within the adjacent Local Plans will ever likely to be located on or adjacent to functionally-linked land, the minor losses of all of these small parcels of agricultural land across Lancashire are considered to be *de minimis* i.e. these small effects would never combine to create a significant effect on the integrity of the bird populations associated with the Morecambe Bay and Duddon Estuary SPA and Morecambe Bay Ramsar site. Therefore, in-combination effects in relation to disturbance to birds using adjacent functionally-linked land are unlikely, and has therefore been screened out of further assessment.

Recreational pressure

- 7.3.8 In relation to recreational pressure, the potential exists for a rise in visitor numbers to have a significant effect on the Morecambe Bay and Duddon Estuary SPA and Morecambe Bay SAC/ Ramsar site as the housing developments are progressively completed in the districts within and surrounding Wyre.
- 7.3.9 The Site Improvement Plan for Morecambe Bay identifies public access as a threat to the designated site. The potential effect identified included: disturbance/displacement of the qualifying bird species, and the potential for degradation of the qualifying habitats associated with the Morecambe Bay SAC. Therefore, further consideration of this potential impact will be considered in the Appropriate Assessment.

7.4 Policies and sites considered in the Appropriate Assessment

7.4.1 Table 12 summarises the policies and allocation sites which have been screened into the Appropriate Assessment. These polices and allocation sites have been carried forward into Stage 2 of the HRA process, Appropriate Assessment. The Appropriate Assessment of these polices and sites is presented in the following Sections.

Table 12: Policies and allocation sites screened in for further Appropriate Assessment

Policy	Policy/allocation site reference	Potential impact		
Policy SA1	SA1/12 Land at Arthurs Lane	Loss of fields which could constitute functionally linked land Disturbance to species as a result of construction activities/ operational stage.		
Policy SA3	SA3/1 Fleetwood Docks and Marina	Increased recreational pressure. Disturbance to species as a result of construction activities/ operational stage. Change in water quality.		
Tolley OAG	SA3/3 Great Eccleston Extension	Loss of fields which could constitute functionally linked land Disturbance to species as a result of construction activities/ operational stage.		
Policy SA4	SA4 Hillhouse Technology Enterprise Zone	Increased recreational pressure. Disturbance to species as a result of construction activities/ operational stage. Change in water quality.		

7.4.2 In addition, the detailed screening also identified the potential for in combination effects as a result of all housing allocations within the Wyre Local Plan that are located within 3.5 km of Morecambe Bay as well as between the Wyre Local Plan and three neighbouring Local Plans in relation to recreational pressure on the Morecambe Bay and Duddon Estuary SPA/ Morecambe Bay Ramsar site/Morecambe Bay SAC as a result of increased visitor pressure on the coast.

8 Appropriate Assessment of the Potential Effects Upon European Sites

8.1 Overview

- 8.1.1 This Section comprises the Appropriate Assessment (Stage 2) of the policies, sites and in combination effects which could not be screened out at the initial or detailed screening stage of the HRA process (Stage 1).
- 8.1.2 The following Sections assess the potential impacts of the policies and allocation sites on the qualifying features of Morecambe Bay SPA/Ramsar site, and the Morecambe Bay and Duddon Estuary SPA. Finally, the potential for in combination effects between the Wyre Local Plan and other neighbouring Local Plans is also assessed.

8.2 Fleetwood - Thornton AAP

- 8.2.1 Table 13 provides a summary of the allocation sites within the Fleetwood-Thornton AAP and the potential impacts identified during the detailed screening of these sites. The two allocation sites are shown on Figure 5, and their location in relation to the AAP boundary is shown on Map 3 within Appendix B.
- 8.2.2 The Ribble and Alt Estuaries SPA/Ramsar site lies more than 16 km to the south of the allocation sites, therefore no potential impacts on the Ribble and Alt Estuaries SPA/Ramsar site, as a result of development at these sites is considered likely. The Ribble and Alt Estuaries SPA/Ramsar site has therefore been screened out of the AA. The HRA of the Fleetwood Thornton Area Action Plan (AAP) (within which the two sites lie, refer to Appendix C) also screened out potential effects of development around Fleetwood on the Ribble and Alt Estuaries SPA/Ramsar site (refer to Section 8.2) below.

Table 13: Potential impacts on the European sites as a result of development at Fleetwood

Allocation site	European site potentially affected	Potential impacts		
Hillhouse Technology Enterprise Zone (Site Ref: SA4)	Morecambe Bay Ramsar site	Development within the Hillhouse Technology Enterprise Zone has the potential to impact European sites through: Increased recreational pressure. Disturbance to species as a result of construction activities/ operational stage. Change in water quality.		
Fleetwood Docks and Marina (Site Ref: SA3/1)	Morecambe Bay and Duddon Estuary SPA.	New mix use development within Fleetwood Docks and Marina has the potential to impact European sites through: Increased recreational pressure. Disturbance to species as a result of construction activities/ operational stage. Change in water quality.		

8.2.3 Both sites lie within the Fleetwood - Thornton AAP (as shown on Map 3 within Appendix B). The Fleetwood - Thornton AAP³⁶ comprises an area of land (approximately 512ha) adjacent to the River Wyre (which forms part of the Morecambe Bay Ramsar site and Morecambe Bay and Duddon Estuary

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³⁶ Wyre Borough Council (2009) Fleetwood - Thornton Area Action Plan.

SPA). The Plan was adopted in September 2009. As part of development of the AAP, a HRA was carried out in early 2009³⁷ (refer to Appendix C).

Summary of the HRA for the AAP

- 8.2.4 The HRA of the AAP screened out the potential for likely significant effects on all European sites, with the exception of Morecambe Bay SPA/Ramsar site/SAC. Given the proximity of the AAP to Morecambe Bay SPA/Ramsar site/SAC, the HRA concluded that there was the potential for likely significant effects on the European sites and therefore the HRA included an Appropriate Assessment.
- 8.2.5 The following potential impacts on Morecambe Bay SPA/Ramsar site/SAC were identified in the HRA for the AAP (NOTE: that at the time of producing the HRA for the AAP, the Morecambe Bay and Duddon Estuary SPA had not been officially proposed, however, the potential impacts set out below would equally apply to the new SPA):
 - Direct loss of habitat which is outside of the European site(s) but that is key to the overwintering
 and migratory bird population [NOTE: this potential impact pathway was screened out of the
 detailed screening assessment in this HRA Report due to the fact that there would be no loss of
 functionally-linked land associated with development at the two sites, further clarification of the
 habitat types within the two allocation sites is presented in Sections 8.3 and 8.4].
 - Increased disturbance of the wintering and migratory bird populations due to increased human
 activity, leading to a change in the dynamics of the estuary bird populations as a result of loss of
 some roosting and feeding sites.
 - Disturbance to bird populations during construction works.
 - Increased disturbance of the breeding Sandwich tern population.
 - Contamination from emissions to water as a result of increased industrial use or increased housing density
- 8.2.6 The HRA of the AAP concluded that measures would be required to mitigate for these potential impacts. The mitigation measures are set out in detail within Section 6 of the HRA of the AAP, and therefore will not be repeated here, but specific reference will be made to these measures throughout Section 8.2 to 8.3, where appropriate.
- 8.2.7 The HRA of the AAP concluded no likely significant effect on the Morecambe Bay SPA/Ramsar site as a result of development within the AAP (following implementation of the mitigation measures). Consultation with NE confirmed that they were in agreement with the findings of the HRA³⁸.
- 8.2.8 Given that the Fleetwood Docks and Marina site and Hillhouse Technology EZ both lie within the AAP boundary, any development within these sites will need to comply with the over-arching AAP and take account of the mitigation options presented in the HRA of the AAP (and agreed with NE). Although the HRA of the AAP was carried out in 2009, the information contained within the document (including the extensive list of mitigation measures) remains valid and reflects current conditions within the AAP boundary.
- 8.2.9 As detailed within the AAP, any future development within the boundary will need to comply with Principle 5 of the AAP:
- 8.2.10 'Principle 5 Protecting the Environment: Careful consideration will be given to the effect of new development on the various nature conservation interests associated with the Area and its surrounding environment including the adjacent European Marine Site together with land associated with the Wyre Estuary which includes nationally and internationally important sites of nature conservation value. Where appropriate, planning applications will be required to be accompanied by appropriate surveys or assessments to assess the direct and indirect impacts of the proposals on habitats and species.'
- 8.2.11 Both sites are discussed in more detail below.

³⁷ Atkins Ltd (2009) Fleetwood - Thornton Area Action Plan. Appendix F. Appropriate Assessment

 $^{^{38}}$ Wyre Borough Council (2009) Fleetwood - Thornton Area Action Plan. Appendix K. Consultation Statement.

8.3 Fleetwood Docks and Marina

Baseline, including Ecological Information for the site

- The Fleetwood Docks and Marina site covers an area of 32.67 ha. The site comprises Fleetwood 8.3.1 Haven Marina at the northern end of the site, and a small area of rough grassland/brownfield land at the southern end. The northern end of the site comprises existing development containing a range of uses including an Outlet Shopping Village, boat storage and industrial units. This area would not constitute FLL. The southern parcel of the site (9.5 ha) comprises rough grassland/brownfield land. From a review of aerial images, this patch of land is regularly disturbed by human activity with evidence of fly-tipping and regular use by vehicles, and would therefore not be considered suitable FLL. Small parcels of vacant land are also present within the allocation and comprise hardstanding, bare ground or patches of rough grassland. These small areas are also not considered to be suitable for use by SPA bird species. The site is bordered by existing development and the A585 to the north, west and south, and a sewage treatment works to the south of the allocation. The River Wyre and Fleetwood Marsh Nature Park are located to the east of the already developed part of the allocation. The Dock and Marina are not within the boundary of the allocation. Given the habitats on site, and its location adjacent to existing development, the Fleetwood Docks and Marina site is not considered to constitute functionally-linked land (refer to Map 2 within Appendix B).
- 8.3.2 Bird Records provided by Fylde Bird Club confirms that the site lies within a tetrad containing bird data, and there are also individual bird records for the site (refer to paragraph 8.3.3). The site lies within tetrad 34I which contains 494 bird records. The majority of the records are associated with Fleetwood Marsh Nature Park or Fleetwood Docks. Fleetwood Marsh Nature Park comprise an important high tide roost associated with the Morecambe Bay SPA/Ramsar site and the bird data confirms this. The Fleetwood Nature Reserve is located directly adjacent to the eastern boundary of the site.
- 8.3.3 Ninety of the 494 tetrad records comprising 21 different species are associated with Fleetwood Docks (adjacent to the allocation). The bird data includes: 14 records of herring gull (peak count 300), eight records of lesser black-backed gull (peak count 6), one record of pink-footed goose (707 birds), four records of curlew (peak count 8), one record of a single dunlin, three records of knot (peak count 8), 11 records of redshank (peak count 500), four records of shelduck (peak count 4), and two records of turnstone (peak count 1). The remaining species recorded at Fleetwood Docks form part of either the breeding or wintering bird assemblages, with no species being present in large numbers. Although five records (four related to herring gull and one to pink-footed geese) represented more than 1% of the most recent Morecambe Bay and Duddon Estuary SPA populations for these two species (i.e. more than 200 herring gulls during the breeding season and more than 156 pink-footed geese during the winter period), the records are not considered to have occurred sufficiently regularly (the records were spread over 5-years) for the area to constitute functionally-linked land. In addition, the dock area (which is outside of the allocation boundary and would not be affected by development within the Fleetwood Docks and Marina site) is already subject to high levels of disturbance from existing development which surrounds the Dock and Marina, and therefore would provide less suitable habitat for birds compared to that available to them within the Fleetwood Marsh Nature Park and/or the estuary itself.
- 8.3.4 The allocation site also lies within the NE functionally-linked land IRZ buffer, but is outside of the goose index squares. As detailed within the Morecambe Bay Wader Roost Study³⁹, Fleetwood Marsh Nature Reserve, adjacent to the eastern boundary of the site, is utilised by SPA birds as a high tide roost. Four other roost sites are identified within the Morecambe Bay Wader Roost Study along the edge of the Wyre Estuary, the closest of which is approximately 100 m to the north of the allocation, adjacent to the entrance to the dock area.

Planning Status

8.3.5 Part of the southern parcel of the site (as described in Paragraph 8.3.1) has a pending planning application associated with it. There are currently no relevant planning applications relating to the remainder of the site. The area which has the pending planning application is shown on Local Plan

³⁹ Marsh, Roberts, (2013) Morecambe Bay Wader Roost Study Heritage Lottery funding.

- Allocations and Planning Applications Map and comprises part of the site supporting rough grassland/brownfield (refer to Aerial photos in Appendix B).
- 8.3.6 The planning application at the southern end of the allocation comprises a new Fish Park to house the port's fish merchants. As a requirement of part of the HRA for the AAP, a Further Ecological Information Statement was produced for the planning application in July 2015. The document detailed the potential impacts/ mitigation measures from the AA of the AAP which would be relevant to the site (the Further Ecological Information Statement is provided in Appendix D). The Statement concludes that:
 - 'The scheme is at a scale and location that is considered unlikely to have an adverse effect on the integrity of the SPA'.
- 8.3.7 Following consultation with NE, NE confirmed that they were in agreement with the conclusions of the Further Information Statement.

Potential Impacts and associated mitigation measures

8.3.8 Table 14 provides a summary of the potential impacts and associated mitigation measures which could be relevant to any future development at the northern end of the Fleetwood Docks and Marina allocation site. The Table provides a summary of which of the potential impacts/ mitigation measures from the AA for the AAP could be of relevance to the northern part of the site, based on the information provided within the AA for the AAP. However, further screening may be required at the planning stage of future development at the site to confirm the measures set out below are appropriate, and comply with Principle 5 of the AAP.

Table 14: Potential Impacts and Mitigation options

Potential impact Mitigation Conclusion

Direct loss of habitat which is outside of the European site(s) but that is key to overwintering and migratory bird population (applicable to SPA and Ramsar site only)

The AA of the AAP identified the following effects associated with loss of FLL: Short-term loss and/or damage of lagoon habitat within ICI landfill area.

(more than 1 km away (refer to Map 2 within Appendix B), there would be no direct loss or damage of this habitat as a result of future development at this site. In addition, the northern part of the site comprises industrial buildings with some areas of vacant land comprising hardstanding, bare ground or small patches of rough grassland. There is evidence of fly-tipping and regular use by vehicles within the rough grassland/ brownfield southern parcel of the site. Given the habitats identified within the allocation, it is not considered to constitute FLL. The Fylde Bird Club data confirmed that the Dock is used by waterfowl at high tide. However, the Dock and Marina are outside of the allocation boundary and will not be affected by any future development at the site. Therefore, there would be no direct loss of habitat outside of

the European site (i.e. no loss of FLL).

The lagoon habitat within the ICI landfill area is located outside of the boundary of the site

No mitigation has been identified as there will be no net loss of FLL as a result of future development at this site.

No adverse effect on integrity of the SPA/Ramsar site

Increased disturbance of wintering and migratory bird populations due to increased human activity, leading to a change in dynamics of the estuary bird populations as a result of loss of some roosting and feeding sites (applicable to SPA and Ramsar site only)

The AA of the AAP identified the following effects associated with increased disturbance: Increased public access along the shorefront between Fleetwood and Stanah, increased recreational disturbance of Wyre Estuary Lagoons within the AAP area (ICI landfill area and Fleetwood Nature Park) and an increase in numbers of humans in the area due to residential developments and disturbance from new light sources.

Any proposed development at the northern end of the site would comprise a mix of residential employment and commercial.

As the exact details of any future development in this area are not yet known, on a precautionary basis, all of the potential impacts listed could be relevant to this site.

The following mitigation options set out within the AA for the AAP could be relevant to this site in relation to increased disturbance:

- (ii)a) Restrict access to the foreshore.
- (ii)b) Restrict direct access from the residential area to the north of the AAP area to the Estuary Foreshore (i.e. no public rights of way to be provided directly from the residential area to the Estuary other than a link to the continuous riverside route).
- (ii)c) Provision of visual screening and/or fencing to the remediated lagoons and any new lagoons provided within the ICI landfill area to restrict public access.
- (ii)d) Provision of an additional lagoon within either the reclaimed landfill area or old ICI landfill designed specifically for important populations of wintering and migrating waterfowl. There will be restricted public access to this lagoon.
- (ii)e) Restrict use of security lighting on any new developments within a buffer zone from the SPA/Ramsar. The width of the buffer zone will be agreed with NE.

No adverse effect on integrity of the SPA/Ramsar site

Disturbance to bird populations during construction works (applicable to SPA and Ramsar site only)

The AA of the AAP identified the following effects associated with increased disturbance: Construction disturbance of breeding Sandwich terns within the SPA/Ramsar (using foreshore shingle habitat), and of wintering and migratory birds using the Wyre Estuary Lagoons within Fleetwood Nature Park and the landfill area.

The tern colony is associated with the shingle habitat along the northern coast of the Fylde peninsula, more than 1 km from the site. No direct impacts on Sandwich tern are anticipated. The AA for the AAP did not identify any breeding habitat for Sandwich tern within the AAP boundary, the Fylde Bird Club records also confirmed only occasional records (five records; one record for Fleetwood Marsh Nature Park the rest for Ferry Promenade) of tern within the AAP in the last five years)

Although the lagoons and Fleetwood Nature Reserve are important areas for birds associated with the Morecambe Bay Ramsar site/ Morecambe Bay and Duddon Estuary SPA, significant disturbance as a result of construction works are considered unlikely. The site is situated in an area which is already subject to high levels of existing background disturbance from adjacent roads and development. It is considered that any increase in noise and visual disturbance during the construction works associated with any future development at this site would be negligible.

No mitigation has been identified (however, this would need to be confirmed as future planning application come forward).

The natural screening from the bund and scrub between the site and the adjacent Fleetwood Marsh Nature Reserve, would further reduce potential impacts such as light spill, noise and visual disturbances on wintering birds using adjacent habitat during the construction stage.

No adverse effect on integrity of the SPA/Ramsar site Potential impact Mitigation Conclusion

Increased disturbance of breeding Sandwich term population (applicable to SPA and Ramsar site only)

The AA of the AAP identified the following effects associated with increased disturbance of Sandwich tern: Disturbance of breeding Sandwich terns within the SPA/Ramsar (using foreshore shingle habitat), particularly from recreational disturbance from continuous riverside route and associated construction activities and form increased human presence due to increase in local residential developments and increased disturbance from new light sources

The tern colony is associated with the shingle habitat along the northern coast of the Fylde peninsula, more than 1 km from the site. No impacts on Sandwich tern are anticipated.

No mitigation has been identified over and above those which have been summarised above for general recreational pressure.

No adverse effect on integrity of the SPA/Ramsar site

Contamination from emissions to water as a result of increased industrial use or increased housing density. This could be a result of increased pollution per se or an increase in the number of pollution sources, or both. An increase in water pollution could result in cumulative effects on the qualifying interests. For example, if the quality of the feeding habitat becomes poorer, this could reduce the number of birds that any one area can support. This pollution can also affect mudflats, sandflats and Salicornia vegetation, for example by siltation leading to degradation and reduced productivity (applicable to SAC, SPA and Ramsar).

The AA of the AAP identified the following effects associated with contamination: Contamination of habitats within the SAC/SPA/Ramsar as a result of construction run-off and increased discharged from industrial and residential uses into the Estuary

There is the potential for run off from construction works to enter the Dock area, and consequently the Morecambe Bay Ramsar site/ Morecambe Bay and Duddon Estuary SPA.

Appropriate pollution prevention measures would be incorporated into any new development at the site to reduce/ eliminate the potential impacts associated with contamination. Any forthcoming planning applications would need to follow strict water quality/pollution prevention measures (in particular those located directly adjacent to the European sites). This would include meeting policy CDMP4 which requires development not to reduce water quality or diminish the ecological value of the water body or environs, protecting the water quality of existing water resources, such as watercourses, coastal waters and ground waters and not permitting developing likely to damage or destroy habitats or harm species of international or national importance. Policy CDMP2 requires major developments to implement sustainable urban drainage systems (SuDS) or other options for the management of the surface water at source and policy CDMP1 requires development to not have a significant adverse effect on the operation of surrounding uses, with reference to pollution. Development would also have to comply with other legislative requirements such as the Environmental Permitting (England and Wales) Regulations 2010).

No adverse effect on integrity of the SPA/Ramsar site

Residual Impact

8.3.9 With the mitigation measures (outlined in Table 14) in place. There would be no residual effects associated with development at the northern end of the Fleetwood Docks and Marina site.

Overall Conclusion

The land within the allocation is not considered to constitute functionally-linked land. Following implementation of the mitigation measures identified in Table 14 (in relation to disturbance of adjacent functionally-linked land), no adverse impacts on the integrity of Morecambe Bay SPA/Ramsar site/ Morecambe and Duddon Estuary SPA would be expected as a result of development at the Fleetwood Docks and Marina site.

8.4 Hillhouse Technology Enterprise Zone

Baseline, including Ecological Information for the site

- 8.4.1 The Hillhouse Technology EZ site covers an area of 137.7 5ha. The whole site comprises existing development, including the former Thornton ICI works and reservoir. Any new development on the site would be considered redevelopment or infill of areas of vacant land within the existing development (the extent of the vacant land is shown on Map 4 within Appendix B). The areas of vacant land comprise patches of hardstanding, bare ground and rough grassland/scrub in amongst the existing industrial units and are not considered to comprise suitable habitat for supporting SPA species and would therefore not constitute functionally-linked land. The site is bordered by existing development and the railway to the south and west, with the River Wyre and Fleetwood Marsh Nature Park and the Jameson Road Landfill site to the north (refer to aerial photos within Appendix B).
- 8.4.2 Bird Records provided by Fylde Bird Club confirms that the site lies within a tetrad containing bird data, and there are also individual bird records for the site. There are 64 individual records within the site and the site is within three tetrads containing bird data, as detailed below.
- 8.4.3 All of the individual records relate to Thornton ICI Reservoir, located at the northern end of the allocation (refer to Aerial photos within Appendix B). The records include mallard (peak count 63), red-breasted merganser (peak count 9), shelduck (peak count 2), teal (peak count 3), wigeon (peak count 37), great crested grebe (peak count 1), goldeneye (peak count 11) and cormorant (peak count 9).
- 8.4.4 The site is also within tetrad 34H containing 304 records, tetrad 34M containing 589 records, and tetrad 34L containing 446 records. Given the location of the allocation adjacent to the Wyre Estuary, the majority of the bird records associated with these tetrads include secondary location data which identifies that the records are associated with the sandflats and saltmarsh within the estuary and not directly associated with the land within the allocation boundary. The exception being Thornton ICI Reservoir which has 38 tetrad records associated with it comprising mallard (peak count 5), redbreasted merganser (peak count 10), shelduck (peak count 20), great crested grebe (peak count 1), goldeneye (peak count 8) and cormorant (peak count 1).
- 8.4.5 The northern part of the site lies within NE goose index squares, with the southern part of the site within the functionally-linked land IRZ buffer. However, based on the bird records described above, none of the records associated with the land inside the allocation site indicate use by significant numbers of SPA birds on a regular basis. Therefore, based on these bird records and the ecological information for the site, the allocation is not considered to be functionally-linked to the European site.

Planning Status

8.4.6 There are currently no relevant planning applications associated with the site; however, a masterplan for the site will be developed which will set out how the site will deliver the dwellings and employment required within the Local Plan. A gas fired Power Station Scheme is being proposed on part of the site, which is currently at the pre-application stage. However, this Power Station Scheme would be an NSIP. NSIPs fall within Category C in accordance with DTA Publications Limited The Habitats Regulations Assessment Handbook40 (Refer to Table 3). Projects which are identified in higher policy frameworks, such as the National Policy Statements, are assessed separately by the Secretary of State; and can therefore be screened out of this assessment.

Potential Impacts and associated mitigation measures

8.4.7 Table 16 below provides a summary of the potential impacts and associated mitigation measures which could be relevant to any future development within the allocation (excluding the potential Power Station site). The Table provides a summary of which of the potential impacts/ mitigation measures from the AA for the AAP could be of relevance to the northern part of the site, based on the information provided within the AAP there would be a need to determine whether further HRA is required (this would be dependent on the size and scale and nature of the proposed development). If further screening is required at the planning stage, this

 $^{^{}m 40}$ DTA Publications Limited (June 2016) The Habitats Regulations Assessment Handbook.

would need to confirm that the measures set out below are appropriate, and comply with Principle 5 of the AAP and Policy CDMP4 of the Local Plan.

Table 15: Potential Impacts and Mitigation options

Potential impact Mitigation Conclusion

Direct loss of habitat which is outside of the European site(s) but that is key to overwintering and migratory bird population (applicable to SPA and Ramsar site only)

The AA of the AAP identified the following effects associated with loss of FLL: Short-term loss and/or damage of lagoon habitat within ICI landfill area.

The Thornton ICI reservoir is located within the boundary of the site (refer to aerial photos within Appendix B). Whilst it does support small numbers of SPA European species (as described in Paragraph 8.4.3 and 8.4.4 above), the range and numbers of birds recorded are not sufficient to indicate the area would constitute FLL. At this stage, no specific proposals for development at this site have been produced so it cannot be confirmed whether the reservoir would be retained as part of any development of the site. Given the area is not considered to be functionally-linked to the European site, no significant effects would be anticipated.

No mitigation has been identified as there will be no net loss of FLL as a result of future development at this site. However, any future development would require the production of a masterplan for the site and, in line with Policy CDMP4, a project level HRA would be required. Should this identify that the land within the EZ is FLL, then appropriate mitigation measures (such as those set out within the AA for the AAP) would need to be implemented.

No adverse effect on integrity of the SPA/Ramsar site

Increased disturbance of wintering and migratory bird populations due to increased human activity, leading to a change in dynamics of the estuary bird populations as a result of loss of some roosting and feeding sites (applicable to SPA and Ramsar site only)

The AA of the AAP identified the following effects associated with increased disturbance: Increased public access along the shorefront between Fleetwood and Stanah, increased recreational disturbance of Wyre Estuary Lagoons within the AAP area (ICI landfill area and Fleetwood Nature Park) and an increase in numbers of humans in the area due to residential developments and disturbance from new light sources.

Any proposed development of the site would comprise a mix of residential and employment.

As the exact details of any future development in this area are not yet known, on a precautionary basis, all of the potential impacts listed above could be relevant to this site.

The following mitigation options set out within the AA for the AAP could be relevant to this site in relation to increased disturbance:

- (ii)a) Restrict access to the foreshore.
- (ii)b) Restrict direct access from the residential area to the north of the AAP area to the Estuary Foreshore (i.e. no public rights of way to be provided directly from the residential area to the Estuary other than a link to the continuous riverside route).
- (ii)c) Provision of visual screening and/or fencing to the remediated lagoons and any new lagoons provided within the ICI landfill area to restrict public access.
- (ii)d) Provision of an additional lagoon within either the reclaimed landfill area or old ICI landfill designed specifically for important populations of wintering and migrating waterfowl. There will be restricted public access to this lagoon.
- (ii)e) Restrict use of security lighting on any new developments within a buffer zone from the SPA/Ramsar. The width of the buffer zone will be agreed with NE.

No adverse effect on integrity of the SPA/Ramsar site

Disturbance to bird populations during construction works (applicable to SPA and Ramsar site only)

The AA of the AAP identified the following effects associated with increased disturbance: Construction disturbance of breeding Sandwich terns within the SPA/Ramsar (using foreshore shingle habitat), and of wintering and migratory birds using the Wyre Estuary Lagoons within Fleetwood Nature Park and the landfill area

The tern colony is associated with the shingle habitat along the northern coast of the Fylde peninsula, more than 1 km from the site. No impacts on Sandwich tern are anticipated.

Although the Morecambe Bay Ramsar site/
Morecambe Bay and Duddon Estuary SPA is
adjacent to the site, significant disturbance as a
result of construction works are considered unlikely.
The site is situated in an area which is already
subject to high levels of existing background
disturbance from adjacent roads and development. It
is considered that any increase in noise and visual
disturbance during construction works associated
with any future development at the site would be
negligible.

No mitigation has been identified at this stage. However, any future development would require the production of a masterplan for the site and, in line with Policy CDMP4, a project level HRA would be also be required. Should this identify that development within the EZ could disturb birds associated with a European site, then appropriate mitigation measures (such as those set out within the AA for the AAP) would need to be implemented.

No adverse effect on integrity of the SPA/Ramsar site

Increased disturbance of breeding Sandwich term population (applicable to SPA and Ramsar site only)

The AA of the AAP identified the following effects associated with increased disturbance of Sandwich tern: Disturbance of breeding Sandwich terns within the SPA/Ramsar (using foreshore shingle habitat), particularly from recreational disturbance from continuous riverside route and associated construction activities and form increased human presence due to increase in local residential developments and increased disturbance from new light sources

The tern colony is associated with the shingle habitat along the northern coast of the Fylde peninsula, more than 1 km from the site. No impacts on Sandwich tern are anticipated.

No mitigation has been identified over and above those which have been summarised above.

No adverse effect on integrity of the SPA/Ramsar site

Contamination from emissions to water as a result of increased industrial use or increased housing density. This could be a result of increased pollution per se or an increase in the number of pollution sources, or both. An increase in water pollution could result in cumulative effects on the qualifying interests. For example, if the quality of the feeding habitat becomes poorer, this could reduce the number of birds that any one area can support. This pollution can also affect mudflats, sandflats and Salicornia vegetation, for example by siltation leading to degradation and reduced productivity (applicable to SAC, SPA and Ramsar).

The AA of the AAP identified the following effects associated with contamination: Contamination of habitats within the SAC/SPA/Ramsar as a result of construction run-off and increased discharged from industrial and residential uses into the Estuary

There is the potential for run off from construction works to enter the adjacent Morecambe and Duddon Estuary SPA/ Morecambe Bay Ramsar site.

Appropriate pollution prevention measures would be incorporated into any new development at the site to reduce/ eliminate the potential impacts associated with contamination. Any forthcoming planning applications would need to follow strict water quality/pollution prevention measures (in particular those located directly adjacent to the European sites). This would include meeting policy CDMP4 which requires development not to reduce water quality or diminish the ecological value of the water body or environs, protecting the water quality of existing water resources, such as watercourses, coastal waters and ground waters and not permitting developing likely to damage or destroy habitats or harm species of international or national importance. Policy CDMP2 requires major developments to implement sustainable urban drainage systems (SuDS) or other options for the management of the surface water at source and policy

No adverse effect on integrity of the SPA/Ramsar site

Potential impact	Mitigation	Conclusion
	CDMP1 requires development to not have a significant adverse effect on the operation of surrounding uses, with reference to pollution. Development would also have to comply with other legislative requirements such as the Environmental Permitting (England and Wales) Regulations 2010).	

Residual Impact

8.4.8 With the mitigation measures (outlined in Table 14) in place, there would be no residual effects associated with development within this allocation site.

Conclusion

8.4.9 The land within the allocation is not considered to constitute functionally-linked land. Following implementation of the mitigation measures identified in Table 14 (in relation to disturbance of adjacent functionally-linked land), no adverse impact on the integrity of the Morecambe Bay Ramsar site/ Morecambe Bay and Duddon Estuary SPA would be expected as a result of Policy SA4, or development at the Hillhouse Technology EZ allocation site.

8.5 Land at Arthurs Lane

Baseline, including Ecological Information for the site

- 8.5.1 The Land at Arthurs Lane allocation covers an area of 10.8 ha. The site comprises two arable fields and a small area of grassland to the east of Hambleton.
- 8.5.2 Bird records provided by Fylde Bird Club confirm that the site lies within a tetrad containing bird data; however, there are no individual bird records within the allocation or 300 m buffer. This site lies within tetrad 34R containing 441 bird records. Of these, 22 were located at Hambleton with no additional location information, it is possible that these records could relate to the site. Two of the records related to pink-footed goose with flocks of 20 and 60 both from 2010 and two records were for black-headed gull with flocks of 900 and 1,000. The remaining records were all of single birds. The remaining tetrad records were all located at Skippool Creek, Wardley's Creek, Stannah, Staynall and Hambleton Marsh, all of which are to the north or west of Hambleton and as such separated from the allocation by the existing settlement.
- 8.5.3 The site lies within the NE functionally-linked land IRZ buffer. The project level HRA undertaken for the planning application concluded that no likely significant effects would occur either alone or cumulatively. A further Addendum to the HRA was undertaken to address concerns raised by NE and GMEU in relation to the potential effects upon SPA/ Ramsar site bird species which had been identified within and adjacent to the site during site specific bird surveys.

Planning Status

8.5.4 The whole site has outline planning permission for 165 dwellings (16/00217) and the reserved matters (18/00393) application is pending for the whole site.

Potential Impacts and associated mitigation measures

8.5.5 The project level addendum to the HRA identified the presence of potentially functionally-linked land within the allocation site which would be lost as a result of the development of the allocation, as well the potential for disturbance to birds utilising the adjacent habitats. Precautionary mitigation was proposed and agreed through a S106 agreement. Details of the mitigation to be incorporated into the development are provided in Table 16 (below).

Table 16: Potential impacts and mitigation measures (Land at Arthurs Lane)

Potential impact Mitigation Conclusion

Direct loss of habitat which is outside of the European site(s) but that is key to overwintering and migratory bird population (applicable to SPA and Ramsar site only)

Development of the allocation site will lead to the loss of two arable fields and the loss of short term foraging opportunities for pinkfooted geese. As a precautionary measure, 6.3 ha of land to the south of the development will be managed to provide suitable foraging habitat for pink-footed geese. The management plan agreed in the S106 includes:

- 1 Sward management within grassland areas
- 2 Manage field operations and stocking levels to avoid damage to soil structure
- 3 Leaving stubble following harvest of spring crops
- 4 No surface applications of nutrients between 1 January to 15 April
- 5 Control of undesirable species
- 6 Management to minimise disturbance between 1 September to 15 April
- 7 Ditch management to promote biodiversity

The S106 also includes details for implementation and monitoring of the mitigation plan and requires the mitigation plan to be followed for a period of 60 years from the approval of the development or until such time that the cessation of the mitigation plan would not be detrimental to the integrity of the Morecambe Bay and Wyre Estuary pink-footed goose population.

No adverse effect on integrity of the SPA/Ramsar site

Residual Impact

8.5.6 With the mitigation measures in place, there would be no residual effects associated with development within this allocation site.

Conclusion

8.5.7 The land within the allocation could support SPA birds. Following implementation of the mitigation measures established through the Addendum IHRA and Section 106 agreement no adverse impact on the integrity of the Morecambe Bay Ramsar site/ Morecambe Bay and Duddon Estuary SPA would be expected as a result of Policy SA1, or development at the Land at Arthurs Lane site.

8.6 Great Eccleston Extension

Baseline, including Ecological Information for the site

- 8.6.1 The Great Eccleston Extension covers an area of 33.7 ha. The site comprises largely green fields to the west of Great Eccleston and would create an in-fill between Great Eccleston and Little Eccleston.
- 8.6.2 Bird records provided by Fylde Bird Club confirms that the site lies across two tetrads containing bird data; however, there are no individual bird records within the allocation or 300 m buffer. The site lies within tetrad 44F to the north which contains 25 records and 43J to the south which contains 11 records. Many of the records associated with 44F were to the north of the allocation at Ratten Row, Ratcliffe Moss and Cartford Bridge. Fourteen records were identified as Great Eccleston with no further location information and therefore could relate to the allocation site. These comprised two records of mallard (10 and 18 birds), one record of cormorant (2 birds), two records of lapwing (350 and 12), one record of redshank (1 bird), two records of black-headed gull (5 and 2 birds), two records of lesser-black-backed gull (both 1 bird), one record of shelduck (2 birds), one record of oystercatcher (4 birds) and two records of pink-footed geese (1 bird in 2010 and 30 birds in 2014). A single record of 3,000 pink-footed geese was recorded to the east of Little Eccleston and therefore, to the north west of the allocation site, but this was a single sighting on one occasion. The records associated with tetrad 43J all related to Elswick, 800 m to the south of the allocation.

8.6.3 The site lies within the NE functionally-linked land IRZ buffer. However, based on the bird records described above, none of the records associated with the land inside the allocation site indicate use by significant numbers of SPA birds on a regular basis. Therefore, based on these bird records and the ecological information for the site, the allocation is not considered to be functionally-linked to the European site.

Planning Status

8.6.4 The south eastern part of the allocation site has planning permission for 90 dwellings (Outline: 15/00576 and Reserved Matters: 16/00973) and is under construction. The south part of the allocation has planning permission for 93 dwellings (Outline: 16/00650). The remaining area of the site is allocated for a further 385 dwellings and 1 ha of employment space.

Potential Impacts and associated mitigation measures

- 8.6.5 The analysis of the ecological information indicates that only low numbers of birds have been recorded within and surrounding the site. Taking into account site specific details relating to the southern part of the allocation site for which part has planning permission, the allocation is not considered to be regularly used by SPA/Ramsar site species. NE agreed that there would be no likely significant effects as a result of planning applications 15/00576 and 16/00650 and no potential impacts upon wintering birds associated with the SPA/Ramsar site were identified during the Ecological Assessment undertaken to inform these adjacent planning applications.
- 8.6.6 Given the size of the allocation, and the fact that, as a greenfield site, the habitats could be suitable for foraging SPA/ Ramsar site species, as a precautionary measure, the associated policy (SA3) identifies the potential requirement for HRA at the project level stage. Any forthcoming developments would therefore need to check that there has been no increase in use of the fields within the allocation by SPA/ Ramsar site species and ensure that any future proposals would not lead to adverse effects upon European sites.

Residual Impact

8.6.7 With the mitigation measures in place, there would be no residual effects associated with development within this allocation site.

Conclusion

8.6.8 The land within the allocation is not considered to constitute functionally-linked land. Following implementation of the mitigation measure incorporated into the associated policy, no adverse impact on the integrity of the Morecambe Bay Ramsar site/ Morecambe Bay and Duddon Estuary SPA would be expected as a result of Policy SA3, or development at the Great Eccleston allocation site.

8.7 In combination effects

Loss of functionally linked land

8.7.1 Two allocation sites were identified as being located on greenfield sites which could constitute functionally linked land, SA1/12 Land at Arthurs Lane and SA3/3 Great Eccleston Extension). Both of these sites were taken through to Appropriate Assessment for potential impacts alone. Land at Arthurs Lane has planning permission in place and precautionary mitigation to provide alternative foraging habitat for overwintering pink-footed geese was agreed through a Section 106 agreement. Although the land at Great Eccleston was considered unlikely to constitute functionally linked land, precautionary mitigation included within the associated policy in the Local Plan provides for the requirement for project level HRA to be completed to ensure there has been no increase in the use of field within the allocation by SPA/ Ramsar site species and ensure that any future proposals would not lead to adverse effects upon European sites.

Residual Impact

8.7.2 With the mitigation measures in place, there would be no residual effects associated with loss of functionally linked land associated with new housing development within Wyre.

Conclusion

8.7.3 With the mitigation measures in place, the allocations within the Wyre Local Plan would not lead to an additive adverse effect in terms of loss of functionally linked land associated with the Morecambe Bay SAC/Ramsar site and the Morecambe Bay and Duddon Estuary SPA.

Recreational pressure on Morecambe Bay (allocations within Wyre)

- 8.7.4 There is the potential for an increase in housing associated with the Local Plan as a whole to increase recreational pressure on the adjacent Morecambe Bay SAC/Ramsar site and the Morecambe Bay and Duddon Estuary SPA as housing developments are progressively completed.
- 8.7.5 Of the 31 housing/ mixed use allocations within the Local Plan 13 are within 3.5 km of Morecambe Bay, of which 3 (totalling 185 houses) are within 3.5 km of the coastal section of the European site on the Borough's northern boundary. The remaining 10 allocations are within 3.5 km of the European part of the Wyre Estuary. It is considered likely that the majority of people on a day trip in the area would visit the 'coast' rather than the 'estuary'. The closest part of the coastal strip for all but two of the allocations (SA1/1 and SA 3/1) is the west coast between Cleveleys and Blackpool which is outside of the European site. Therefore, in terms of day trips, it is considered likely that the majority of visits would be to the beach front along the west coast (outside of the European site) rather than to the estuary or the more distant (for the majority of new homes within the Local Plan) Fleetwood coast which is within the European site. However, given that this cannot easily be quantified, it cannot be relied upon in terms of HRA.
- 8.7.6 The new housing sites/mixed use allocations are concentrated around existing settlements. The Objectively Assessed Need (OAN) for housing within Wyre is 479 dwellings per annum (for the Plan period 2011 to 2031), this OAN is in response to the economic and demographic forecast for Wyre which will meet the needs of Wyre rather than being aspirational growth that will alter the boroughs position in the regional hierarchy. Due to highway and flood risk constraints in the borough, Wyre will not be able to meet its full OAN for the Plan period. The new Local Plan will allocate sites for the delivery of 5,302 dwellings, of which 2,903 dwellings already have planning permission or are minded to approve (subject to the signing of a Section 106 agreement). The allocated sites which do not have planning permission or minded to approve total 2,399 dwellings and are concentrated around existing settlements in the borough.
- 8.7.7 Taking the 3.5 km distance⁴¹ identified as the distance that visitors to Morecambe Bay who were on a day-trip/short visit from home travelled, of the 5,302 dwellings allocated, 3,253 would be located within 3.5 km of Morecambe Bay SAC/Ramsar site and the Morecambe Bay and Duddon Estuary SPA. Of these, 1,524 dwellings associated with allocations either have planning permission in place or minded to approve subject to signing a section 106 agreement (1,154 dwellings) or fall within the Fleetwood-Thornton AAP (370 dwellings). The 1,154 dwellings includes SA1/12 Arthurs Lane (165 dwellings) which has mitigation measures built into the planning permissions to reduce the potential for an increase in recreational pressure upon Morecambe Bay (and as such additional mitigation within the Local Plan for this site is not required). This is outlined in Section 8.5. For the 370 dwellings within the Fleetwood –Thornton AAP, comprising Fleetwood Docks and Marina (SA3/1) and Hillhouse Technology EZ (SA4), additional mitigation has been included in the Local Plan to reduce the potential impacts associated with recreational pressure on Morecambe Bay. This is outlined in Sections 8.3 and 8.4.
- 8.7.8 For the remaining 1,659dwellings within 3.5 km of Morecambe Bay there is the potential for new residents in these developments to lead to a negative impact upon Morecambe Bay as a result of increased recreational pressure. Therefore, in order to minimise the potential for such impacts to occur, a number of mitigation measures have been built into the Local Plan. Policy CDMP4 requires European sites to be taken into account during the planning process, and includes a requirement that all residential developments within 3.5 km of Morecambe Bay will be required to prepare a Home Owners

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⁴¹ Liley, D., Underhill-Day, J., Panter, C., Marsh, P. & Roberts, J. (2015). Morecambe Bay Bird Disturbance and Access Management Report. Unpublished report by Footprint Ecology for the Morecambe Bay Partnership.

Pack for future home owners which would highlight the sensitivity of Morecambe Bay to recreational disturbance. In addition, Policy HP9 outlines the requirement that any residential developments of 10 or more units are required to provide green infrastructure in accordance with the typology and standard. This includes provision of open space on site, or where appropriate, a financial contribution towards improving the quality and accessibility of a nearby existing open space (accepted in lieu of onsite provision). Larger allocations would be expected to include a significant proportion of public open space which would need to accommodate a range of activities including parks and gardens (suitable for use by dog walkers), amenity greenspace and children/young people play areas.

Residual Impact

8.7.9 With the mitigation measure in place, there would be no residual effects associated with recreational pressure associated with new housing development within Wyre.

Conclusion

8.7.10 With the mitigation measures in place, the allocations within the Wyre Local Plan would not lead to an additive adverse effect in terms of recreational pressure upon the Morecambe Bay SAC/Ramsar site and the Morecambe Bay and Duddon Estuary SPA. In addition, Wyre Council is an informal member of the Morecambe Bay Partnership which is currently exploring opportunities to take forward the recommendations to alleviate a general rise in recreational pressures along the coast in Wyre, including Natural Ambassadors.

Recreational pressure on Morecambe Bay (in combination with other Local Plans)

8.7.11 As described in Paragraphs 8.7.1 to 8.7.4 (above), the Wyre Local Plan includes Policy CDMP4 which requires European sites to be taken into account during the planning process, ensuring projects adequately assess the potential impacts upon the European sites prior to planning permission being granted. The policy also requires all new residential developments within 3.5 km of Morecambe Bay to provide home owner packs informing residents of the sensitivities of the European sites to recreational pressures. Policy HP9 also outlines the requirements for public open space to be built into residential developments, thereby minimising the need to residents to find alternative areas for recreation outside of the allocation area. Specific mitigation measures to alleviate recreational pressure on Morecambe Bay have also been included in the Local Plan in relation to the Hillhouse Technology EZ and the Fleetwood Docks and Marina allocations (refer to Section 8). Therefore, although the Site Improvement Plan for Morecambe Bay includes recreational pressure as a potential threat, it is considered that it is unlikely (with mitigation in place) that new housing developments in Wyre would add to the potential in combination effect with other neighbouring boroughs which are closer to the Morecambe Bay European sites.

Residual Impact

8.7.12 With the mitigation measure in place, there would be no residual effects associated with recreational pressure in combination with neighbouring authorities.

Conclusion

8.7.13 The allocations within the Wyre Local Plan would not lead to an additive adverse effect in terms of recreational pressure upon the Morecambe Bay SAC/Ramsar site and the Morecambe Bay and Duddon Estuary SPA. In addition, Wyre Council is an informal member of the Morecambe Bay Partnership and is currently exploring opportunities to take forward recommendations to alleviate recreational pressures along the coast in Wyre (such as those put forward in the recent Waders and Wildfowl Interpretation Plan, 2017⁴²) as part of a general review of increasing pressures.

⁴² Our Bay, Our Birds Headlands to Headspace Waders and Wildfowl Interpretation Plan January 2017. Morecambe Bay Partnership

8.8 Avoidance and Mitigation

- 8.8.1 The avoidance/mitigation measures included within the Local Plan include: Policy CDMP4, Policy HP9 and the specific mitigation measures set out within Section 8.
- 8.8.2 Policy CDMP4 provides for ensuring water courses and water bodies are protected and that development close to such features do not, amongst other things, reduce water quality, diminish the ecological value of the water body or environs or increase flood risk. Policy CDMP4 also provides for protecting the Borough's designated and undesignated ecological assets with the aim of establishing and preserving functional networks which facilitate movement of species and populations and protect the Borough's biodiversity. Under this policy development that is likely to damage or destroy habitats or harm species of international importance would not be permitted. The Policy also requires residential developments within 3.5 km of Morecambe Bay to prepare a Home Owners Pack, highlighting the sensitivities of Morecambe Bay to recreational disturbance.
- 8.8.3 Policy HP9 includes the need for provision of green infrastructure within new residential development. This includes provision of open space on site, or where appropriate, a financial contribution towards improving the quality and accessibility of a nearby existing open space (accepted in lieu of onsite provision). Larger allocations would be expected to include a significant proportion of public open space which would need to accommodate a range of activities including parks and gardens (suitable for use by dog walkers), amenity greenspace and children/young people play areas. The amount of public open space to be provided increases with the size of the development, therefore, larger allocations with greater potential for impacts upon adjacent areas would include larger areas of public open space.
- 8.8.4 All planning applications will be required to adhere to these policies, it therefore provides assurance that projects associated with the allocation areas, as set out in the Local Plan, would have adverse effect on the integrity of the European Sites within and adjacent to the Borough.

8.9 Appropriate Assessment Conclusion

- 8.9.1 The Appropriate Assessment concluded that, with appropriate protection policies in place, there would be no adverse impact on the integrity of the Morecambe Bay Ramsar site/ Morecambe Bay and Duddon Estuary SPA as a result of development at the five allocation sites (and three associated policies) which were screened into the assessment. Table 17, below, provides a summary of the findings of the Appropriate Assessment.
- 8.9.2 The Appropriate Assessment also considered in combination effects both within the Local Plan itself, as well as potential effects with other plans and projects within the local area. The results of the assessment concluded that there would be no adverse in combination effects between any of the elements of the Wyre Local Plan itself (with mitigation in place). The results of the assessment also concluded that increased recreational pressure as new housing developments are completed across the region as both Wyre and other neighbouring Local Plans are implemented, with the appropriate and deliverable mitigation measures included within the Local Plan to help reduce recreational pressure on Morecambe Bay (refer to Section 8.7), no in combination effects between the Wyre Local Plan and other plans and projects adjacent to Wyre are considered likely. Table 17, below, provides a summary of the findings of the Appropriate Assessment.

Table 17: Appropriate Assessment Summary and Conclusion

Policy/ Allocation(s)	European site potentially affected	Potential impact	Mitigation Included	Conclusion
Policy SA1 SA1/12 Land at Arthurs Lane	Morecambe Bay SAC/Ramsar site Morecambe Bay and Duddon Estuary SPA	Loss of fields which could constitute functionally linked land Disturbance to species as a result of construction activities/ operational stage.	Provision of alternative feeding areas (SA1/12)	No adverse effect on the integrity of Morecambe Bay and Duddon Estuary SPA or Morecambe Bay SAC/Ramsar sites or on the ability of the site to achieve the aims of the Conservation Objectives would occur (with mitigation in place)
Policy SA3 SA3/1 Fleetwood Docks and Marina SA3/3 Great Eccleston Extension	Morecambe Bay SAC/Ramsar site Morecambe Bay and Duddon Estuary SPA	Increased recreational pressure. Loss of fields which could constitute functionally linked land (SA3/3 only) Disturbance to species as a result of construction activities/ operational stage. Change in water quality (SA3/1 only)	Measures to restrict access to foreshore and estuary; provision of screening; habitat creation and restriction on lighting required (SA3/1) Strict pollution prevention controls, including compliance with Local Plan Policies CDMP1, CDMP2 and CDMP4 (SA3/1) Requirement for project level HRA to confirm no LSE prior to planning	No adverse effect on the integrity of Morecambe Bay and Duddon Estuary SPA or Morecambe Bay SAC/ Ramsar sites or on the ability of the site to achieve the aims of the Conservation Objectives would occur (with mitigation in place)
Policy SA4 SA4 Hillhouse Technology Enterprise Zone	Morecambe Bay SAC/Ramsar site Morecambe Bay and Duddon Estuary SPA	Increased recreational pressure. Disturbance to species as a result of construction activities/ operational stage. Change in water quality	Measures to restrict access to foreshore and estuary; provision of screening; habitat creation and restriction on lighting required Strict pollution prevention controls including compliance with Local Plan Policies CDMP1, CDMP2 and CDMP4 Requirement for project level HRA to confirm no LSE prior to planning	No adverse effect on the integrity of Morecambe Bay and Duddon Estuary SPA or Morecambe Bay SAC/ Ramsar sites or on the ability of the site to achieve the aims of the Conservation Objectives would occur (with mitigation in place)
SA1/12 Land at Arthurs Lane SA3/3 Great Eccleston Extension	Morecambe Bay SAC/Ramsar site Morecambe Bay and Duddon Estuary SPA	In combination effect in relation to loss of functionally linked land	Provision of alternative feeding areas (SA1/12) Requirement for project level HRA to confirm no LSE prior to planning	No adverse effect on the integrity of Morecambe Bay and Duddon Estuary SPA or Morecambe Bay SAC/Ramsar sites or on the ability of the site to achieve the aims of the Conservation Objectives would occur (with mitigation in place)

Policy/ Allocation(s)	European site potentially affected	Potential impact	Mitigation Included	Conclusion
All residential allocations within Wyre Local Plan within 3.5 km of Morecambe Bay	Morecambe Bay SAC/Ramsar site Morecambe Bay and Duddon Estuary SPA	Increased recreational pressure.	Policy CDMP4 includes requirements for all residential developments within 3.5 km to take potential effects of recreational pressure into account and provide specific mitigation to reduce impacts. Policy HP9 requires developments to incorporate appropriate public open space relative to the size of development to provide alternative areas to the European sites.	No adverse effect on the integrity of Morecambe Bay and Duddon Estuary SPA or Morecambe Bay SAC/ Ramsar sites or on the ability of the sites to achieve the aims of the Conservation Objectives would occur (with mitigation in place)
Wyre Local Plan in combination with other Local Plans	Morecambe Bay SAC/Ramsar site Morecambe Bay and Duddon Estuary SPA	Increased recreational pressure.	Policy CDMP4 includes requirements for all residential developments within 3.5 km to take potential effects of recreational pressure into account and provide specific mitigation to reduce impacts. Policy HP9 requires developments to incorporate appropriate public open space relative to the size of development to provide alternative areas to the European sites.	No adverse effect on the integrity of Morecambe Bay and Duddon Estuary SPA or Morecambe Bay SAC/ Ramsar sites or on the ability of the sites to achieve the aims of the Conservation Objectives would occur (with mitigation in place)

9 Overall Conclusion

- 9.1.1 This HRA Report has considered the potential implications of the Wyre Local Plan for European sites within and near to the borough boundary.
- 9.1.2 The detailed screening (presented in Tables 10 and 11) looked at the each of the allocation sites listed within the Wyre Local Plan. The review of ecological information, as well as documentation supplied by Wyre Borough Council confirmed that all allocation sites within Policies SA2 (Employment Developments), SA6 (Travelling showpeople) and SA7 (Brockholes Employment Expansion Site) are not likely to have significant effects on the European sites alone, and were therefore screened out of further Appropriate Assessment. All but one of the sites associated with Policy SA1 (Residential Developments) and three of the five allocation sites listed under SA3 (Mixed Use Development) can also be screened out of further Appropriate Assessment, as there are no likely significant effects on European sites alone as a result of potential development at these sites. The three policies and four allocation sites which could not be screened out at the detailed screening stage comprised the following:
 - Policy SA1
 - SA1/12 Land at Arthurs Lane
 - Policy SA3

- SA3/1 Fleetwood Docks and Marina.
- SA3/3 Great Eccleston Extension
- Policy SA4
 - SA4 Hillhouse Technology Enterprise Zone.
- 9.1.3 These sites were carried forward into Stage 2 of the HRA process, Appropriate Assessment (refer to Section 8).
- 9.1.4 The Appropriate Assessment concluded that, with appropriate mitigation in place, there would be no adverse impact on the integrity of the Morecambe Bay Ramsar site/ Morecambe Bay and Duddon Estuary SPA as a result of development at these sites.
- 9.1.5 The assessment of in combination effects (refer to Section 6.6) looked at the potential for in combination effects within the Local Plan itself, as well as potential effects with other plans and projects within the local area. The results of the screening assessment concluded that the only potential likely significant in combination effects between elements of the Wyre Local Plan was in relation to increased recreational pressure as a result of new residential development within 3.5 km of Morecambe Bay, further Appropriate Assessment was completed in respect of this potential impact. In addition, the potential in combination effect as a result of increased recreational pressure as new housing developments are completed across the region in-combination with other Local Plans was also screened in to the Appropriate Assessment.
- 9.1.6 With the appropriate and deliverable mitigation measures included within the Local Plan to help reduce recreational pressure on Morecambe Bay (refer to Section 8.7), no in combination effects either within the Wyre Local Plan itself or between the Wyre Local Plan and other plans and projects adjacent to Wyre are considered likely.
- 9.1.7 It has, therefore, been concluded that the Wyre Local Plan will not have any adverse effects on the integrity of the European sites identified within this HRA Report, either alone or in combination with other plans or projects.
- 9.1.8 NE are in agreement with the conclusion of this HRA Report.

APPENDIX A

Conservation Objectives and Qualifying Features

Site Name	Qualifying Features Habitats	Species	Current Conditions ⁴³ and Threats ⁴⁴	Results of SSSI Condition Surveys
Morecambe Bay Ramsar Site	N/A	 Ramsar criterion 4: The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>. Ramsar criterion 5 Assemblages of international importance with peak counts in the winter: 223709 waterfowl Ramsar criterion 6 Species/populations occurring at levels of international importance during the breeding season: Lesser black-backed gull, <i>Larus fuscus graellsii</i> Herring gull, <i>Larus argentatus</i> Sandwich tern, <i>Sterna</i> (<i>Thalasseus</i>) sandvicensis Species with peak counts in spring/autumn: Great cormorant, <i>Phalacrocorax carbo</i> Common shelduck, <i>Tadorna tadorna</i> Northern pintail, <i>Anas acuta</i> Common eider, <i>Somateria mollissima</i> Eurasian oystercatcher, <i>Haematopus ostralegus</i> Ringed plover, <i>Charadrius hiaticula</i> Grey plover, <i>Pluvialis squatarola</i> Sanderling, <i>Calidris alba</i> Eurasian curlew, <i>Numenius arquata</i> Common redshank, <i>Tringa totanus tetanus</i> Ruddy turnstone, <i>Arenaria interpres</i> Lesser black-backed gull, <i>Larus fuscus graellsii</i> Species with peak counts in winter: Great crested grebe, <i>Podiceps cristatus</i> Pink-footed goose, <i>Anser brachyrhynchus</i> Eurasian wigeon, <i>Anas penelope</i> Common goldeneye, <i>Bucephala clangula</i> Red-breasted merganser, <i>Mergus serrator</i> European golden plover, <i>Pluvialis apricaria</i> Northern lapwing, <i>Vanellus vanellus</i> Red knot, <i>Calidris canutus islandica</i> Dunlin, <i>Calidris alpina alpine</i> Bar-tailed godwit, <i>Limosa lapponica</i> 	No factors reported adversely affecting the Ramsar sites ecological character (past, present or potential).	Area favourable 94.31% Area unfavourable but recovering 5.69% Area unfavourable no change 0% Area unfavourable declinin 0% Area destroyed / part destroyed 0%
Morecambe Bay SAC	Annex I habitats that are a primary reason for selection of this site: Estuaries Mudflats and sandflats not covered by seawater at low tide Large shallow inlets and bays Perennial vegetation of stony banks Salicornia and other annuals colonising mud and sand Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Shifting dunes along the shoreline with Ammophila arenaria (`white dunes`) Fixed dunes with herbaceous vegetation (`grey dunes`) *Priority feature Humid dune slacks Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: Sandbanks which are slightly covered by sea water all the time Coastal lagoons *Priority feature Reefs Embryonic shifting dunes	Annex II species that are a primary reason for selection of this site: Great crested newt <i>Triturus cristatus</i>	There are a wide range of pressures on Morecambe Bay but the site is relatively robust and many of these pressures have only slight or local effects on its interests. The interests depend largely upon the coastal processes operating within the Bay, which have been affected historically by human activities including coastal protection and flood defence works. The Site Improvement Plan for Morecambe Bay includes the following pressures/threats to the qualifying species associated with the SAC: 1. Public access/disturbance 2. Air pollution: atmospheric nitrogen deposition 3. Water pollution 4. Invasive species 5. Fisheries: Aquaculture 6. Biological resource use 7. Changes in land management 8. Hydrological changes	Area favourable 94.31% Area unfavourable but recovering 5.69% Area unfavourable no change 0% Area unfavourable declinin 0% Area destroyed / part destroyed 0%

 $^{^{\}rm 43}$ Taken from Natura 2000 Standard Data Forms (SAC and SPA) and Ramsar Information Sheets. $^{\rm 44}$ Taken from Natural England Site Improvement Plans

	Qualifying Features			Results of SSSL
Site Name	Habitats	Species	Current Conditions ⁴³ and Threats ⁴⁴	Condition Surveys
Ribble and Alt Estuaries SPA		This 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 Ruff Philomachus pugnax, Over winter; Bar-tailed Godwit Limosa lapponica Bewick's Swan Cygnus columbianus bewickii Golden Plover Pluvialis apricaria, Whooper Swan Cygnus, This site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species: During the breeding season; Lesser Black-backed Gull Larus fuscus On passage; Ringed Plover Charadrius hiaticula Sanderling Calidris alba Over winter; Black-tailed Godwit Limosa islandica Dunlin Calidris canutus Oystercatcher Haematopus ostralegus, Pink-footed Goose Anser brachyrhynchus Pintail Anas acuta Redshank Tringa totanus Sanderling Calidris alba Shelduck Tadorna Teal Anas penelope Assemblage qualification: A seabird assemblage of international	9. Physical modification 10. Energy production 11. Fisheries: commercial, marine, estuarine Overall, the dunes, intertidal flats and saltmarsh enjoy a relatively robust status and a favourable condition. However, the site is, in places, subject to pressure from recreation, built development (including coastal defence), wildfowling and industry, including sandwinning. Wildfowling is not considered to have a significant impact in terms of direct take; resulting disturbance is effectively managed through the provision of refuge areas and strict regulation on shooting activities. Recreation is informal and of relatively low intensity along most of the Sefton Coast and in the Ribble Estuary. Beach activities are managed by the Beach Management Plan. Sand-winning was addressed during a Public Inquiry in August 2001, with the result that detailed environmental monitoring will now be incorporated into the renewed planning permission. Much of the site attracts beneficial land management via the implementation of agreed plans for three NNRs, two LNRs and other initiatives developed by the Sefton Coast Partnership. These plans/initiatives are addressing a number of these pressures, whilst other pressures will be addressed following procedures under the Habitat Regulations. Wider land management issues are being developed via the neighbouring Ribble and Mersey Estuary Strategies. The issue of grazing pressure on the saltmarsh will be addressed through a management agreement to reduce the grazing pressure. Although there is little evidence of sea-level rise so far, the extent and distribution of habitats remains vulnerable to changes in the physical environment, either natural or maninduced. In contrast the coast at Formby Point and Ainsdale is suffering intense erosion which is being investigated through the Sefton Shoreline Management Plan, and beach management practices have effectively encouraged the creation of considerable areas of embryo dunes on the upper shore elsewhere. The Ribble Estuary is also evolving as sed	Area favourable 99.10% Area unfavourable but recovering 0% Area unfavourable no change 0.90% Area unfavourable declining 0% Area destroyed / part destroyed 0%
			The Site Improvement Plan for Sefton and Ribble includes the following pressures/threats to the qualifying species associated with the SPA: 1. Public access/disturbance 2. Fisheries: Commercial, marine, estuarine 3. Shooting/scaring	
Ribble and Alt Estuaries Ramsar site	N/A	Ramsar criterion 2 This site supports up to 40% of the Great Britain population of natterjack toads <i>Bufo calamita</i> . Ramsar criterion 5 Assemblages of international importance: Species with peak counts in winter: 222,038 waterfowl Ramsar criterion 6	4. Invasive species Coastal erosion is a factor at Formby Point with an estimated loss of 4 metres per year. It is a concern because pine woodland on the sand dunes is causing coastal squeeze and therefore preventing sand dune habitats from rolling back; as such dune slack habitats for natterjack toads are declining/being lost.	See above.

Site Name	Qualifying Features Habitats	Species	Current Conditions ⁴³ and Threats ⁴⁴	Results of SSSI Condition Surveys	
		Species/populations occurring at levels of international importance. Qualifying Species/populations (as identified at designation): Species regularly supported during the breeding season: Lesser black-backed gull, Larus fuscus graellsii, Species with peak counts in spring/autumn: Ringed plover, Charadrius hiaticula, Grey plover, Pluvialis squatarola Red knot, Calidris canutus islandica Sanderling, Calidris alba Dunlin, Calidris alpina Black-tailed godwit, Limosa islandica Common redshank, Tringa totanus, Lesser black-backed gull, Larus fuscus graellsii, Species with peak counts in winter: Tundra swan, Cygnus columbianus bewickii Whooper swan, Cygnus Pink-footed goose, Anser brachyrhynchus Common shelduck, Tadorna Eurasian wigeon, Anas penelope Eurasian teal, Anas crecca Northern pintail, Anas acuta Eurasian oystercatcher, Haematopus ostralegus Bar-tailed godwit, Limosa lapponica			
Morecambe Bay and Duddon Estuary SPA	N/A	The site qualifies under article 4.1 of the Directive (2009/147/EC) as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I in any season: Whooper swan Little egret Golden plover Bar-tailed godwit Ruff Mediterranean gull Little tern Sandwich tern Common tern The site qualifies under article 4.2 of the Directive (79/409/EEC) as it is used regularly by 1% or more of the biogeographical populations of the following regularly occurring migratory species (other than those listed in Annex I) in any season: Pink-footed goose Common shelduck Northern pintail Eurasian oystercatcher Grey plover Ringed plover Ringed plover Ringed plover Red Knot Sanderling Dunlin Common redshank Lesser black-backed gull European herring gull Assemblage qualification The site qualifies under article 4.2 of the Directive (2009/147/EC) as it used regularly by over 20,000 seabirds in any season:	Refer to Morecambe Bay SAC, above.	N/A	
		At time of the 1997 citation of Morecambe Bay SPA, the area supported 40,672 individual seabirds including: herring gulls, lesser black-backed gulls, sandwich terns, common terns, and little terns.			

Site Name	Qualifying Features Habitats	Species	Current Conditions ⁴³ and Threats ⁴⁴	Results of SSSI Condition Surveys
Bowland Fells SPA	N/A	The site qualifies under article 4.2 of the Directive (2009/147/EC) as it used regularly by over 20,000 waterbirds in any season: During the period 2009/10 – 2013/14, the site held a five year peak mean value of 266,751 individual birds. The main components of the assemblage include all of the qualifying features listed above, as well as an additional 19 species present in numbers exceeding 1% of the GB total and / or exceeding 2,000 individuals: great white egret, Eurasian spoonbill, light-bellied Brent goose (Nearctic origin), Eurasian wigeon, Eurasian teal, green-winged teal, mallard, ring-necked duck, common eider (non-breeding), common goldeneye, red-breasted merganser, great cormorant, northern lapwing, little stint, spotted redshank, common greenshank, black-headed gull, common (mew) gull and European herring gull (non-breeding). This 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; Hen Harrier Circus cyaneus Merlin Falco columbarius This site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species: During the breeding season; Lesser Black-backed Gull Larus fuscus	The expansive blanket bog and heather dominated moorland provides suitable habitat for a diverse range of upland breeding birds. Favourable nature conservation status of the site depends on appropriate levels of sheep grazing, sympathetic moorland burning practice, sensitive water catchment land management practices and on-going species protection. Since designation as an SPA, many localised problems of over-grazing have been controlled through management agreements or the Countryside Stewardship Scheme. To date approximately 20% of SPA is under Section 15 management agreements and Countryside Stewardship to stimulate heather regeneration in order to produce better moorland for grouse and raptors alike. Burning plans and stocking levels have also been agreed for all other areas of the SPA through Site Management Statements, whilst problems of raptor persecution continues to be addressed by the RSPB in conjunction with North West Water, Natural England and Lancashire Constabulary. The Site Improvement Plan for Bowland Fells includes the following pressures/threats to the qualifying species associated with the SPA: 1. Low breeding success/poor recruitment/ juvenile and adult survival (hen harrier) 2. Game management: grouse moors (lesser black-backed gull, hen harrier and merlin) 3. Managed rotational burning (hen harrier and merlin) 4. Changes in species distribution (merlin) 5. Change in land management (hen harrier) 6. Hydrological changes (lesser black-backed gull, hen harrier and merlin)	Area favourable 5.28% Area unfavourable but recovering 71.99% Area unfavourable no change 0% Area unfavourable declining 22.72% Area destroyed / part destroyed 0%
		This site qualifies under Article 4.1 of the Directive (79/409/EEC)	 7. Public access/disturbance (hen harrier) 8. Air pollution: atmospheric nitrogen deposition (hen harrier) 9. Invasive species (hen harrier) The main pressure upon the qualifying features of the site comes from commercial and recreational fishing which can directly affect the food source and feeding grounds. In 	
Liverpool Bay		by supporting populations of European importance of the following species listed on Annex I of the Directive: Over winter;	addition, entanglement in static fishing nets is also known to affect red-throated divers. Both red-throated diver and common scoter are sensitive to non-physical disturbance by both commercial and recreational activities, for example disturbance by moving vessels.	
SPA	N/A	 Red-throated diver Gavia stellata On passage; Common scoter Melanitta nigra The area qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl 	The presence of off-shore wind farms may also displace these species with a number of sites operational, under construction or consented. The Site Improvement Plan for Liverpool Bay includes the following pressures/threats to the qualifying species associated with the SPA: 1. Fisheries: Commercial, marine, estuarine 2. Transportation and service corridors	N/A

Site Name	Qualifying Features Habitats	Species	Current Conditions ⁴³ and Threats ⁴⁴	Results of SSSI Condition Surveys
		Over winter, the area regularly supports 55,597 individual waterfowl (2001/02-2002-03), including red-throated diver <i>Gavia stellata</i> and common scoter <i>Melanitta nigra</i>	 Fisheries: Recreational, marine, estuarine Extraction: non-living resources Siltation Water pollution 	
Shell Flat and Lune Deep cSAC	Annex I habitats that are a primary reason for selection of this site: Sandbanks which are slightly covered by sea water all the time Reefs	N/A	The Site Improvement Plan for Shell Flats and Lune Deep cSAC includes the following pressures/threats to the qualifying species associated with the cSAC: 1. Fisheries: Commercial, marine, estuarine 2. Extraction: non-living resources 3. Siltation	N/A
Calf Hill and Crag Woods SAC	Annex I habitats that are a primary reason for selection of this site: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion, Alnion incanae, Salicion albae</i>)	N/A	Modelled nitrogen deposition exceeds the site-relevant critical load for ecosystem protection and hence there is a risk of harmful effects, but the sensitive features are currently considered to be in favourable condition on the site. This requires further investigation. Past knowledge of the site over the past 20 years has not produced any evidence of adverse nitrogen impact. The Site Improvement Plan for Calf Hill and Crag Woods SAC includes the following pressures/threats to the qualifying species associated with the cSAC: 1. Air Pollution: risk of atmospheric nitrogen deposition	N/A
North Pennines Dales meadows SAC	Annex I habitats that are a Primary reason for selection of this site: Mountain hay meadows Annex I habitats present as a qualifying feature, but not a Primary reason for selection of this site: Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	N/A	The Site Improvement Plan for North Pennines Dales meadows SAC includes the following pressures/threats to the qualifying species associated with the SAC: 1. Fertiliser use 2. Change in land management 3. Air pollution: impact of atmospheric nitrogen deposition 4. Inappropriate cutting/mowing 5. Changes in species distribution 6. Inappropriate CSS/ESA prescription 7. Drainage 8. Overgrazing 9. Under grazing 10. Hydrological changes 11. Inappropriate weed control 12. Invasive species 13. Direct impact from 3 rd party	N/A
Morecambe Bay Pavements SAC	Annex I habitats that are a Primary reason for selection of this site: Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. Juniperus communis formations on heaths or calcareous grasslands. Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites)	N/A	The Site Improvement Plan for Morecambe Bay Pavements SAC includes the following pressures/threats to the qualifying species associated with the SAC: 1. Under grazing 2. Commons management 3. Inappropriate scrub control 4. Forestry and woodland management 5. Deer 6. Public access/disturbance	N/A

Site Name	Qualifying Features Habitats	Species	Current Conditions ⁴³ and Threats ⁴⁴	Results of SSSI Condition Surveys
	 Limestone pavements. Tilio-Acerion forests of slopes, screes and ravines. Taxus baccata woods of the British Isles. Annex I habitats present as a qualifying feature, but not a Primary reason for selection of this site: European dry heaths. Calcareous fens with Cladium mariscus and species of the Caricion davallianae. 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: Narrow-mouthed whorl snail. 		 Disease Game management: pheasant rearing Water pollution Air pollution: impact of atmospheric nitrogen deposition Invasive species Fertiliser use Change in land management 	
Sefton Coast SAC	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 dunes with herbaceous vegetation (`grey dunes`) * Priority feature Dunes with Salix repens ssp. argentea (Salicion arenariae) Humid dune 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) * Priority feature	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	The extensive sand dunes and intertidal areas attract large numbers of summer tourists. This impact is addressed in Sefton Metropolitan Borough Council's Beach Management Plan. Co-ordinated management of the coast is achieved through the long-standing Sefton Coast Management Scheme (now the Sefton Coast Partnership), in which all key landowners play a part. Golf course management achieves a positive balance between play areas and important habitats. Concerns have been raised regarding water abstraction on the coast. This is being addressed through detailed modelling of the dune aquifer by the Environment Agency. The coniferous plantations are also a source of debate, with a balance needed between restoration of dune habitats and public enjoyment of the woodlands. The Site Improvement Plan for Sefton and Ribble includes the following pressures/threats to the qualifying species associated with the SAC: 1. Coastal squeeze 2. Air pollution: atmospheric nitrogen deposition 3. Inappropriate scrub control 4. Invasive species 5. Hydrological changes 6. Public access/disturbance 7. Inappropriate coastal management 8. Fisheries: Commercial, marine, estuarine 9. Change to site conditions	Area favourable 67.2% Area unfavourable but recovering 21.66% Area unfavourable no change 7.99% Area unfavourable declining 3.15% Area destroyed / part destroyed 0%





European Site Conservation Objectives for Morecambe Bay Special Area of Conservation Site Code: UK0013027

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.

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

- H1110. Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks
- H1130. Estuaries
- H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats
- H1150. Coastal lagoons*
- H1160. Large shallow inlets and bays
- H1170. Reefs
- H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves
- H1310. Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand
- H1330. Atlantic salt meadows (Glauco-Puccinellietalia maritimae)
- H2110. Embryonic shifting dunes

H2120. Shifting dunes along the shoreline with Ammophila arenaria ("white dunes"); Shifting dunes with marram

H2130. Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland*

H2150. Atlantic decalcified fixed dunes (Calluno-Ulicetea); Coastal dune heathland*

H2170. Dunes with Salix repens ssp. argentea (Salicion arenariae); Dunes with creeping willow

H2190. Humid dune slacks

S1166. Triturus cristatus; Great crested newt

^{*} denotes a priority natural habitat or species (supporting explanatory text on following page)





European Site Conservation Objectives for Morecambe Bay & Duddon Estuary Special Protection Area Site Code: UK9020326

With regard to this SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features'), 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.

This document should be read in conjunction with the accompanying Conservation Advice document which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features

- A026 Egretta garzetta; Little egret (Non-breeding)
- A038 Cygnus cygnus; Whooper swan (Non-breeding)
- A040 Anser brachyrhynchus; Pink-footed goose (Non-breeding)
- A048 Tadorna tadorna; Common shelduck (Non-breeding)
- A054 Anas acuta; Northern pintail (Non-breeding)
- A130 Haematopus ostralegus; Eurasian oystercatcher (Non-breeding)
- A137 Charadrius hiaticula; Ringed plover (Non-breeding)
- A140 Pluvialis apricaria; European golden plover (Non-breeding)
- A141 Pluvialis squatarola; Grey plover (Non-breeding)
- A143 Calidris canutus; Red knot (Non-breeding)
- A144 Calidris alba; Sanderling (Non-breeding)
- A149 Calidris alpina alpina; Dunlin (Non-breeding)

Contd/

- A151 Philomachus pugnax; Ruff (Non-breeding)
- A156 Limosa limosa islandica; Black-tailed godwit (Non-breeding)
- A157 Limosa lapponica; Bar-tailed godwit (Non-breeding)
- A160 Numenius arquata; Eurasian curlew (Non-breeding)
- A162 Tringa totanus; Common redshank (Non-breeding)
- A169 Arenaria interpres; Ruddy turnstone (Non-breeding)
- A176 Larus melanocephalus; Mediterranean gull (Non-breeding)
- A183 Larus fuscus; Lesser black-backed gull (Non-breeding)
- A183 Larus fuscus; Lesser black-backed gull (Breeding)
- A184 Larus argentatus; Herring gull (Breeding)
- A191 Sterna sandvicensis; Sandwich tern (Breeding)
- A193 Sterna hirundo; Common tern (Breeding)
- A195 Sterna albifrons; Little tern (Breeding)

Waterbird assemblage Seabird assemblage

This is a European Marine Site

This SPA is a part of the Morecambe Bay European Marine Site ('EMS'). These Conservation Objectives should be used in conjunction with the current Conservation Advice document for the EMS. For further details about this please visit the Natural England website at https://www.gov.uk/government/collections/conservation-advice-packages-for-marine-protected-areas or contact Natural England's enquiry service at enquiries@naturalengland.org.uk or by phone on 0845 600 3078.

This is a new combined site

This SPA replaces two individual sites – Morecambe Bay SPA (UK9005081) and Duddon Estuary SPA (UK9005031).

Explanatory Notes: European Site Conservation Objectives

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and Article 6(3) of the Habitats Directive. They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where this is available) will also provide a framework to inform the management of the European Site under the provisions of Articles 4(1) and 4(2) of the Wild Birds Directive, and the prevention of deterioration of habitats and significant disturbance of its qualifying features required under Article 6(2) of the Habitats Directive.

These Conservation Objectives are set for each bird feature for a <u>Special Protection Area (SPA)</u>. Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

Publication date: 13 September 2017 (version 5). This document updates and replaces an earlier version dated 29 January 2016 following the classification of the SPA. It replaces similar documents previously published for Morecambe Bay SPA (UK9005081) and Duddon Estuary SPA (UK9005031)





European Site Conservation Objectives for Ribble and Alt Estuaries Special Protection Area Site Code: UK9005103

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.

This document should be read in conjunction with the accompanying Supplementary Advice document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

AU37	Cygnus columi	bianus bewickir,	Bewick's swan	(Non-breeding)
------	---------------	------------------	---------------	----------------

- A038 Cygnus cygnus; Whooper swan (Non-breeding)
- A040 Anser brachyrhynchus: Pink-footed goose (Non-breeding)
- A048 Tadorna tadorna; Common shelduck (Non-breeding)
- A050 Anas penelope; Eurasian wigeon (Non-breeding)
- A052 Anas crecca; Eurasian teal (Non-breeding)
- A054 Anas acuta; Northern pintail (Non-breeding)
- A130 Haematopus ostralegus; Eurasian oystercatcher (Non-breeding)
- A137 Charadrius hiaticula; Ringed plover (Non-breeding)
- A140 Pluvialis apricaria; European golden plover (Non-breeding)
- A141 Pluvialis squatarola; Grey plover (Non-breeding)
- A143 Calidris canutus; Red knot (Non-breeding)

- A144 Calidris alba; Sanderling (Non-breeding)
- A149 Calidris alpina alpina; Dunlin (Non-breeding)
- A151 Philomachus pugnax; Ruff (Breeding)
- A156 Limosa limosa islandica; Black-tailed godwit (Non-breeding)
- A157 Limosa lapponica; Bar-tailed godwit (Non-breeding)
- A162 Tringa totanus; Common redshank (Non-breeding)
- A183 Larus fuscus; Lesser black-backed gull (Breeding)
- A193 Sterna hirundo; Common tern (Breeding)

Waterbird assemblage

Seabird assemblage

This is a European Marine Site

This SPA is a part of the Ribble and Alt Estuaries European Marine Site (EMS). These Conservation Objectives should be used in conjunction with the Regulation 35 Conservation Advice document for the EMS. For further details about this please visit the Natural England website at http://www.naturalengland.org.uk/ourwork/marine/protectandmanage/mpa/europeansites.aspx or contact Natural England's enquiry service at enquiries@naturalengland.org.uk or by phone on 0845 600 3078.

Explanatory Notes: European Site Conservation Objectives

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and Article 6(3) of the Habitats Directive. They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where available) will also provide a framework to inform the management of the European Site under the provisions of Articles 4(1) and 4(2) of the Wild Birds Directive and the prevention of deterioration or significant disturbance of its qualifying features under Article 6(2) of the Habitats Directive.

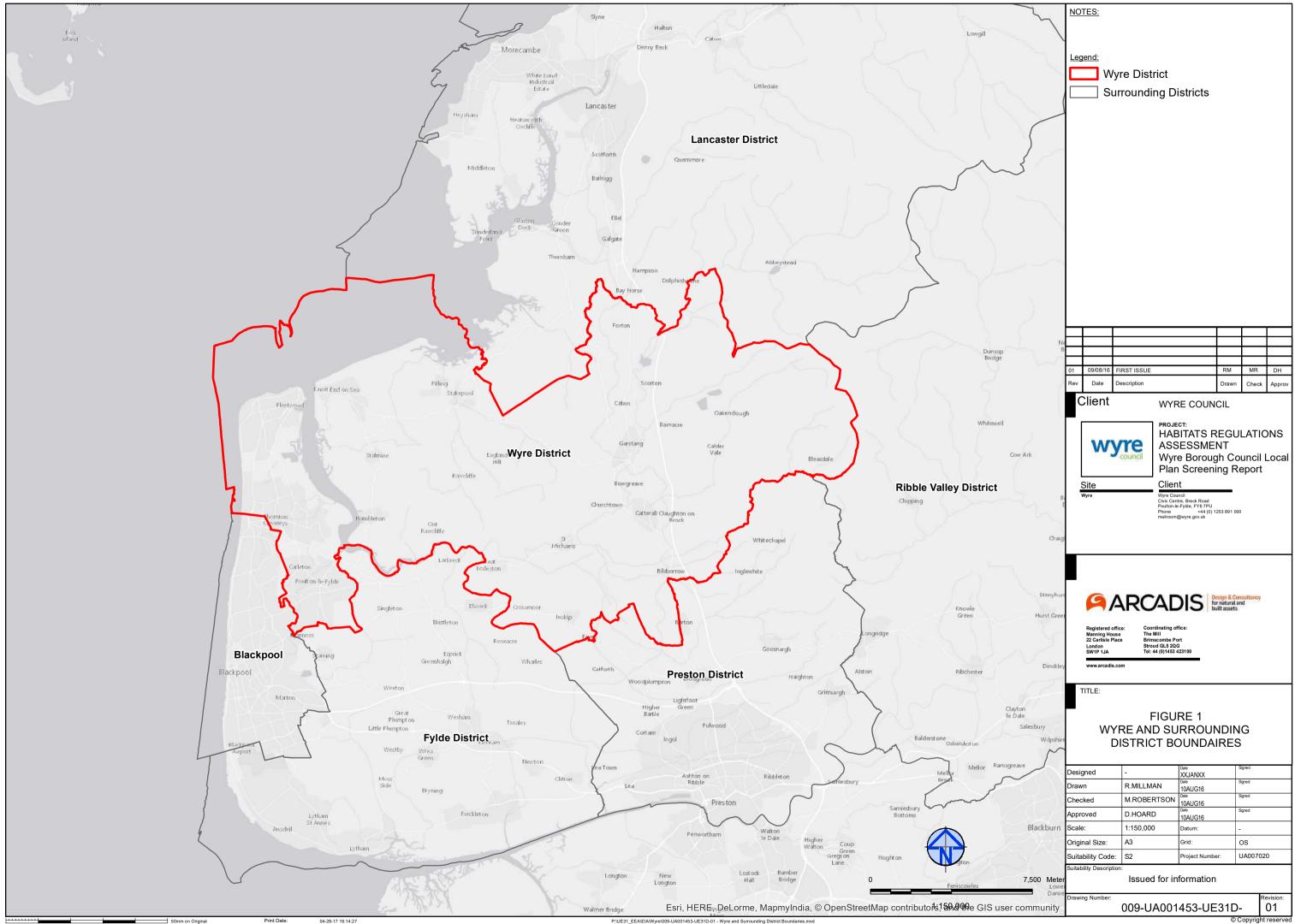
These Conservation Objectives are set for each bird feature for a <u>Special Protection Area (SPA)</u>. Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

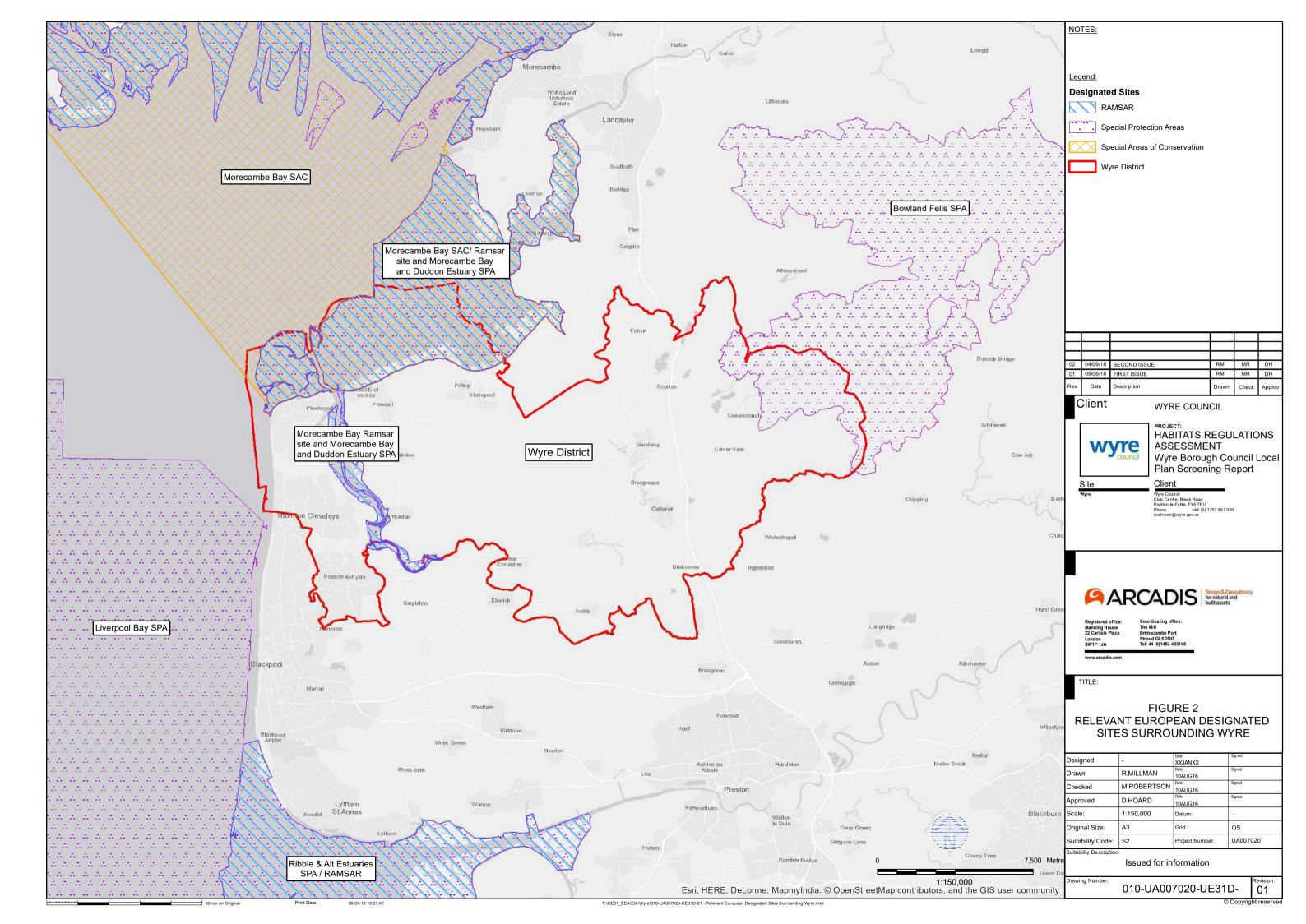
APPENDIX B

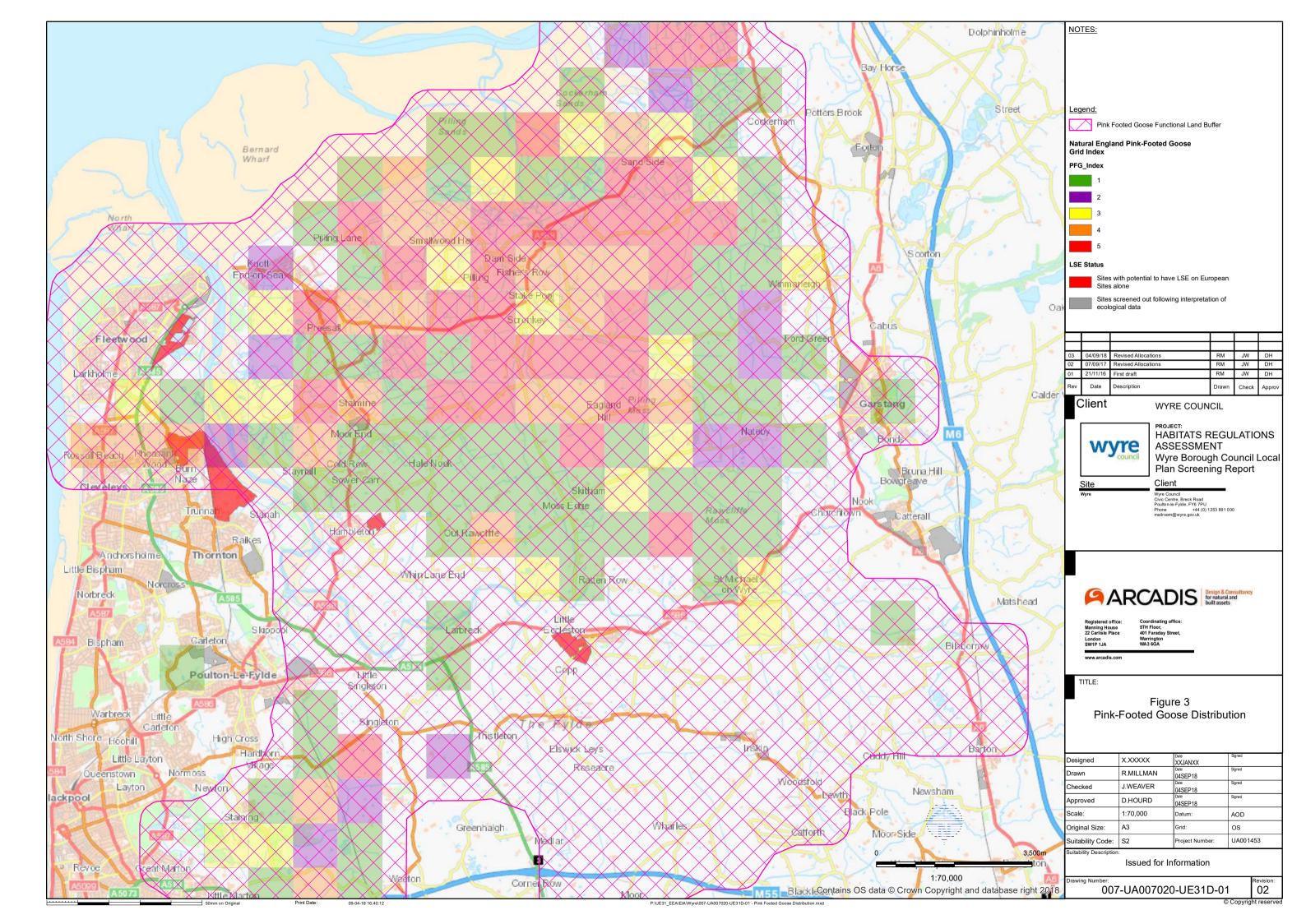
Figures/ Maps/ Aerial photography

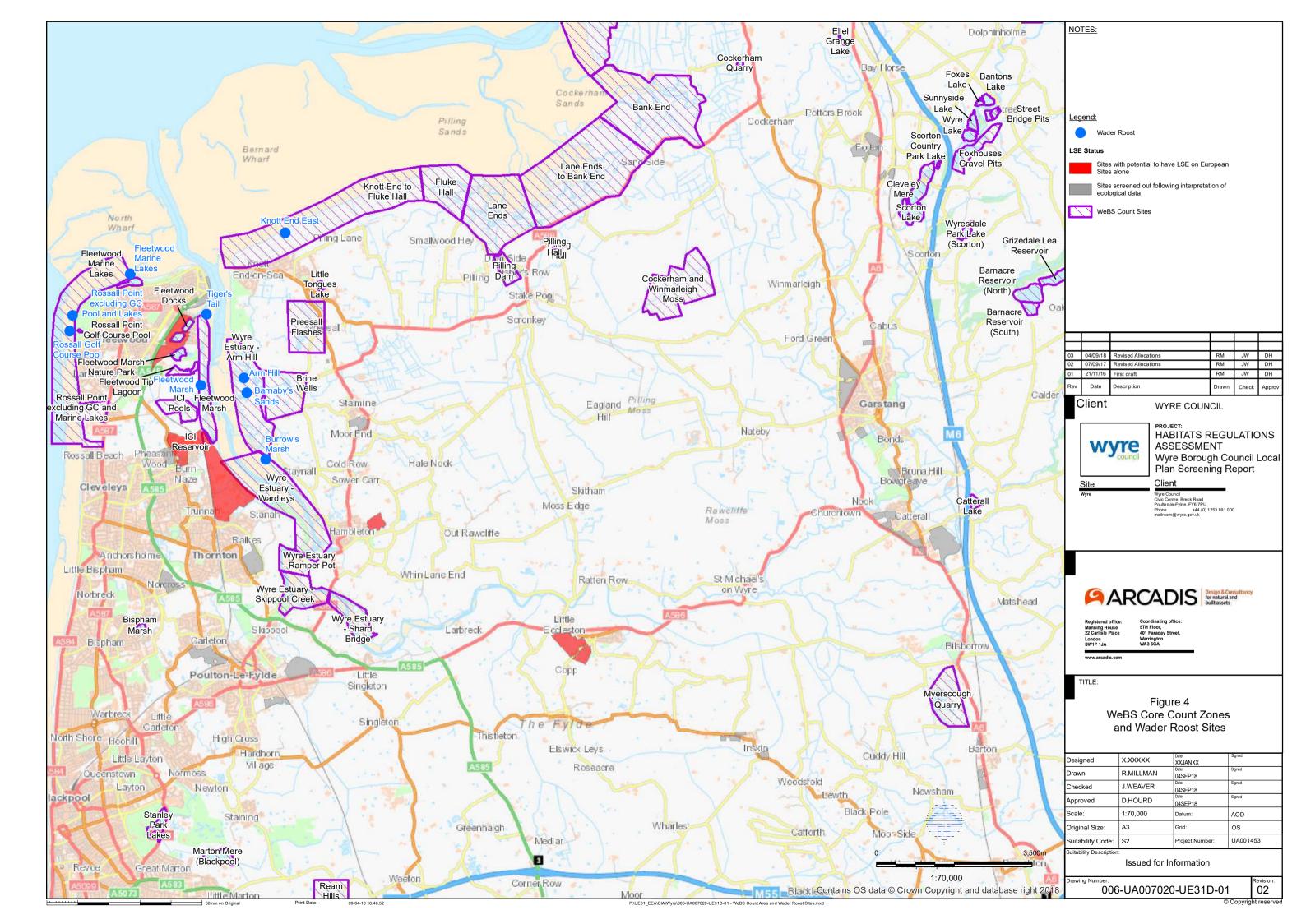
- Figure 1: Wyre and surrounding district boundaries
- Figure 2: Relevant European sites surrounding Wyre
- Figure 3: Pink-footed goose distribution
- Figure 4: WeBS count areas and wader roost sites
- Figure 5: Fleetwood to Thornton AAP boundary
- Map 1: Location of LBBG records and site allocations
- Map 2: SA3/1 Fleetwood Dock and Marina and surrounding land uses
- Map 3: AAP boundary and Local Plan Allocations
- Map 4: SA4 Hillhouse Technology EZ current large extent of vacant land
- Map 5: SA1/3 Land between Fleetwood Road North and Pheasants Wood and surrounding land uses
- Map 6: Morecambe Bay SPA with 1.5 km and 3.5 km buffer and allocations
- Map 7: Bowland Fells SPA with 1.5 km and 3.5 km buffer and allocations

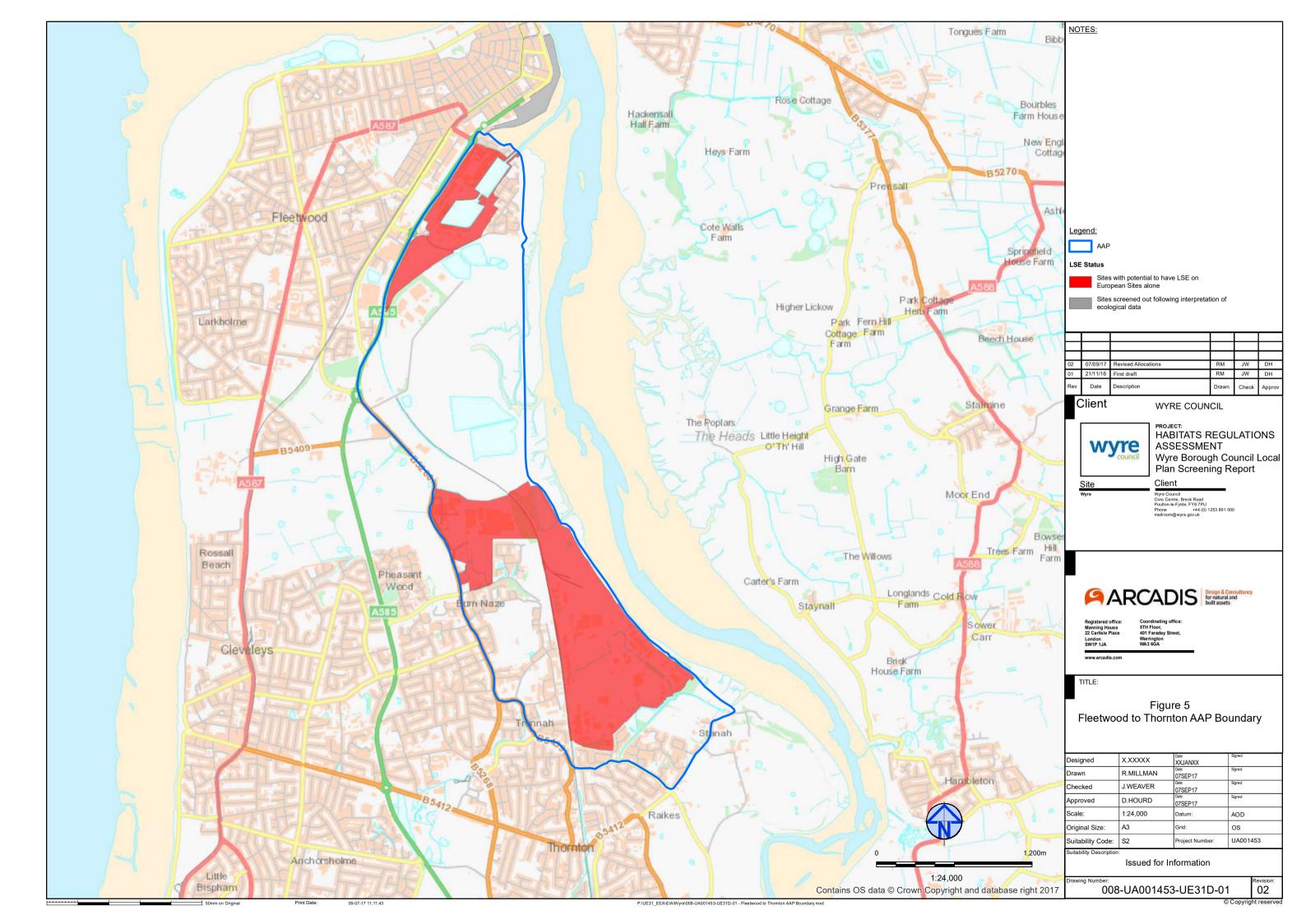
Aerial Photos 1 to 6: Fylde Peninsula allocation sites

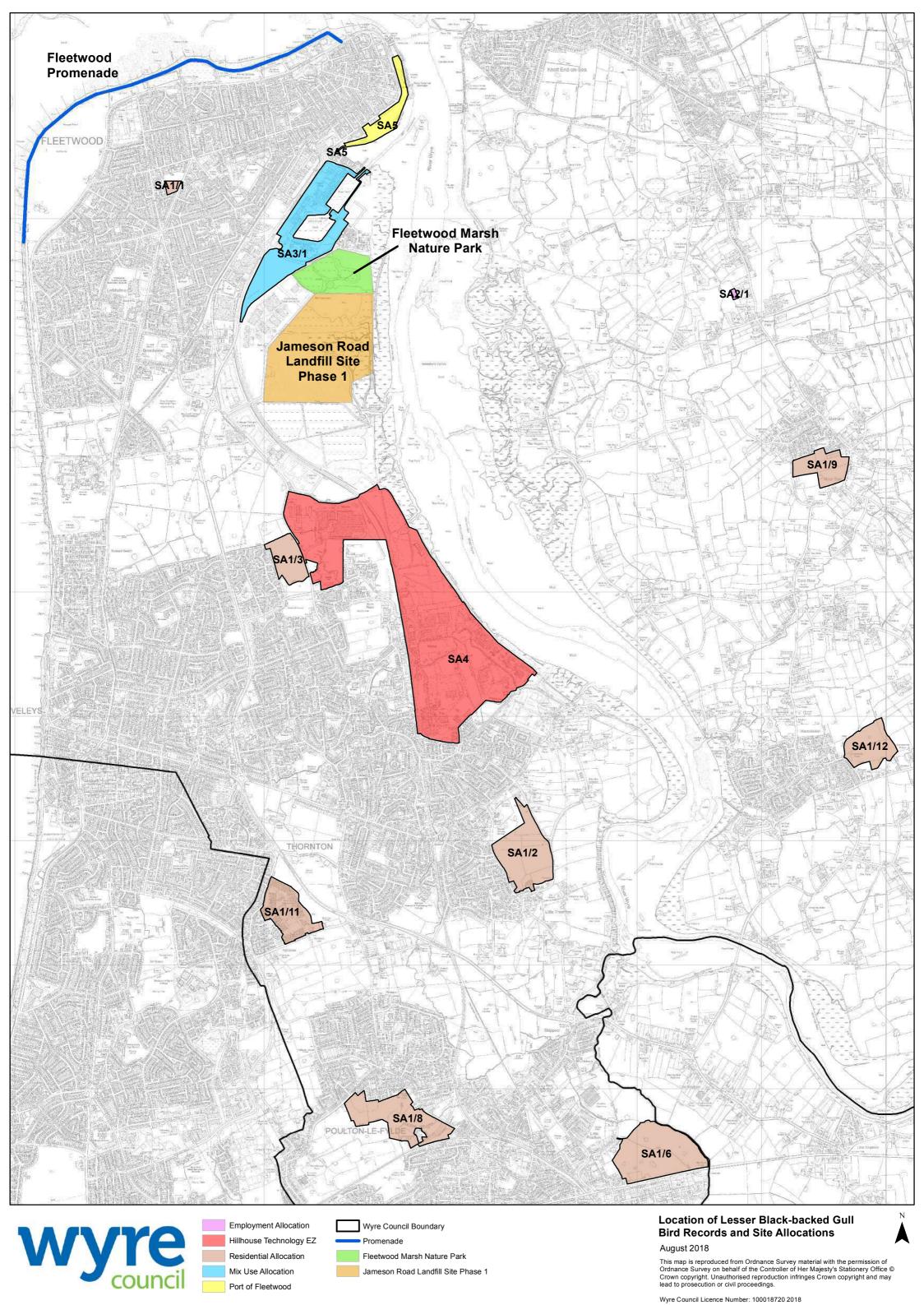


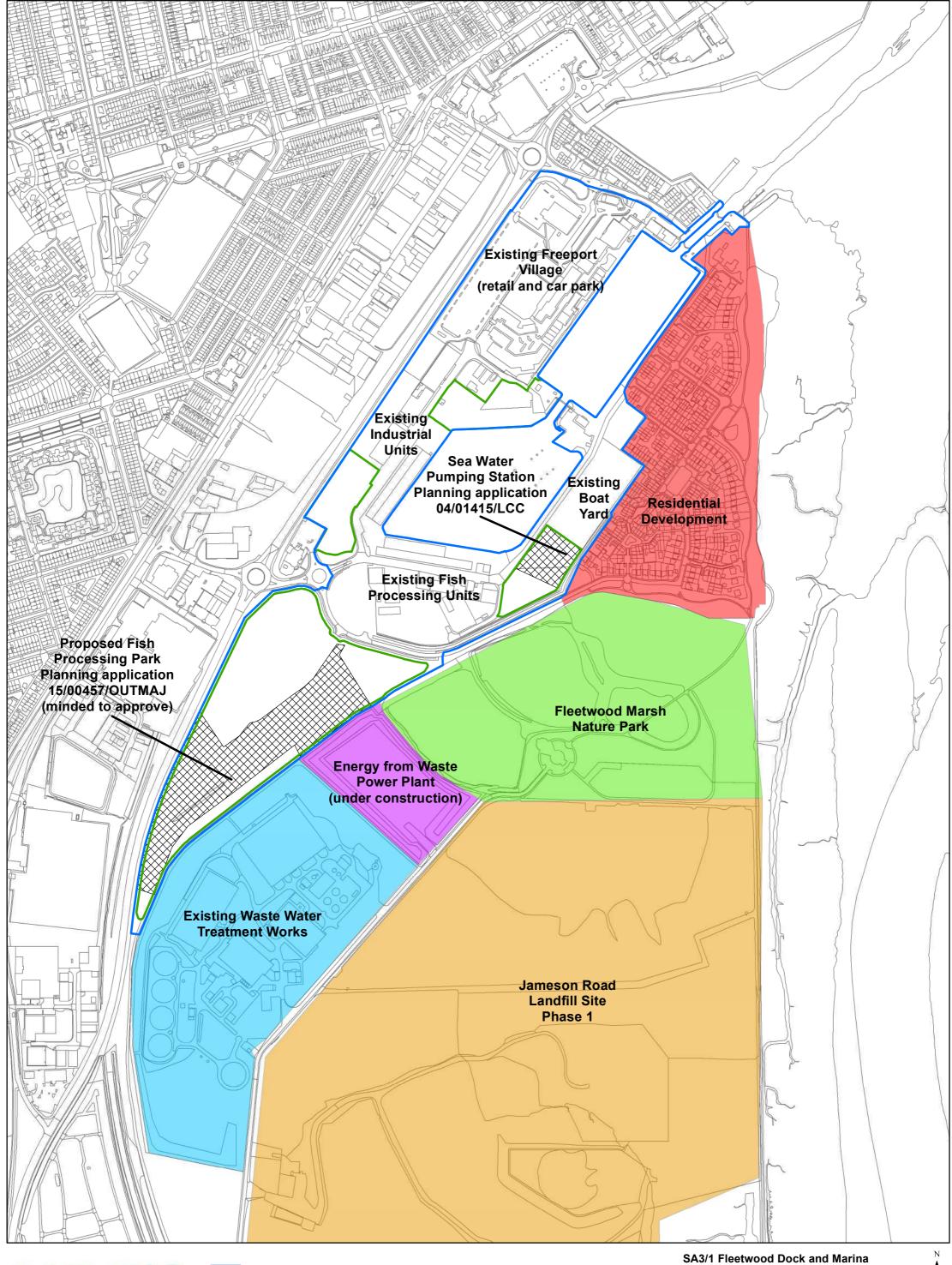














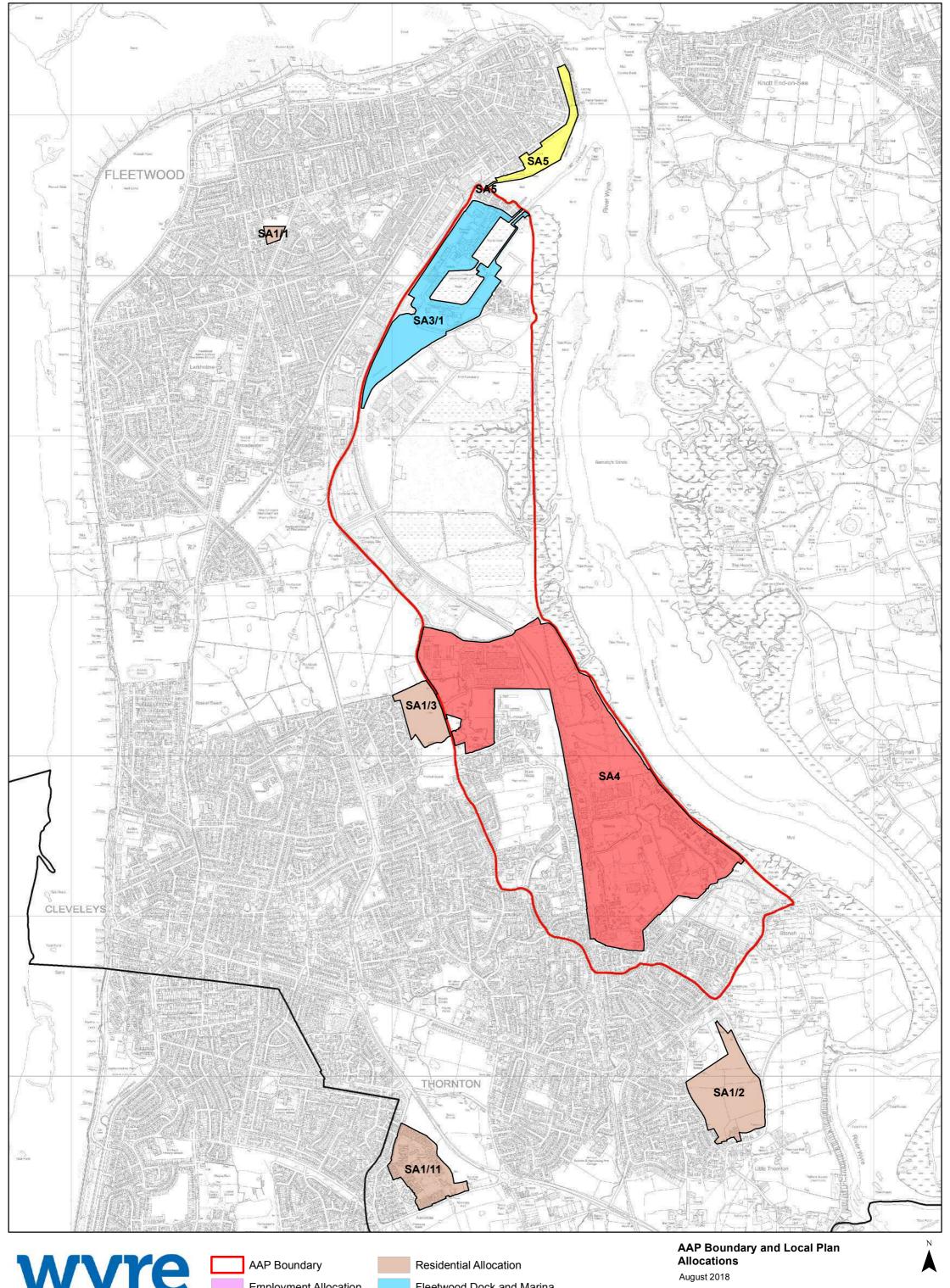
SA3/1 Fleetwood Dock and Marina Site Allocation Boundary

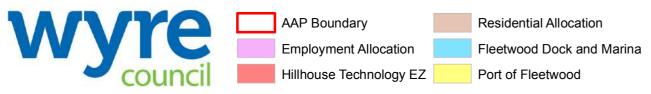
Existing Vacant Land (approximate location)

SA3/1 Fleetwood Dock and Marina and surrounding land uses

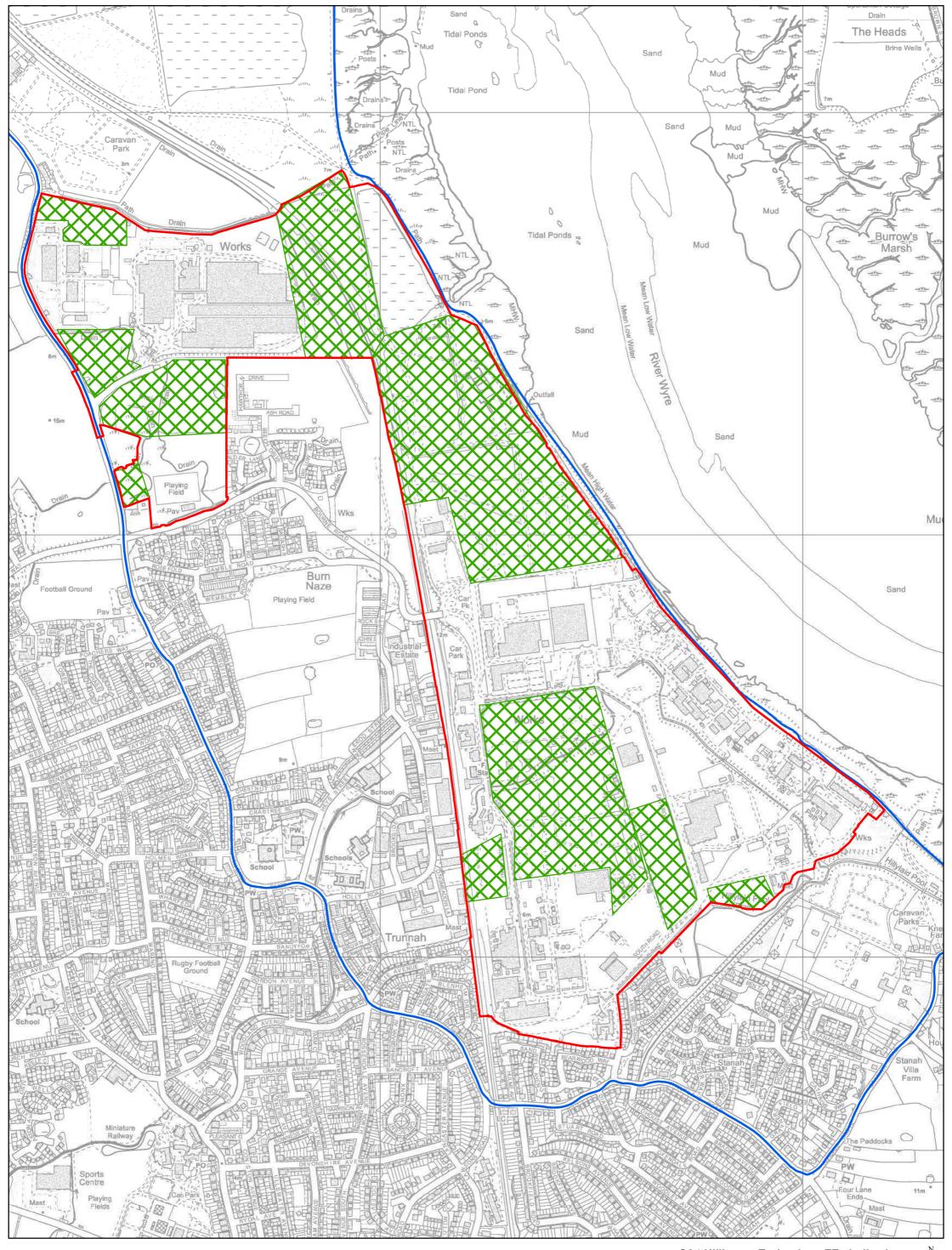
August 2018

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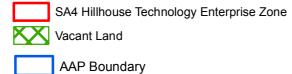




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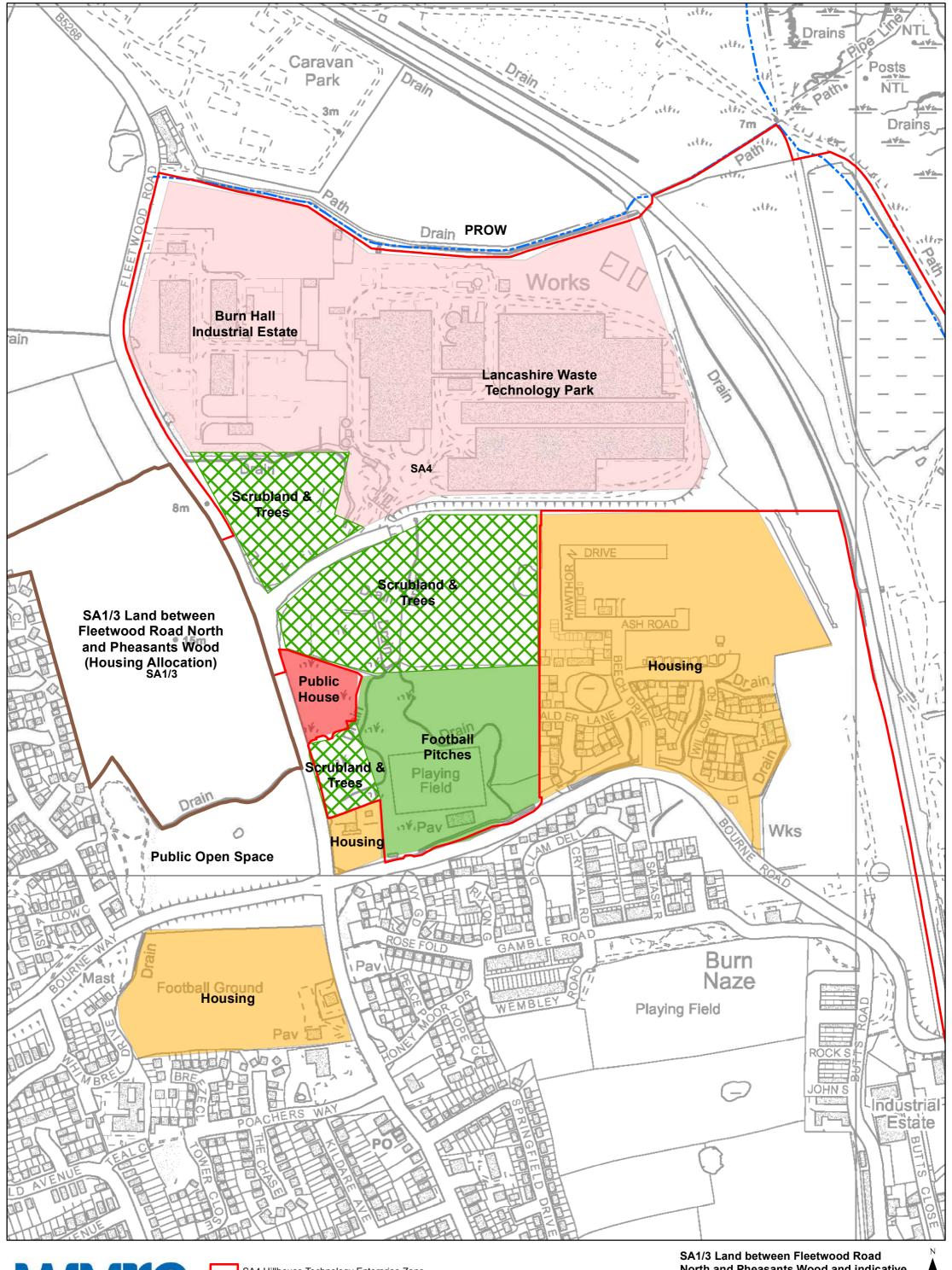




SA4 Hillhouse Technology EZ - Indicative location or current large extents of vacant land

August 2018

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SA4 Hillhouse Technology Enterprise Zone

SA1/3 Residential Allocation

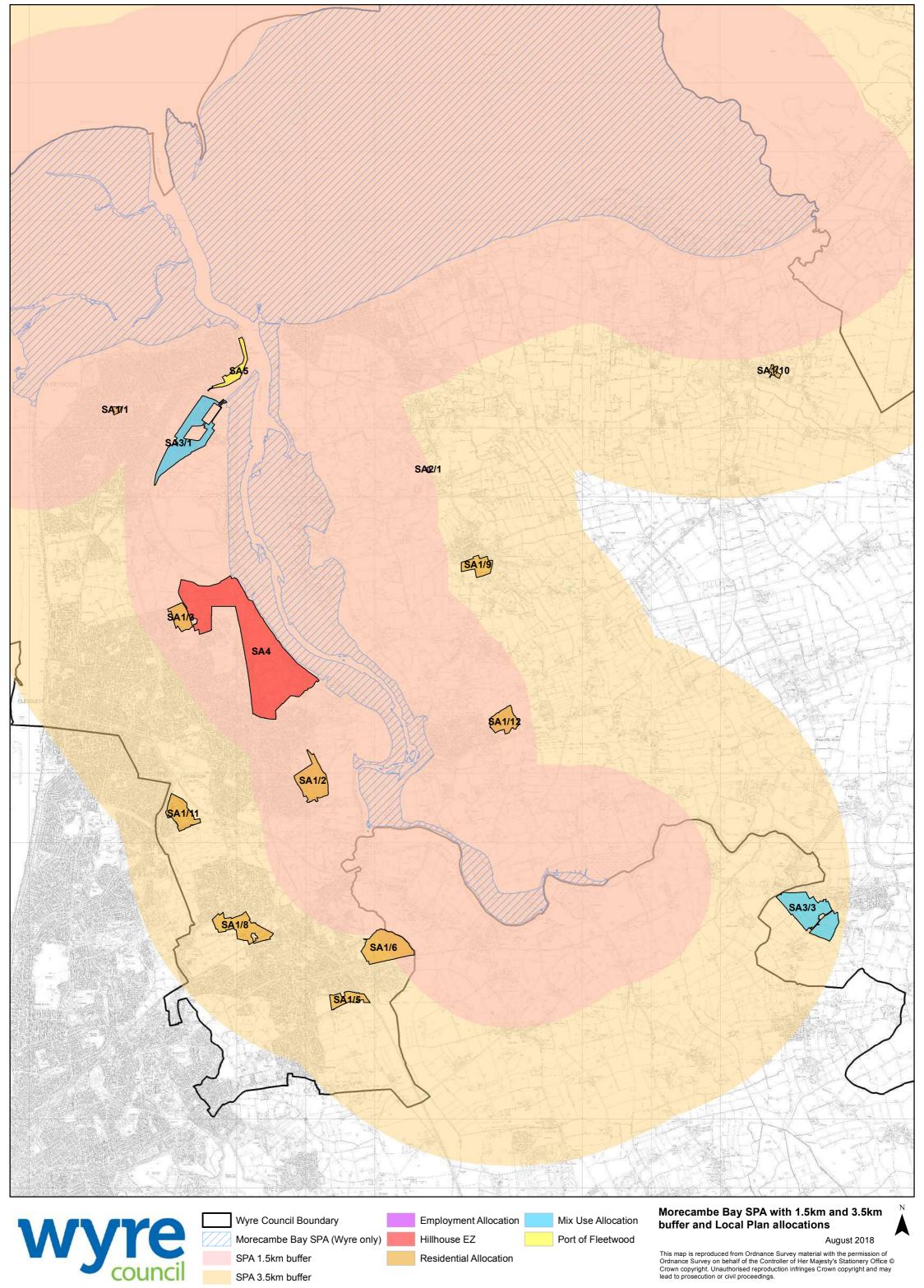
Public Right of Way (PROW)

Scrubland and Trees

SA1/3 Land between Fleetwood Road North and Pheasants Wood and indicative locations of surrounding uses August 2018

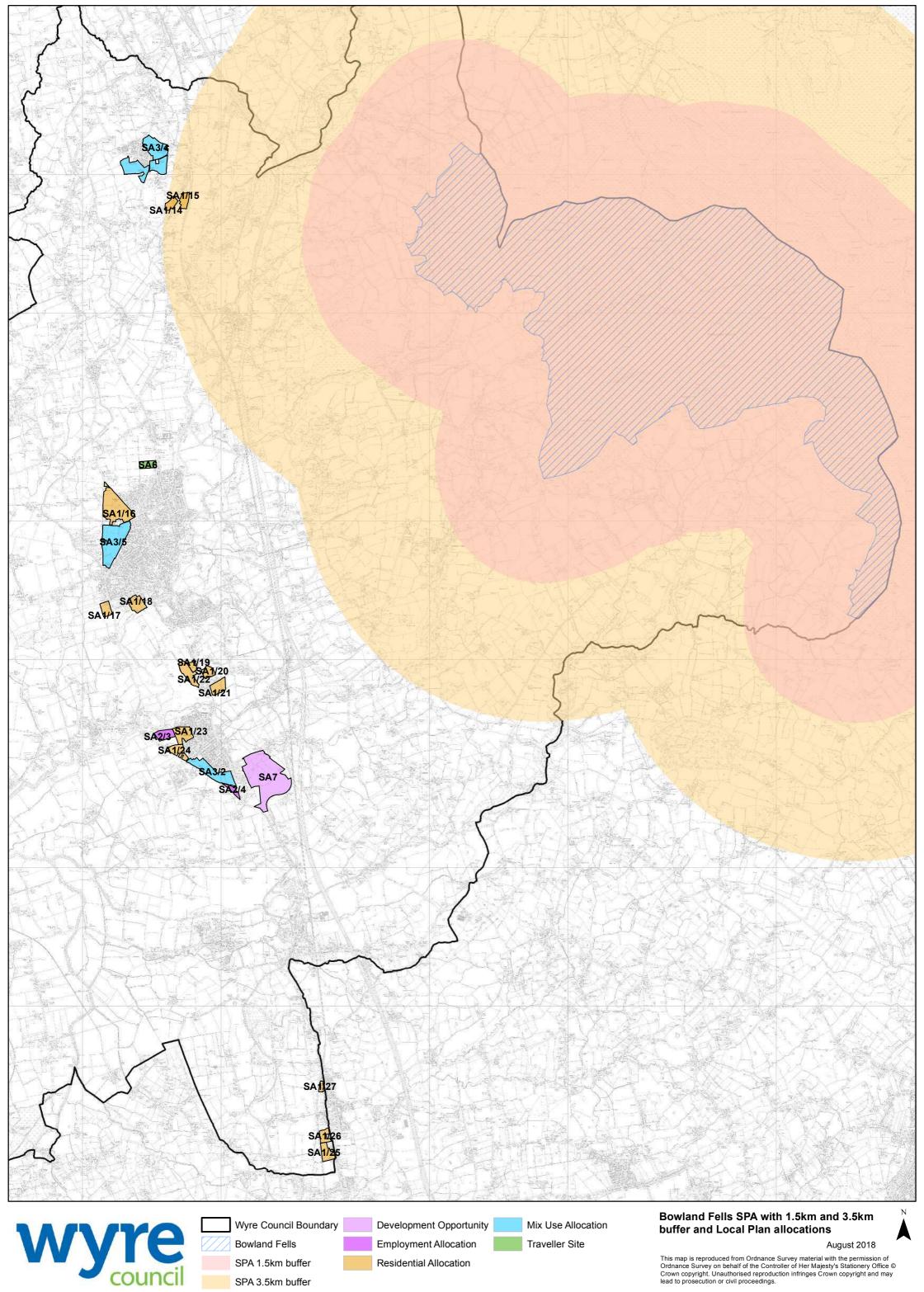
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SPA 3.5km buffer

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SPA 3.5km buffer

Residential Allocation

SPA 1.5km buffer

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APPENDIX C

HRA of Fleetwood - Thornton AAP



Fleetwood-Thornton

L D

F

Area Action Plan

Appendix F Appropriate Assessment

Development Plan Document

September 2009



Fleetwood-Thornton Area Action Plan

Appendix F

Appropriate Assessment



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Appendices

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1. Introduction

- 1.1 Atkins Ltd was commissioned by Wyre Borough Council to undertake, on their behalf, an Appropriate Assessment of the proposed Fleetwood Thornton Area Action Plan (AAP) for Fleetwood and Thornton in Lancashire.
- 1.2 The Wyre Estuary Site of Special Scientific Interest (SSSI), which is immediately adjacent to Fleetwood, is a component part of the Morecambe Bay Special Area of Conservation (SAC), the Morecambe Bay Special Protection Area (SPA) and the Morecambe Bay Wetland of International Importance (Ramsar site). The SAC and the SPA are also known as European sites or Natura 2000 sites. The Wyre Estuary runs parallel to the AAP along the plans eastern boundary. The location of the AAP in relation to the designated sites is shown on the drawing in Appendix 1. It should be noted that only part of Wyre Estuary SSSI lies within the Morecambe Bay SAC.
- 1.3 The requirement to undertake Appropriate Assessment was transposed from the European Habitats Directive (Directive 92/43/EEC) into UK legislation through the provisions of Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994 (commonly referred to as the Habitats Regulations).
- 1.4 However, in 2005 the European Court of Justice found that the United Kingdom had failed to transpose the European Habitats Directive (Directive 92/43/EEC) into domestic legislation correctly (Judgement in case 6/04, 20 October 2005). This ruling has resulted in an interpretation of the Directive that means that Appropriate Assessment must be considered for land use development plans, such as Area Action Plans where a European site is involved. Planning Policy Statement 9 (PPS 9) *Biodiversity and Geological Conservation* (2005) has extended the requirement for Appropriate Assessment to listed Ramsar sites (para 6). Therefore, an Appropriate Assessment will be required where an AAP contains proposals that are likely to have a significant effect on a Special Protection Area (SPA), Special Area of Conservation (SAC) or Wetland of International Importance (Ramsar site).
- 1.5 Guidance on the AA process is provided in Government Circular ODPM Circular 6/2005 and Defra Circular 1/2005 to accompany PPS9: *Biodiversity and Geological Conservation* Statutory obligations and their impact within the planning system.
 - The joint Circular provides a framework for consideration of development proposals affecting internationally designated sites. This is summarised briefly here:
 - The first stage is to establish whether or not the proposed development is necessary for the nature conservation management of a European site.
 - If not, a decision must be taken on whether an appropriate assessment is needed of
 the proposal, based on whether the proposal is likely to have a significant effect on a
 European site, or, based on the precautionary principle, whether there is any
 probability or risk that the proposals would have significant effects;
 - If the appropriate assessment indicates that the proposal would not adversely affect the integrity of the site, permission may be granted or the plan may be adopted;
 - If the appropriate assessment suggests that there would be residual effects that could not be mitigated or avoided, the Circular indicates that permission should not be granted. However, if there are imperative reasons of over-riding public interest,



- including those of a social or economic nature, the planning authority, if minded to grant permission, must notify the Secretary of State;
- If the appropriate assessment indicates that priority habitats could be adversely
 affected by proposals, permission can only be considered if there are imperative
 reasons of overriding public interest relating to human health, public safety or benefits
 of primary importance to the environment, and can only be granted subject to the
 Secretary of State securing the necessary compensatory measures to ensure
 coherence of the Natura 2000 network;
- If the proposals within the plan would affect priority habitats but are for other reasons
 of public interest (for example those of a social or economic nature), permission may
 only be granted following consultation between the Government and the European
 Commission and subject to necessary compensatory measures being secured.
- 1.6 The AAP is not directly connected to or necessary for the management of Morecambe Bay SAC, SPA, Ramsar site. Therefore, full Appropriate Assessment is required.
- 1.7 Guidance has recently been published relating to how Appropriate Assessment should be undertaken with respect to land use development plans in England: *Planning for the Protection of European Sites: Appropriate Assessment, Guidance for Regional Spatial Strategies and Local Development Plan Documents* (Department for Communities and Local Government, August 2006). This guidance summarises the Appropriate Assessment Process into three main tasks:
 - Determination of likely significant effects from the plan on a Natura 2000 site (European site) (AA task 1);
 - Appropriate Assessment and ascertaining the effect on site integrity (AA task 2);
 - Mitigation and alternative solutions (AA task 3); and imperative reasons of overriding public interest.
- These tasks together are collectively described as Appropriate Assessment. Existing guidance has also been used in the AA process which is listed in the Reference section, but with particular reference to the document; Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC, (European Commission, November 2001).
- 1.9 In order to ensure that there are no likely significant adverse effects on the integrity of the designated site from any of the policies or objectives contained within the AAP or any proposals which could occur as a result of this plan, mitigation measures have been identified that would be delivered as part of the planning control process to reduce the likely effects to an insignificant level. Policy wording has also been amended to ensure that all projects within the AAP area would be subject to Appropriate Assessment.

Background

- 1.10 A comparative assessment between three development Options was undertaken by Atkins and reported in October 2006 (Fleetwood Thornton Area Action Plan, Appropriate Assessment: Initial Screening Exercise, Atkins, October 2006).
- 1.11 The aim of this assessment was to assess the effects of the Fleetwood and Thornton Area Action Plan (here after referred to as the AAP) on the Morecambe Bay SAC, SPA and Ramsar site.



- 1.12 The three options presented in the AAP were:
 - Option 1 'Minimum Development';
 - Option 2 'Moderate Development'; and,
 - Option 3 'Maximum Development'.
- 1.13 The October 2006 assessment undertaken by Atkins included identification of potential impacts and concluded that Option 1 was not likely to result in any significant effects on Morecambe Bay SAC, SPA, Ramsar site.
- 1.14 The outline proposals for Option 2 and Option 3 suggested that direct significant effects are unlikely. However, there was some uncertainty as to whether there would be any indirect effects. These could arise from the increased intensification of use of some areas adjacent to Morecambe Bay.
- 1.15 The comparative assessment identified the requirement for a screening matrix to identify potential impacts from the preferred AAP option and further consultation with Natural England in order to ensure that the opportunities for option development within and adjacent to the Morecambe Bay designated sites are neither restricted nor over optimistic. The current preferred option is Option 3 reported in the document *Fleetwood Thornton Draft Preferred Options* (Atkins, February 2007). This document had not gone out for public consultation at the time of writing this report.
- 1.16 A screening matrix (AA task 1) for the preferred Option of the AAP has been completed and is presented in Appendix 2 of this report. An Appropriate Assessment (AA task 2) has been carried out of the potentially significant impacts arising from the screening exercise, the results of which are presented in this report together with potential mitigation measures (requirement under AA task 3). A strategic level consultation of alternative options of the AAP has been undertaken with various organisations including Natural England, the Wildlife Trusts and the Royal Society for the Protection of Birds (RSPB).
- 1.17 As the assessment has been undertaken on a plan rather than specific project full details of component development within the plan area are not known and the assessment has been undertaken at a strategic level. Subsequent development proposals within the AAP area are expected to be brought forward through the planning and development control process and will be detailed in respect of specific development proposals at particular locations.

Structure of the Report

- 1.18 The following sections of the report comprise:
 - Details of data obtained and consultations carried out;
 - A description of the characteristics of Morecambe Bay SAC, SPA, Ramsar;
 - A summary of the conservation objectives of Morecambe Bay SAC, SPA, Ramsar;
 - A description of the AAP, including an outline of other projects and plans that are currently under consideration which may effect Morecambe Bay SAC, SPA, Ramsar;
 - An identification of the potential impacts on key habitats and species which are likely
 to cause significant impacts on Morecambe Bay SAC, SPA, Ramsar site, including
 any in-combination effects (as identified by the screening exercise) and an
 assessment of how the integrity of Morecambe Bay SAC, SPA, Ramsar site may be
 adversely affected;



- An identification of mitigation measures that could be introduced to avoid or reduce adverse affects on the integrity of Morecambe Bay SAC, SPA, Ramsar including an assessment of the likely success of mitigation and any residual impacts;
- Conclusions of the assessment and requirements for any further work.



2. Data Collection and Consultation

- 2.1 The following data was collected in order to aid the appropriate assessment:
 - Fleetwood Thornton Area Action Plan, Appropriate Assessment: Initial Screening Exercise, Atkins, October 2006;
 - Natura 2000 Standard Data Form and citations for Morecambe Bay SAC and SPA from Joint Nature Conservation Committee (JNCC) website (www.jncc.gov.uk);
 - Information Sheet on Morecambe Bay Ramsar site (<u>www.jncc.gov.uk</u>);
 - Wyre Estuary SSSI citation sheet (<u>www.english-nature.org.uk</u>);
 - Designation boundary maps from the Multi-Agency Geographic Information for the Countryside website (MAGIC) (<u>www.magic.gov.uk</u>);
 - Details of the conservation objectives of the European sites and details of any management of the sites currently causing adverse affects were requested from Natural England. The conservation objectives of the site(s) are set out in the document Morecambe Bay European Marine Site, English Nature's advice given under Regulation 33(2) of the Conservation (Natural Habitats &c.) Regulations 1994 (issued 14 January 2000) which was provided by Natural England.
 - Fleetwood Thornton Area Action Plan Draft Preferred Options Report, Atkins, February 2007;
 - Data from Wetland Birds Survey (WeBS) Sectors from the British Trust for Ornithology (BTO) available within the Fleetwood Area, two areas centred on Arm Hill to the east of the estuary (Sector 5714) and Wyre Estuary Lagoons to the west of the estuary (Sector 57413).
- 2.2 Further information on the great crested newt breeding population within Morecambe Bay SAC and within the AAP area was requested from Natural England (local office), Lancashire Wildlife Trust and Lancashire County Council Biological Records Centre. Natural England did not have any information available on the great crested newt breeding population within the SAC and neither Lancashire Wildlife Trust nor the Biological Records Centre had any records of great crested newts within the AAP area.
- 2.3 Consultation on the screening matrix for the preferred option was undertaken with the following parties:
 - Rosie Baynes, Natural England local contact (Preston Office);
 - Janet Baguley, Natural England (Manchester Office)
 - Jean Roberts, BTO local contact (Cloughton);
 - Tim Melling, RSPB local contact (Wakefield Office);
 - Philip Heath, Environment Agency (Preston);
 - Kim Wisdom, Wildlife Trust for Lancashire, Manchester and North Merseyside.
- 2.4 In addition details of other plans and projects which could affect the European sites (for an assessment of in-combination impacts) were collated by Atkins and on behalf of Atkins by Wyre Borough Council.



3. Characteristics of the Designated Sites

The Morecambe Bay Designated Sites

- 3.1 Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries in Britain of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns. Morecambe Bay is designated as a Special Area of Conservation (SAC), Special Protection Area (SPA) and a Wetland of International Importance (Ramsar site).
- 3.2 The citations of the designated sites are provided in Appendix 1.

Morecambe Bay SAC

- 3.3 The site is designated for its range of internationally important habitats and species, including some priority habitats. Habitats that are a primary reason for selection are:
 - Estuaries;
 - Mudflats and sandflats not covered by seawater at low tide;
 - Large shallow inlets and bays
 - Perennial vegetation of stony ground;
 - Salicornia and other annuals colonising mud and sand;
 - Atlantic salt meadows;
 - Shifting dunes along the shoreline with Ammophila arenaria (white dunes);
 - Fixed dunes with herbaceous vegetation (grey dunes);
 - Humid dune slacks.
- In addition, a number of habitats are present as a qualifying feature, but which are not a primary reason for designation of the site. These are:
 - Sandbanks which are slightly covered by sea water all the time;
 - Coastal lagoons (which are a priority feature);
 - Reefs;
 - Embryonic shifting dunes;
 - Atlantic decalcified dunes (which are a priority feature);
 - Dunes with Salix repens ssp argentea.
- 3.5 Great crested newt is listed as a species of international importance that is a primary reason for site designation. The citation for the SAC (from JNCC website www.jncc.gov.uk) mentions permanent and ephemeral water bodies and man made scrapes with breeding



colonies of great crested newt known within approximately 20 of these ponds. Great crested newts are believed to use 200 ha of the 282ha site. However, when contacted for information, Natural England could not provide any details of the location of these breeding ponds or identify the area of terrestrial habitat which great crested newts are believed to use. Great crested newts generally move 500m from breeding ponds. The nearest part of SAC is 850m from the AAP boundary.

Morecambe Bay SPA

- 3.6 Morecambe Bay has been designated for the following interest features under the EU Birds Directive.
- 3.7 The site has importance for an internationally important population of regularly occurring Annex 1 species (Sandwich tern). A key sub-feature of the SPA is the sparsely vegetated shingle areas which are important nesting areas for the Sandwich tern, the main areas being on Foulney and Walney Islands. The site has approximately 3% of GB's breeding population of Sandwich terns (290 pairs) which nest on shingle and sandbanks.
- The site supports an **internationally important assemblage of waterfowl and seabirds** (regularly supporting over 20,000 wintering birds and an internationally important assemblage of breeding sea birds). The site supports breeding populations of European importance of herring gull and lesser black-backed gull. Key sub-features of the SPA relating to the waterfowl and seabird population are intertidal mudflat and sandflat communities; intertidal and subtidal boulder and cobble skear communities; saltmarsh communities; and coastal lagoon communities.
- 3.9 The site supports internationally important populations of regularly occurring migratory species (on passage, in spring and autumn). Several of these species are included in the wintering waterfowl assemblage but occur in internationally important numbers in their own right and these are listed below. The key sub-features for the migratory species are as for the waterfowl and seabird assemblage.
 - Pintail (4.7% of NW European population);
 - Pink-footed goose (1.1% of the international population);
 - Turnstone (2.4% of Eastern Atlantic Flyway population);
 - Dunlin (3.8% of Eastern Atlantic Flyway population);
 - Knot (8.5% of Eastern Atlantic Flyway population);
 - Oystercatcher (5.4% of Eastern Atlantic Flyway population);
 - Bar-tailed godwit (2.6% of Eastern Atlantic Flyway population);
 - Curlew (3.9% of Eastern Atlantic Flyway population);
 - Grey plover (1.1% of Eastern Atlantic Flyway population);
 - Shelduck (2.1% of NW European population);
 - Redshank (3.6% of Eastern Atlantic Flyway population);
 - Ringed plover (1.5% of the Europe/Northern Africa wintering population)
- 3.10 In terms of its vulnerability, the SPA data form (www.jncc.gov.uk) notes that the site is subject to a wide range of pressures such as land-claim for agriculture, overgrazing,



- dredging, overfishing, industrial uses and unspecified pollution. However, these pressures are generally only evident at a local scale and currently do not have any significant effects on the favourable condition of the site. Overall the site is robust.
- 3.11 The most sensitive feature is probably the breeding Sandwich tern colony, which has recently moved to the Duddon Estuary, further to the north, which is much quieter and less prone to disturbance from human activity.
- 3.12 WeBS data for high tide roost sites of bird species important in a European Context within the SPA/Ramsar was collected. An aerial photo showing the locations of the WebS sectors is shown in Appendix 3 together with the summary and analysis of the relevant WeBS data. High tide roosts of most relevance to the AAP area are lagoons to the west of the Wyre Estuary, these are:
 - Fleetwood Docks;
 - Fleetwood Marsh Nature Park;
 - Fleetwood Marsh;
 - Fleetwood Tip Lagoon;
 - CEGB Jameson Road;
 - ICI Pools;
 - ICI Reservoir.
- 3.13 The lagoons at Fleetwood Docks and Fleetwood Nature Park are not included in the official WeBS counts but are still considered to be important high tide roost sites (personal communication, Jean Roberts, BTO). The other lagoons are included together under the heading of 'Wyre Estuary Lagoons'. The WeBS data has been supplied as an amalgamated list and does not differentiate between the different Wyre Estuary Lagoons.

Morecambe Bay Ramsar site

- 3.14 The site qualifies as a Ramsar site on three counts. Firstly, it is a staging area for migratory wildfowl, including internationally important numbers of passage ringed plover.
- 3.15 Secondly, it supports a wintering bird assemblage of international importance, of over 200,000 birds.
- 3.16 Thirdly, it supports internationally important numbers of breeding, wintering and migratory birds.
- 3.17 The Information Sheet on Ramsar Wetlands (www.jncc.gov.uk) does not record any factors that currently adversely affect the ecological character of the site.

Wyre Estuary SSSI

3.18 The area of the Morecambe Bay SPA, SAC and Ramsar site that is closest to the Fleetwood and Thornton AAP comprises the Wyre Estuary SSSI. As well as being of national importance in its own right for its estuarine habitats and numbers of wintering and on-passage migratory birds, it also forms an integral part of Morecambe Bay. For example, on the west side of the estuary to the north of Stanah lies an extensive area of saltmarsh which, together with other areas along the north and west sides make up the largest area of ungrazed saltmarsh in the north west of England.



- 3.19 Also close to the AAP area there are high tide bird roosts at Stanah and Barnaby Sands. Waders roosting on the Wyre may use other parts of the Morecambe Bay complex at low tide and vice-versa; birds roosting in other areas of the complex may use the Wyre Estuary for feeding. For example, displacement of roosting birds occurs during spring tides to a major high tide roost at Armhill, from around the Morecambe Bay site, not just the Wyre Estuary. Therefore, there is a strong interdependence on the survival of all features present in the wider complex to ensure the survival of the habitats and species for which the international site is designated.
- 3.20 The Natural England website reports that all management units of the Wyre Estuary SSSI are in favourable condition (www.natureonthemap.gov.uk).

Conservation Objectives

- 3.21 The broad conservation objectives for the European sites are, subject to natural change, to maintain the following features in favourable condition (favourable conservation status):
 - the cited habitats;
 - the great crested newt population;
 - the habitats used by the internationally important assemblage of waterfowl and seabirds; and,
 - the internationally important populations of regularly occurring migratory bird species.
- 3.22 To maintain the favourable conservation status of European sites, the Habitats Directive requires the avoidance of loss or deterioration of habitats and the habitats of the qualifying species. The Directive also requires that actions are taken to avoid significant disturbance to the species for which the site was designated. Such disturbance may include alterations in population trends and/or distribution patterns. Natural England use 5 year peak mean information on populations as the basis for determining whether disturbance is damaging.
- 3.23 Further information on the favourable conservation status of the site(s) is given in Morecambe Bay European Marine Site, English Nature's advice given under Regulation 33(2) of the Conservation (Natural Habitats &c.) Regulations 1994 (issued 14 January 2000) which was provided by Natural England. Regulation 33 allows the nature conservation agency (Natural England) to install markers to indicate the extent of a European marine site. The agency is also responsible for advising the relevant authorities of the conservation objectives for the site and of any operations that may cause a deterioration of the habitats or species populations for which it is designated.
- 3.24 In accordance with Regulation 34, which allows for the establishment of a management scheme for a marine site, the Morecambe Bay Management Scheme has been established. Wyre Borough Council is a partner organisation of this scheme.
- 3.25 There are currently no separate conservation objectives for the Ramsar site but as the Ramsar overlaps with the SPA it has been assumed that the conservation objectives are the same.



Description of Fleetwood – Thornton AAP

Existing Conditions

- 4.1 The Borough of Wyre lies in north-west Lancashire and consists of two distinct parts. The western part of the Borough includes the urban areas focussed around Fleetwood, Thornton Cleveleys and Poulton-le-Fylde; and the remainder is predominantly rural in character. The Fleetwood-Thornton Area Action Plan is located within the north-west of the Borough.
- 4.2 The Area covers a total of approximately 512 hectares of land stretching from the northeast of Thornton to Fleetwood and bordered to the east by the Wyre Estuary. The Area is diverse in character and quality and encompasses a variety of land uses including housing, retail, employment and recreation as well as tracts of vacant, derelict and contaminated land, and areas recognised for their contribution to nature conservation. The Wyre Estuary stretches the length of the Area along its eastern boundary. A diagrammatic representation of the AAP proposals and the AAP boundary is shown on the drawing in Appendix 4.
- 4.3 The Area can be separated into sub-areas, each containing different land-uses and activities. In the north of the Area is the Harbour Village which includes the Freeport Retail Outlet Village and the established area of housing comprising largely flats and terraced properties. To the south of the Harbour Village lies Fleetwood Docks which remain in active use as a port for fishing vessels and as a marina for leisure craft. The Docks area remains the focus for Fleetwood's fishing industry where a number of warehouses related to the port and fish industry are located. Adjacent to the Dock area are extensive tracts of derelict, vacant and underused land.
- 4.4 Further south is the Fylde Coast Wastewater Treatment Works (operated by United Utilities), which biologically treats up to 200 million litres of wastewater and rainfall a day. The waste transfer station operated by Wyre Waste lies to the east of the Treatment Works. Further to the east is Fleetwood Nature Park which is bounded to the south by the Jameson Road Landfill Site, used for the tipping of household waste. The steep landform of the landfill site contrasts with the remainder of the Area which is relatively flat in profile.
- 4.5 A further landfill site is situated to the south of Jameson Road and includes lagoons which were subject to an incomplete landfill operation undertaken by ICI in connection with disposal of waste from the Hillhouse Chemical Works.
- 4.6 To the west of the Jameson Road landfill site are two established caravan sites; the Broadwater Holiday Centre and the Cala Gran Holiday Park, which are situated within land designated as Green Belt in the adopted Wyre Borough Local Plan. Further south again, the Hillhouse works form a major land use component of the Area and still remains a focus for industrial related activity in the Borough. The Hillhouse site is dominated by large scale industrial structures, which have been a prominent feature within the Borough for many years. A major use of the Hillhouse site relates to chemical based industry and provides a significant contribution to employment opportunities within the Area and to the local economy.



- 4.7 Surrounding Hillhouse to the west is the district of Burn Naze which forms the main residential component of the Area and includes Pool Foot Farm. To the southern boundary of the area, beyond the Hillhouse site is a caravan park (Kneps Farm) which lies adjacent to the Wyre Estuary Country Park.
- 4.8 Throughout the Area, access and movement are major issues, the main transport route being from the M55 (Junction 3) via the A585 trunk road which is itself heavily congested at times. A disused railway track extends from the station at Poulton-le-Fylde northwards to the Docks. The track is currently safeguarded from development within the adopted Joint Lancashire Structure Plan and policies in the Wyre Borough Local Plan.
- 4.9 The Wyre Way is a long distance footpath providing pedestrian access to the southern periphery of the Area stretching from Stanah in the south and running along the east side of the Hillhouse works where pedestrians can enjoy with views across the Wyre Estuary and the surrounding countryside.

AAP Proposals

- 4.10 A broad masterplan has been prepared for the preferred option of the AAP, indicating the location and likely extent of development. A brief description of the preferred Option is provided below and a diagrammatic representation of the AAP proposals is shown on the drawing in Appendix 4. .
- 4.11 The preferred option proposes large scale development, comprising large scale housing development on brownfield and suitable greenfield land. The use of existing employment land would be intensified and further opportunities created through mixed use development schemes. In particular, the proposals would include the remodelling of land at Fleetwood Docks to provide a comprehensive mixed-use development.
- 4.12 Due to the large scale of development and associated infrastructure requirements, it is expected that the development proposed under this option would occur over the long term (development expected to occur until 2021).
- 4.13 The AAP includes the following features:
 - Increased development around Fleetwood Docks including employment and residential;
 - Extension of Fleetwood Marina;
 - Waste treatment facility;
 - Former railway line to Fleetwood Town Centre to be brought back into use with a
 potential rail freight link;
 - A new housing development areas of up to 380 dwellings plus up to 120 dwellings within Fleetwood Docks (to the north of the area) and up to 700 dwellings (to the south);
 - New office development adjacent to the existing Lancashire Waste Technology Park;
 - Intensification of operations on secure employment site;
 - Provision of a continuous riverside multi-user recreational route (walkers, cyclists, horse-riders) from Stanah to Fleetwood Town Centre;
 - Reclamation of a large area of landfill for nature conservation, and recreation with maximum restoration in the long-term;



- Existing playing fields and farmland near Stannah to be retained with environmental improvements;
- Environmental improvements within existing residential areas and developer contributions to environmental enhancements in existing employment sites.
- 4.14 The phasing of housing within the Area will be encouraged as follows:

Phase 1: 2003-2008

(i) Fleetwood Docks Mixed Use Development Area (FD1) - the first phase of housing development (where a planning application has been submitted for 380 dwellings under planning application reference 04/00240/FUL) will be within the Fleetwood Docks Mixed Use Development Area.

Phase 2: 2009-2013

(ii) Former power station site (PS1) - the second phase of housing development will be on the site of the former power station site where land is allocated on the Proposals Map for up to 400 dwellings. The completion of this phase will be based on the provision of a Local Service Centre.

Phase 3: 2014-2017

(iii) Land to the west of the former power station site (PS2) – the third phase of housing development will be on land to the west of the former power station site where land is allocated on the Proposals Map for up to 400 dwellings.

Phase 4: 2018-2021

(iv) Fleetwood Docks Mixed Use Development Area (FD2) - the fourth phase of housing development will be within the Fleetwood Docks Mixed Use Development Area where land is allocated on the Proposals Map for up to 120 dwellings.

Other Plans or Projects

- 4.15 The following plans and projects under consideration may have the potential to result in incombination impacts on the designated sites. However, no details of the design of or timescale for these projects or whether they have been subject to appropriate assessment were available at the time of writing:
 - Overhead lines at the old ICI recycling plant in Stanah (02-98-836). There are two
 planning applications for this project, one submitted in 2004 for replacement of steel
 masts at Nott End Waste Water Treatment Works, and one in 1998 for proposed
 overhead lines in the south of the AAP area. This permission has not yet been
 approved;
 - North-west Offshore wind farm, 30 wind turbines located approximately 4 miles off the coast of Barrow-in-Furness.
- 4.16 Residential housing developments that have had planning permission granted or have planning applications currently under consideration within the AAP area include:
 - Associated British Ports 380 dwellings and remediation of the site, raising of site levels and a proposed access road including a bridge over the Wyre Dock entrance.



- planning permission granted 04/00240 (went to committee 6 December 2006, deferred for completion of Section 106 agreements);
- NPL Estates planning application submitted for industrial land providing 880 additional employment jobs within secure employment site (not yet approved).
- 4.17 Natural England, in their response to the screening consultation, suggested that the Barrow Port Area Action Plan needed to be considered in relation to in-combination effects. An appropriate assessment of this document is currently underway, due for completion toward the end of June. No information could be given on the initial conclusions of the assessment (personal communication, Regeneration Department, Barrow-in-Furness Borough Council). Also, the Barrow-in-Furness Core Strategy is currently not at the preferred options stage and an appropriate assessment has not been carried out (personal communication, Regeneration Department, Barrow-in-Furness Borough Council).
- 4.18 Morecambe Coastal Defence project, by Lancaster City Council, is due for completion in September 2007. Natural England considered the development to have a significant effect on the designated sites - 13 ha of foreshore habitat has been lost as a result of the development. However, compensatory measures for these coastal defence works are currently being implemented close to the Ribble Estuary and early monitoring suggests that the mitigation measures implemented on-site have been successful (personal communication, Jedd McAlistair, Lancaster City Council).



Potential Effects upon Integrity of the Designated Sites

Adverse Effects

- 5.1 There are a number of potential impacts that could occur on the Morecambe Bay SAC, SPA and Ramsar site as a result of the implementation of the AAP Preferred Option either alone or in-combination with other plans or projects. The adverse effects which were identified at screening stage as having the potential to cause a likely significant effect (below in bold) are assessed in more detail below regarding their likelihood of adversely affecting the integrity of Morecambe Bay SAC, SPA, Ramsar site and whether these effects can be avoided or mitigated. In assessing the effects on the integrity of the site(s) use has been made of the favourable conditions table and sensitivity/vulnerability matrices contained in *Morecambe Bay European Marine Site*, English Nature's advice given under Regulation 33(2) of the Conservation (Natural Habitats &c.) Regulations 1994 (issued 14 January 2000) which was provided by Natural England.
- 5.2 The screening matrix from which the potential effects were derived (those shown in bold below) is presented in Appendix 2.
- 5.3 The magnitude of the potential effects and therefore the significance of the effects will vary, depending on a number of factors, for example, the scale of proposed development, the duration of the schemes, the resilience of the environment and the scope for avoidance, mitigation and enhancement.
- As the assessment has been undertaken on a plan rather than specific project full details of component development within the plan area are not known and the assessment has been undertaken at a strategic level. Subsequent development proposals within the AAP area are expected to be brought forward through the planning and development control process and will be detailed in respect of specific development proposals at particular locations.
 - (i) Direct loss of habitat which is outside of the designated site(s) but that is key to the overwintering and migratory bird population (applicable to SPA and Ramsar site only).
- 5.5 The cited interest feature of the SPA/Ramsar which occurs outside of the designated boundary is the overwintering and migratory bird population, with breeding bird populations occurring outside of the SPA/Ramsar boundary being of lesser importance. Arm Hill and the Wyre Estuary lagoons are the closest high tide bird roosting areas to the AAP outside of the designation boundaries (indicated by WeBS sector counts).
- 5.6 The Arm Hill high tide roost to the east of the Wyre Estuary will not be directly affected by any of the AAP proposals.
- 5.7 Of the lagoon areas within the Wyre Estuary Lagoons WeBS Sector (to the west of the estuary) two are outside of the AAP boundary and will therefore not be subject to direct habitat loss as a result of the proposals and no habitat loss due to physical damage is anticipated.



- 5.8 The Fleetwood Docks lagoon and Fleetwood Nature Park lagoon will be retained as part of the AAP proposals and therefore no direct habitat loss or loss due to physical damage is anticipated.
- The lagoon(s) within the landfill area which were subject to an incomplete landfill operation undertaken by ICI will be subject to remediation under the AAP proposals to reclaim the lagoons for nature conservation and recreational use. The lagoons are currently considered to contain unsafe levels of contamination. Remediation of these lagoons has the potential to cause direct habitat loss or damage to the current lagoons. There are currently no details available on how the remediation of the lagoons will be undertaken or the programme for the remediation.
- 5.10 The damage/loss of lagoons within the landfill area is likely to be short-term. The lagoons within the landfill area are only a small proportion of the overall habitat available to the overwintering and migratory birds and it is considered unlikely that the damage/loss of these lagoons will have a significant effect upon the integrity of the SPA/Ramsar in light of the conservation objectives for the site(s). However, it is difficult to conclude that the damage/loss of these lagoons together with the in-combination effects of the disturbance of various developments associated with the AAP will not be significant in terms of site integrity.
- In order to ensure that there will be at least negligible impacts and ideally beneficial impacts from the remediation of the lagoons in the long-term there will need to be no net loss in suitable roosting habitat for overwintering and migratory birds. Mitigation measures to ensure that there are no significant long-term impacts to the overwintering and migratory bird populations are given in Section 6 of this report.
 - (ii) Increased disturbance of wintering and migratory bird populations due to increased human activity, leading to a change in the dynamics of the estuary bird populations as a result of loss of some roosting and feeding sites (applicable to SPA, Ramsar only)
- 5.12 The greatest potential for disturbance to birds using habitat within the SPA, Ramsar boundary is from increased human presence. This is likely to come from the new housing developments, including that in the north of the AAP area which is almost adjacent to the SPA, Ramsar boundary. The presence of these dwellings along with the continuous riverside route between Stanah and Fleetwood has the potential to cause disturbance to wintering and migratory bird populations, including through the use of security lighting on residential properties. There is currently no access to the shore from the Fleetwood side of the estuary although a footpath currently runs adjacent to the southern section of the AAP area and another footpath is adjacent to the northern AAP area near Fleetwood Docks. There is also the potential for disturbance from increased levels of artificial lighting associated with both residential and industrial development. This could affect roosting and feeding behaviour of birds using the estuary and lagoons at any time of year.
- 5.13 The disturbance from proposals within the AAP due to increased human activity is unlikely to cause any significant impacts on site integrity through disturbance of birds using the Arm Hill high tide roost site, which is outside of the SPA/Ramsar boundary and on the eastern side of the Estuary. Therefore, effects on this roost site from disturbance are not considered further.
- 5.14 Increased recreational and industrial uses within the AAP area also have the potential to cause disturbance to wintering and migratory birds using the Wyre Estuary Lagoons (plus the lagoons at Fleetwood Docks and Fleetwood Nature Park). The Wyre Estuary lagoons



form an important component of the habitat used by wintering wildfowl, some of which use the lagoons in numbers that are important in a European context, including ringed plover, particularly in autumn and spring months when birds are on passage. Whilst a large number of sanderlings use the lagoons, they are not of internationally qualifying levels. However, it is clear that the lagoons play an important role in habitat provision for this species on passage, a time when many species are vulnerable.

- The lagoons within the landfill area will be particularly vulnerable to disturbance from increased recreational use of the reclaimed landfill as these lagoons are not currently publicly accessible and are fenced to prevent access (for reasons of public health and safety given the contaminated nature of the lagoons). The lagoons within Fleetwood Nature Park and Fleetwood Docks are currently publicly accessible, although public access is difficult. The large lagoon within Fleetwood Nature Park was designed with the help of Flyde Bird Club in order to reduce public accessibility and therefore disturbance. The lagoon areas outside of the AAP area are within private land adjacent to roads and large residential areas with no formal public access. Increased impacts from recreational and other human disturbance are less likely on these lagoons.
- 5.16 The wintering and migratory species which are qualifying features of the SPA, particularly ringed plover, are largely vulnerable to irregular visual disturbance. For example it is more likely that the birds could become habituated in the long-term to the presence of new buildings but could be disturbed by the irregular passing of walkers (particularly those with dogs) and cyclists.
- 5.17 Natural England assesses the relative exposure of habitats within the SPA and associated internationally important populations of regularly occurring migratory species population to non-physical disturbance as medium based on October 1999 levels of activities. All migratory species are considered to have high sensitivity and vulnerability to non-physical disturbance. Wintering and migratory birds are vulnerable due to daylight hours being reduced for feeding in autumn through to spring and birds not being able to afford to loose time and waste energy moving from disturbed areas. The available feeding habitat also reduces in extent in winter due to high spring tides.
- 5.18 It is difficult to assess the effect of disturbance on the wintering and migratory bird populations in terms of the effects on the integrity of the SPA/Ramsar site. The part of the SPA/Ramsar site adjacent to the AAP area is only a small proportion of the total low tide roost habitat available to birds. The area around Fleetwood adjacent to the estuary (and therefore the designated sites) already has a high degree of residential and industrial use and Natural England assesses the designated site(s) as robust with no current significant effects on the favourable condition of the site(s).
- 5.19 It is considered that there is the potential for an adverse effect upon the SPA/Ramsar from increased human disturbance but that this can be mitigated to reduce the effects to an acceptable (therefore insignificant) level upon the integrity of the site.
- 5.20 Mitigation measures to reduce adverse disturbance effects to the overwintering and migratory bird populations are given in Section 6 of this report.
 - (iii) <u>Disturbance to bird populations during construction works (applicable to SPA, Ramsar only).</u>
- 5.21 Construction of individual elements of the AAP will cause short-term disturbance (mainly of an acoustic and visual nature). With the proposals being at the plan stage there is currently no information available on construction programmes apart from the residential areas, construction of which are phased over four time periods until 2021.



- It should be noted that bird communities are highly mobile and exhibit patterns of activity related to tidal water movements and other factors. Birds will also have different sensitivity to disturbance at different times of year, the most sensitive time usually being within the breeding season. Whereas disturbance from winter roosting and feeding areas may reduce available feeding time and the overall time available for the bird to feed and gain weight prior to migration, disturbance of breeding birds could result in abandonment of nests and a decrease in the populations net rate of recruitment. If all of the construction within the AAP area occurred concurrently there is the potential for a significant adverse effect upon the integrity of the SPA/Ramsar site in terms of reduction of numbers of qualifying features (i.e. birds). However, the construction will not occur concurrently and in some areas construction will take place in existing urban or industrial areas. It is anticipated that the overall proposals will be constructed over a long time period so that the amount of construction at any one time will be of relatively small scale and of temporary duration.
- In the areas of Fleetwood Docks and the secure employment site there is already a high level of operational, developed land and therefore the increase in noise and visual disturbance from construction activities are not anticipated to be as high as in undeveloped ('greenfield' land) or less developed areas of the plan ('brownfield' land).
- 5.24 It is more likely for short-term construction disturbance of birds using the SPA/Ramsar site to occur when building the northern housing development (of up to 380 dwellings) and any construction associated with provision of the continuous river route. It is considered that the feature most sensitive to disturbance within the SPA/Ramsar is the breeding Sandwich tern population, which is particularly sensitive to human activities which cause noise or visual disturbance particularly in summer months when on the nest. This can cause them to abandon nests and can exclude them from suitable habitat. In recent years, the sandwich tern colony has moved to the nearby Duddon Estuary. However, Sandwich terns are highly nomadic and the birds could return to Morecambe Bay. Whole colonies can move within a couple of years, in response to changing conditions; they are vulnerable to disturbance and favour remote, undisturbed areas. The fact that the breeding population is distributed in a small number of large colonies also makes them vulnerable; changes in one area could affect a large proportion of the population. Due to the short-term duration of construction works it is not considered that there will be any significant adverse long-term effects on the integrity of the site and there will be no long term exclusion of Sandwich tern nesting habitat within the SPA/Ramsar as a result of construction activities.
- 5.25 There is likely to be construction disturbance of birds using the Wyre Estuary lagoons during reclamation and remediation of the landfill areas. Due to the location of the lagoons, construction disturbance is only likely to affect the lagoons within Fleetwood Nature Park and the landfill area. Whilst the lagoons are not considered to be significant breeding habitats for herring gull, lesser black-backed gull, little tern, ringed plover or sanderling there are regular counts of over 30,000 birds recorded at the lagoons during the breeding season including large numbers of shelduck, ringed plover, lapwing, knot, dunlin and redshank. A maximum of 55 Sandwich terns have been recorded during the breeding season (June 2003), with none recorded in the last 3 years. However, BTO records indicate that these lagoons have a greater importance in terms of a wintering and premigratory habitat particularly for ringed plover and sanderling. The lagoons support a significant proportion of the 20,000+ birds that use the SPA in winter, some of which use the lagoons in numbers that are important in a European context. This includes 300 Sandwich terns that were recorded using the lagoons during September 2004 and 2005 which is when birds are preparing to migrate. Three hundred birds represent approximately



- half of the Morecambe Bay/Duddon Estuary breeding population, suggesting that the Wyre Estuary Lagoons may provide important pre-migratory habitat.
- 5.26 It is considered that construction effects without mitigation has the potential to cause adverse impacts upon the integrity of the SPA/Ramsar but that mitigation measures could reduce the impacts to acceptable levels, in particular focusing on timing of construction activities to be in periods when birds are less vulnerable to disturbance.
- 5.27 Mitigation measures to ensure that there are no significant impacts to important bird populations from construction activities are given in Section 6 of this report.
 - (iv) <u>Increased disturbance of the breeding Sandwich tern population (application</u> to SPA, Ramsar only).
- 5.28 No habitat within the SPA/Ramsar site used by the breeding Sandwich tern colony will be directly affected by the proposals. The Wyre Estuary Lagoons are not considered to be significant habitat for breeding Sandwich terns. A maximum of 55 Sandwich terns have been recorded during the breeding season (June 2003), with none recorded in the last 3 years. However, the Wyre Estuary Lagoons will be retained and will be available for future use by Sandwich terns.
- 5.29 The potential significant effects on the breeding Sandwich tern population within the SPA/Ramsar is likely to be from disturbance relating to increased human disturbance and construction activities largely relating to the continuous river route and new residential developments, including the presence of security lighting on residential properties. Natural England assesses the relative exposure of shingle habitats and associated breeding Sandwich tern population to non-physical disturbance as high based on October 1999 levels of activity.
- 5.30 These issues have been discussed under items (i), (ii) and (iii) above. It is considered that adverse effects may occur as a result of the AAP proposals but that these can be reduced with the implementation of mitigation measures to acceptable levels (I.e. to levels that will result in no significant adverse effect on the integrity of the SPA/Ramsar site).
- 5.31 Mitigation measures in relation to the breeding Sandwich tern colony are given in Section 6 of this report.
 - (v) Contamination from emissions to water as a result of increased industrial use or increased housing density. This could be a result of increased pollution per se or an increase in the number of pollution sources, or both. An increase in water pollution could result in cumulative effects on the qualifying interests. For example, if the quality of the feeding habitat becomes poorer, this could reduce the number of birds that any one area can support. This pollution can also affect mudflats, sandflats and Salicornia vegetation, for example by siltation leading to degradation and reduced productivity (applicable to SAC, SPA and Ramsar).
- 5.32 Natural England assesses the relative exposure of habitats associated with the internationally important assemblages of birds occurring within the SPA/Ramsar as medium for most contamination and low for thermal and saline contamination. There are high levels of exposure of intertidal, sub-tidal boulder and cobble skear communities and coastal lagoon communities to changes in turbidity (e.g. from run-off and dredging). The exposure of shingle habitats to contamination (and therefore the breeding Sandwich tern colony) is considered to be low (based on October 1999 level of activities).



- All habitats associated with the important bird assemblages are considered to be highly sensitive and vulnerable to toxic contamination; with coastal lagoons, intertidal and subtidal boulder and cobble skear communities particularly sensitive and vulnerable to nutrient enrichment and organic enrichment and coastal to changes in salinity and thermal regime. The major influence of contamination on the important bird assemblages would be degradation and reduced productivity of feeding habitats within the designation boundaries and toxic contamination in the food chain potentially causing reduced fitness, survivability and fecundity of individuals.
- All SAC habitats are considered to be sensitive and vulnerable to toxic contamination with coastal lagoons and eel grass bed communities having particular sensitivity and vulnerability to nutrient and organic enrichment. The major influence of contamination on the SAC habitats would be to cause toxic contamination of plants thus preventing photosynthesis and growth or smothering of habitats through siltation.
- 5.35 The habitats outside of the designated sites which are important for the bird assemblages and which may be affected by contamination are the Wyre Estuary Lagoons. However, as these lagoons are less important as feeding sites and more important as wintering and migratory sites it is less likely that contamination would have a significant affect upon the associated bird population.
- 5.36 Sources of contamination are likely to be from:
 - increased run-off during construction activities (leading to potential siltation of habitats and turbidity of water which could particularly affect eel grass communities and coastal lagoons) within the designated sites;
 - increased discharges of industrial processes leading to potential toxic and non-toxic discharges to the estuary,
 - increased sewage and storm water discharges to the estuary from increase in residential development.
- 5.37 The increase in types and amounts of contaminants entering the estuary and thus the designated sites through discharges has the potential to cause significant adverse effects on the integrity of the designated sites. However, there are standard mitigation practices for pollution prevention and published compliance criteria in relation to controlled waters (i.e. surface water and ground water). Additionally discharges to controlled waters may be subject to consent conditions in relation to contaminant concentrations such as trade effluent discharge consents. These consents are granted and enforced by the Environment Agency. Part of the role of the Environment Agency is to monitor water quality of discharges and controlled waters.
- 5.38 The Environment Agency is currently coming to the end of their review of Consents for Morecambe Bay SAC/SPA and there are issues with water quality from consented discharges to the site. Until the Review of Consents (due in the next few months) is complete the Environment Agency could not release any specific information. Therefore it is difficult to assess the 'in-combination' impacts of contamination upon the designated sites based on current information. Each development which could result in potential contamination of the estuary and could adversely affect the SPA/Ramsar site would need to be subject to separate screening for Appropriate Assessment.
- 5.39 Mitigation measures in relation to contamination of the designated sites are given in Section 6 of this report.



Beneficial Effects

- 5.40 There is the potential for beneficial effects on the designated sites as a result of the sensitive, ecological design of the reclaimed landfill area. This could increase the area and quality of shoreline habitats, which could benefit roosting birds and could also form mitigation for predicted adverse effects in the future. However, there are currently no definite development proposals and the beneficial effects cannot be quantified.
- 5.41 Ecological enhancements will be sought within the AAP wherever possible. Funding for this enhancement could be sourced from commuted sum payments requested from developers submitting planning applications within the AAP area (see Section 6.4).



6. Mitigation Measures

- 6.1 The following tables give an outline of mitigation measures which are required to reduce identified effects on the designated sites to levels which will not significantly affect the integrity of these sites. Separate mitigation measures are given in relation to each of the identified potential effects with details of how the mitigation will be implemented and how this will be monitored in a format recommended by the EU guidance on appropriate assessment (reference 8.9). The following abbreviations are used in the tables:
 - BTO British Trust for Ornithology
 - RSPB Royal Society for the Protection of Birds
 - WBC Wyre Borough Council
 - NE Natural England
- All developments within the AAP area will need to comply with the principles and objectives set out in the Fleetwood Thornton Area Action Plan Preferred Options Report (Draft, February 2007) with particular reference to Development Principle 5 Protecting the Environment:
 - There will be an emphasis on creating sustainable patterns of development;
 - Careful consideration will be given to the effect of new development on the various nature conservation interests associated with the Area and its surrounding environment including the adjacent European Marine Site together with land associated with the Wyre Estuary which includes nationally and internationally important sites of nature conservation value. Where appropriate planning applications will be required to be accompanied by appropriate surveys or assessments to assess the direct and indirect impacts of the proposals on habitats and species.
- Each planning application must be supported by assessments of how the development proposal may contribute to adverse impacts on the integrity of Morecambe Bay SAC/SPA/Ramsar and will need to include a detailed plan of how relevant mitigation measures, including those outlined in this report, will be implemented in consultation with Wyre Borough Council and Natural England. Planning permissions will also be considered favourably where they can demonstrate that, as well as having no significant effects on the designated sites, they can contribute toward local nature conservation enhancements, particularly where these enhancements are aimed at the qualifying features of Morecambe Bay SPA/SAC/Ramsar site.
- The Fleetwood Thornton Area Action Plan Preferred Options Report contains several references to the Council requiring developers to make commuted sum payments towards a comprehensive series of highway improvements in relation to applications for the construction of new houses. Developers may also be requested to make commuted sum payments towards ecological mitigation measures to reduce adverse effects on the integrity of the Morecambe Bay SAC/SPA/Ramsar in the light of the conservation objectives for these sites and to implement enhancement measures specifically designed to increase beneficial effects on the qualifying features and conservation objectives of the European site(s) and the Ramsar site.



- An eco-landscape plan will be requested by Wyre Borough Council from the developer for the reclaimed landfill area to design and incorporate habitats which are an extension of the SPA/Ramsar (and/or provide suitable buffer habitat for the designated site) where possible and to provide additional feeding, roosting and nesting habitat specially designed for the important bird assemblage which is a qualifying feature of the SPA/Ramsar. This should be integrated with local nature conservation objectives and would need to consider potential conflicts of interest between recreational use and nature conservation.
- 6.6 Input on the eco-landscape design will need to be sought from Natural England, BTO, RSPB, Fylde Bird Club and the local Wildlife Trust to ensure that the nature conservation objectives for the area are met. Other interest groups should be given the chance to input to achieve the recreational objectives of the area.
- 6.7 The eco-landscape plan will need to include details of the long-term management of the site including timing of management to be sensitive to the nature conservation interests and who will be responsible for implementation of the management. There will also the requirement for monitoring of the area in relation to its recreational and nature conservation uses in order to inform the management of the site.



Direct loss of habitat which is outside of the designated site(s) but that is key to the overwintering, breeding and migratory bird population (applicable to SPA, Ramsar site only).

Significant Effect: Short-term loss and/or damage of lagoon habitat within ICI landfill area.

Mitigation Measure

(i)a No net loss of lagoon habitat. Ensure design of remediated lagoons or replacement lagoons are beneficial to overwintering migratory bird populations in consultation with NE, BTO, RSPB and Flyde Bird Club. For enhancements there should be an aim to provide/create a greater amount of lagoon habitat than that which is lost or damaged in the ratio of at least 1:3.

Degree of confidence in mitigation success

If the designs of remediated lagoons are carried This will depend on when the BTO monitor Wyre Estuary Lagoons (i)a out in close consultation with NE, BTO, RSPB and Flyde Bird Club there is a high degree of confidence in success of mitigation in the longterm.

How mitigation will avoid or reduce Evidence of how mitigation will be adverse affects on integrity

No net loss of habitat and any newly created habitat to be suitable to the overwintering, breeding and migratory bird populations in future.

Timescale relative to plan when Proposed monitoring scheme and how mitigation will be implemented

timescale are not known.

implemented and by whom

Planning and development control process. Measures should implemented by the company responsible for the remediation of the lagoons under agreement with WBC.

any mitigation failure will be addressed

remediation is carried out. Details of including within the landfill area. Agreement should be made with BTO or Flyde Bird Club to continue to monitor the remediated lagoons. Annual results to be analysed by BTO and NE with an analysis of 5 year peak numbers of birds (5 years following remediation of lagoons and availability for use by wintering and breeding birds). If not being used to the same extent as current lagoons possible reasons for this to be



reported on as well as measures that might address these reasons. Landowner to be responsible for implementation of these measures, enforced by WBC.

Conclusion: There will be short-term high tide roost habitat loss during remediation. However, there are alternative roosts sites in the immediate area and the area of temporary habitat loss as a proportion of the total local high tide roost habitat is small. If the mitigation measures outlined are implemented the temporary disturbance and habitat loss should not cause a significant adverse effect on the integrity of the SPA/Ramsar site from loss/damage of habitat in the long-term. There is the potential for long-term beneficial effects due to improved high tide roost habitat and from increasing the area available as high tide roost habitat for overwintering and migratory bird populations.



Increased disturbance of wintering and migratory bird populations due to increased human activity, and leading to a change in the dynamics of the estuary bird populations as a result of loss of some of roosting and feeding sites (applicable to SPA, Ramsar only)

Significant Effect: Increased public access along the shorefront between Fleetwood and Stanah, increased recreational disturbance of Wyre Estuary Lagoons within the AAP area (ICI landfill area and Fleetwood Nature Park) and an increase in numbers of humans in the area due to residential developments and disturbance from new light sources.

Mitigation Measure

Restrict public access to the foreshore. There Reduction in disturbance of birds Planning and development control (ii)a should be agreement with NE for a buffer zone between the continuous river route and the foreshore and careful control of access to the shore, particularly where there has previously been no public right of way. Signage should be used along the continuous riverside route for people to stay on the path and keep dogs on a lead pointing out the sensitivities of the estuary in terms of birds. The design will be required to create the route at a lower level than the foreshore and/or screen part of the route using planting or low level barriers (visual screen) to reduce the visual disturbance on birds, particularly along sensitive parts of the foreshore.

Take measures to prevent motorised access to the foreshore adjacent to ICI and in any other areas where there is currently informal and unmanaged public access.

How mitigation will avoid or reduce Evidence of how mitigation will be adverse affects on integrity

using the SPA/Ramsar by reducing visible presence of humans.

implemented and by whom

process. The developer will be responsible for ensuring these measures are carried out and agreement reached with NE. The developer to commission designers to consider options for lowering the route relative to the foreshore and/or provide visual screens.

Reduce risk of loss of habitat due to informal and uncontrolled access.

Restrict direct access from the residential area to Reduction in disturbance of birds Planning and development control (ii)b



the north of the AAP area to the Estuary Foreshore using the SPA/Ramsar by reducing (i.e. no public rights of way to be provided directly visible presence of humans. from the residential area to the Estuary other than a link to the continuous riverside route). Design of visual and noise screening between the residential development and any low tide roost sites supporting species which would be vulnerable to this disturbance.

process. The developer will be responsible for ensuring these measures are carried out.

Provision of visual screening and/or fencing to the (ii)c remediated lagoons and any new lagoons provided within the ICI landfill area to restrict public access. Although it is recognised that some public views and recreational use of waterbodies is desirable within public open spaces, these will be provided separately to those lagoons of use as high tide roost sites to avoid compromises between the two uses. An agreed stand-off distance from the lagoons used as high tide bird roosts will be agreed with NE. If public access to bird lagoons is desirable then it should be at a restricted point and in the form of visually unobtrusive hides (to be discussed and agreed with NE). The majority of banks of the roost lagoons however, should be visually screened and/or fenced off. No recreation on the water (such as boating or fishing) should be allowed on these lagoons. If water-sports areas are required then additional water bodies will need to be provided for these uses. The lagoon within Fleetwood Nature Park already has restricted public access. There will continue to be restricted public access to this lagoon.

An eco-landscape plan for the lagoons and

Reduction in disturbance of birds Planning and development control using the Wyre Estuary Lagoons by restricting the presence of humans.

Measures will process. implemented by WBC within the Nature Park and by the company responsible for the remediation of the landfill lagoons and provision of any new lagoons by the developer under agreement with WBC.

The developer will be responsible for ensuring these measures are carried out and agreement reached with NE.



reclaimed landfill area should be prepared by an ecologist in consultation with NE, BTO, RSPB and Flyde Bird Club to detail how the screening/fencing will be implemented and what species/materials to use with provisions for management of the habitat if planting is used or maintenance of any materials used. The eco-landscape plan will need to be agreed with NE, BTO, RSPB and Flyde Bird Club prior to implementation.

Provision of an additional lagoon within either the Provision of additional habitat that Planning and development control (ii)d reclaimed landfill area or old ICI landfill designed specifically for important populations of wintering and migrating waterfowl. There will be restricted public access to this lagoon.

will not be subject to recreational pressure.

process. The developer will be responsible for ensuring these measures are carried out and NE. agreement reached with Enforcement by WBC through the planning process.

Restrict use of security lighting on any new Reduction in disturbance of birds Planning and development control (ii)e developments within a buffer zone from the using the SPA/Ramsar by reducing SPA/Ramsar. The width of the buffer zone will be sources of light spill. agreed with NE (and in consultation with BTO, RSPB and Flyde Bird Club). The use of screens, such as fencing or earth bunds, or changes in topographic levels of development platforms could be considered within development plans to prevent general light spill from developments onto the foreshore.

Degree of confidence in mitigation success

If mitigation measures agreed with NE, BTO, RSPB The design of the mitigation will be SPA/Ramsar monitored by BTO. (ii)a and Flyde Bird Club there is a high degree of agreed prior to installation of the Agreement should be made with BTO

Timescale relative to plan when Proposed monitoring scheme and how mitigation will be implemented

process. The developer will be responsible for ensuring these measures are carried out and agreement reached with NE. The developer to commission designers to consider options for preventing light spill to the foreshore and to provide visual screens.

any mitigation failure will be addressed



confidence in success of mitigation in the longterm.

continuous river route to ensure all mitigation can be implemented line of the route.

that any issues arising with respect to disturbance of birds using the satisfactorily and to inform the exact foreshore will be raised by BTO to WBC and NE. The developer will be responsible for designing any alterations in the route and these implementing measures (including extra screening or moving the route further from the foreshore more sensitive areas) in agreement with WBC, BTO and NE.

If enforced through the development control During proposal master planning (ii)b process there is a medium degree of confidence in (residential development up to 2008). success.

Enforcement by WBC through the planning process.

If the design of screening vegetation and (ii)c restricting public access around the lagoons is carried out in close consultation with NE. BTO. RSPB and Flyde Bird Club there is a high degree of confidence in success of mitigation in the longterm.

Details of timescale are not known. However, the plan for partial Agreement should be made with BTO screening and restricting access to lagoons will be prepared in advance of any works on-site to ensure that the screening/fencing can be in place prior to the majority of proposed residential development and by 2010.

The screening and design of restricted access to the lagoons within the landfill area will depend on when the remediation is carried out but should be implemented as the final stage in remediation before contractors have left the site.

BTO monitor Wyre Estuary Lagoons. to continue to monitor the lagoons. Annual results to be analysed by BTO and Natural England with an analysis of 5 year peak numbers of birds (5 years following remediation of lagoons and availability for use by wintering and breeding birds). If not being used to the same extent as current lagoons possible reasons for this to be reported on as well as measures that might address these reasons. WBC/Developer to be responsible for agreement and implementation of these measures.

If the lagoon is designed and agreed in Timing will depend upon when the consultation with NE, BTO, RSPB and Flyde Bird reclamation/remediation of landfill with BTO as part of Wyre Estuary

WBC/Developer to agree monitoring



Club there is a high degree of confidence in areas success of mitigation in the long-term.

carried implementation should be built into reclamation/remediation the programme.

Lagoon counts.

the lagoon is designed appropriately it is unlikely that birds will not use it. However, results of monitoring will be analysed after first 5 years of counts and compared with results from other lagoons. Potential design faults which may be discouraging use by overwintering and migratory birds will be identified by BTO following the first 5 years of monitoring and potential measures to remedy the faults proposed. WBC/Developer will be responsible for the agreement and implementation of any remedies.

If mitigation measures are agreed with NE, BTO, The design of the mitigation will be Enforcement by WBC through the (ii)e RSPB and Flyde Bird Club there is a high degree of agreed prior to consent for any planning process. confidence in success of mitigation in the longterm.

developments.

Conclusion: Based on current data and despite the mitigation measures set out above there may be residual adverse effects on the integrity of the SPA/Ramsar due to disturbance of overwintering and migratory bird populations. Natural England advise that if adverse effects are anticipated then compensatory measures such as habitat creation or mitigation in the form of reducing disturbance through the use of refuges at critical times of the year, may be an option.

To ensure that the proposed measures will be sufficient to ensure no significant effect upon the integrity of the SPA/Ramsar it is proposed that an additional lagoon within the reclaimed landfill site or the old ICI landfill is created and designed specifically with the important wintering and migratory bird populations in mind. In this context this would not be considered a compensation measure but an enhancement of the area which will allow a higher degree of confidence that the mitigation measures in relation to disturbance of bird populations will be successful in reducing the impacts on the integrity of the SPA/Ramsar such that they are not significant.



Disturbance to bird populations during construction works (applicable to SPA, Ramsar only).

Significant Effect: Construction disturbance of breeding Sandwich terns within the SPA/Ramsar (using foreshore shingle habitat), and of wintering and migratory birds using the Wyre Estuary Lagoons within Fleetwood Nature Park and the landfill area.

Mitigation Measure

sensitive times of year.

(iii)a Implement 'no-construction' zones around the Reduction in noise and visual Planning and development control banks of the lagoons such that it can be demonstrated to the satisfaction of NE that no avoiding birds abandoning pre- implementation. construction disturbance impacts will occur within migration roosts. this zone. The distance of these exclusion zones from the works will vary depending on the exact works to be undertaken and the species involved and should be agreed at the planning stage between the developer, LPA and NE. measures such as temporary screening during construction may also be required as discussed in (iii) c below together measures that minimise light spill into the surrounding area at night, or

How mitigation will avoid or reduce Evidence of how mitigation will be adverse affects on integrity

implemented and by whom

disturbance from construction

process. WBC responsible for

Restrict timing of construction activities in the north of the AAP area adjacent to lagoons in winter or visual screens or noise bunds in place between construction activities and lagoons prior to and pre-migratory habitat. reclamation/remediation activities taking place.

restrictions on working times at particularly

disturbance from construction activities avoiding birds abandoning nests or implementation.

noise

construction

from

Reduction in

disturbance

and visual Planning and development control process. WBC responsible avoiding birds abandoning wintering implementation.

(iii)c Shingle habitat used by breeding Sandwich terns Reduction in noise to be advised by NE/BTO/RSPB/Flyde Bird Club. Restrict timing of construction

and visual Planning and development control **WBC** process. responsible



associated with continuous river route in summer becoming excluded form nesting (construction activities adjacent to shoreline to be undertaken between September and February) or agree with NE a stand-off distance for construction from sensitive Sandwich tern breeding habitat.

habitat.

Staged approach to reclamation of landfill and (iii)d remediation of old landfill such that the northern reclamation area is completed with provision of an alternative lagoon in place before major phase of remediation of lagoons in the southern landfill area. Remediation of the lagoon within the landfill area will have to be undertaken outside of the bird breeding season because of the potential to damage or destroy bird nests, unless it can be demonstrated that remediation will occur in such a way as to avoid damage or destruction of birds nests and to avoid birds abandoning nests due to disturbance. The provision of an alternative lagoon will mitigate for the short-term loss of the remediated lagoon during the wintering and migratory period. The alternative lagoon should be designed specifically for use by wintering and migratory birds in consultation with NE/BTO/RSPB/Flyde Bird Club.

Avoidance of damage/destruction of Planning and development control birds nests and abandonment of nests and provision of alternative implementation. lagoon habitat in the immediate vicinity for wintering/migratory birds.

process. WBC responsible for

Degree of confidence in mitigation success

Implemented through planning (iii)a development control process. High degree of confidence.

Timescale relative to plan when mitigation will be implemented

Implementation from of restricted zone for construction activities around the lagoons immediately construction unless prior to developer can conclusively prove to the satisfaction of NE that no

Proposed monitoring scheme and how any mitigation failure will be addressed

WBC to monitor through planning and development control process. To be included in WBC Annual Monitoring Report.



construction disturbance impacts will occur within this zone.

(iii)b	Implemented development confidence.	through the control process.	planning and High degree of	Dependent on timing on construction activities.	WBC to monitor through planning and development control process. To be included in WBC Annual Monitoring Report.
(iii)c	Implemented development confidence.	through the control process.	planning and High degree of	Mitigation to be implemented at construction programming stage of the continuous river route. Consultations with NE/BTO/RSPB/Flyde Bird Club will be required to inform the construction programme.	
(iii)d	Implemented development confidence.	through the control process.	planning and High degree of	Dependent upon timing of reclamation of landfill and remediation of old landfill. Early implementation will provide extra mitigation through the creation of additional lagoon habitat for birds.	

Conclusion: If the mitigation measures outlined are implemented it is considered that there will be no significant adverse effect on the integrity of the SPA/Ramsar site.



(iv) Increased disturbance of the breeding Sandwich tern population (application to SPA, Ramsar only).

Significant Effect: Disturbance of breeding Sandwich terns within the SPA/Ramsar (using foreshore shingle habitat), particularly from recreational disturbance from continuous riverside route and associated construction activities and form increased human presence due to increase in local residential developments and increased disturbance from new light sources. Note that the mitigation measures below have all been previously mentioned above in relation to other effects.

Mitigation Measure

(iii)a Shingle habitat used by breeding Sandwich terns Reduction in noise and visual Planning and development control to be advised by NE/BTO/RSPB/Flyde Bird Club. Restrict timing of construction activities associated with continuous river route in summer (construction activities adjacent to shoreline to be habitat.

undertaken between September and February) or agree a stand-off distance for construction from

sensitive Sandwich tern breeding habitat with NE.

(ii)b Restrict public access to the foreshore. There should be agreement with NE for a buffer zone between the continuous river route and the foreshore and careful control of access to the shore, particularly where there has previously been no public right of way before. Signage should be used along the continuous river path for people to stay on the path and keep dogs on a lead pointing out the sensitivities of the estuary in terms of birds. There may be the possibility of creating the route at a lower level than the foreshore or screening part of the route using planting or low level barriers (visual screen) to

How mitigation will avoid or reduce Evidence of how mitigation will be adverse affects on integrity

disturbance from avoiding birds abandoning nests or implementation. becoming excluded form nesting

implemented and by whom

construction process. WBC responsible for

Reduction in disturbance of birds Planning and development control using the SPA/Ramsar by reducing the presence of humans.

process. WBC will be responsible for ensuring these measures are carried out and agreement reached with NE. WBC to commission designers to consider options for lowering the route relative to the foreshore or providing visual screens, particularly along sensitive parts of the foreshore.



reduce the visual disturbance on birds.

(ii)c Restrict use of security lighting on any new developments within a buffer zone from the SPA/Ramsar. The width of the buffer zone will be sources of light spill. agreed with NE (and in consultation with BTO, RSPB and Flyde Bird Club). The use of screens, such as fencing or earth bunds, or changes in topographic levels of development platforms, should be considered within development plans to prevent general light spill from developments onto the foreshore.

using the SPA/Ramsar by reducing

Reduction in disturbance of birds Planning and development control process. The developer will be responsible for ensuring these measures are carried out and agreement reached with NE. The developer to commission designers to consider options for preventing light spill to the foreshore and to provide visual screens.

Degree of confidence in mitigation success

Timescale relative to plan when mitigation will be implemented

Proposed monitoring scheme and how any mitigation failure will be addressed

Implemented through planning (iii)a development control process. High degree of confidence.

construction programming stage of the continuous river route. Consultations with NE/BTO/RSPB will be required to inform the construction programme.

Mitigation to be implemented at WBC to monitor through planning and development control process.

If mitigation measures agreed with NE, BTO, RSPB (ii)b and Flyde Bird Club there is a high degree of confidence in success of mitigation in the longterm.

agreed prior to installation of the continuous river route to ensure all mitigation can be implemented satisfactorily and to inform the exact line of the route.

The design of the mitigation must be SPA/Ramsar monitored by BTO. Agreement should be made with BTO that any issues arising with respect to disturbance of birds using the foreshore will be raised by BTO to WBC and NE. The developer will be responsible for designing any alterations in the route and implementing these measures (including extra screening or moving the route further from the foreshore more sensitive areas) in



agreement with BTO and NE.

(ii)e If mitigation measures are agreed with NE, BTO, The design of the mitigation will be Enforcement by WBC through the RSPB and Flyde Bird Club there is a high degree of agreed prior to consent for any planning process. confidence in success of mitigation in the long- developments. term.

Conclusion: If the mitigation measures outlined are implemented it is considered that there will be no significant adverse effect on the integrity of the SPA/Ramsar site.



(v) Contamination from emissions to water as a result of increased industrial use or increased housing density. This could be a result of increased pollution per se or an increase in the number of pollution sources, or both. An increase in water pollution could result in cumulative effects on the qualifying interests. For example, if the quality of the feeding habitat becomes poorer, this could reduce the number of birds that any one area can support. This pollution can also affect mudflats, sandflats and Salicornia vegetation, for example by siltation leading to degradation and reduced productivity (applicable to SAC, SPA and Ramsar).

Significant Effect: Contamination of habitats within the SAC/SPA/Ramsar as a result of construction run-off and increased discharged from industrial and residential uses into the Estuary.

	Mitigation Measure	How mitigation will avoid or reduce adverse affects on integrity	Evidence of how mitigation will be implemented and by whom
(v)a	All construction will follow Environment Agency Pollution Prevention Guide notes and any other construction best practice in relation to pollution prevention.		Planning and development control process. WBC will condition this for all relevant planning permissions.
(v)b	No direct discharges (i.e. discharges which have not been subject to primary or secondary treatment) to Wyre Estuary or to Wyre Estuary lagoons allowed from any new developments associated with the AAP.	As above	Planning and development control process. WBC will condition this for all relevant planning permissions.
(v)c	All discharges associated with development to be subject to discharge consents meeting water quality criteria.	As above	Planning and development control process and Environment Agency consents process.
(v)d	All planning applications must demonstrate consideration of Sustainable Urban Drainage. However, no discharges to soakaways due to risk of contaminants reaching Estuary through groundwater unless it can be demonstrated to the satisfaction of WBC, EA and NE that contamination	As above	Planning and development control process. WBC will condition this for all planning permissions.



risk will be negligible. Each development which could result in potential contamination of the estuary and could adversely affect the SPA/Ramsar site would need to be subject to separate screening for Appropriate Assessment.

	separate serecining for Appropriate Assessment.		
	Degree of confidence in mitigation success	Timescale relative to plan when mitigation will be implemented	Proposed monitoring scheme and how any mitigation failure will be addressed
(v)a	Implemented through the planning and development control process. High degree of confidence.	Conditions imposed at planning stage with designs of suitable mitigation submitted by developer for WBC approval. Mitigation implemented at construction phase.	Through planning and development control process.
(v)b	As above	As above	As above
(v)c	As above	As above	Through planning and development control process and through Environment Agency monitoring.
(v)d	As above	As above	Through planning and development control process.

Conclusion: If all of the development within the AAP strictly adheres to current pollution prevention best practice guidelines, guidelines for sustainable urban drainage solutions are followed and if all discharges are compliant then it is unlikely that the developments within the AAP will cause significant adverse effects upon the integrity of the designated sites. However, it is difficult at this stage to know the precise effects of any single developments within the AAP. Therefore any development within the AAP will require appropriate assessment screening to determine whether there will be any likely significant adverse effects on the Morecambe Bay SAC/SPA/Ramsar site from contamination. The developer will need to design appropriate mitigation measures as necessary in order to satisfy Natural England that there will be no significant adverse affects on the integrity of the designated sites either from the development alone or in-combination with other developments and in light of current water quality conditions within the Estuary.



7. Conclusions

- 7.1 Atkins Ltd was commissioned by Wyre Borough Council to undertake, on their behalf, an Appropriate Assessment of the preferred option for Fleetwoood Thornton Area Action Plan (AAP) in Lancashire under Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994.
- 7.2 The Wyre Estuary, which is immediately adjacent to Fleetwood, is part of the Morecambe Bay Special Area of Conservation (SAC), Special Protection Area (SPA) and a Wetland of International Importance (Ramsar site). The sites largely qualify for designation due to the presence of notable coastal habitats and internationally important populations of birds.
- 7.3 The screening matrix carried out on the preferred option for the AAP found there to be five likely adverse effects which could result in significant effects on the integrity of the SAC/SPA/Ramsar as a result of the AAP proposals, most of which relate to the internationally important bird assemblages associated with the SPA/Ramsar.
 - Direct loss of habitat outside of the designated site(s) that is key to the overwintering, breeding and migratory bird population (applicable to SPA, Ramsar site only). The potentially significant effect is related to the short-term loss and/or damage of lagoon habitat within ICI landfill area;
 - Increased disturbance of wintering and migratory bird populations due to increased human activity and new light sources (applicable to SPA, Ramsar only). The potentially adverse effect is related to an increase public access along the shorefront between Fleetwood and Stanah and increased recreational disturbance of Wyre Estuary Lagoons within the AAP area (ICI landfill area and Fleetwood Nature Park);
 - Disturbance to bird populations during construction works (applicable to SPA, Ramsar only). The potential adverse effect is related to construction disturbance of breeding Sandwich terns within the SPA/Ramsar (using foreshore shingle habitat), and of wintering and migratory birds using the Wyre Estuary Lagoons within Fleetwood Nature Park and the landfill area;
 - Increased disturbance of the breeding Sandwich tern population (application to SPA, Ramsar only). The potential adverse effect is related to disturbance of breeding Sandwich terns within the SPA/Ramsar (using foreshore shingle habitat), particularly from recreational disturbance from continuous riverside route and associated construction activities, from increased human presence due to increase in local residential developments and from new light sources.
 - Contamination from emissions to water as a result of increased industrial use or increased housing density (applicable to SAC, SPA and Ramsar). The potential adverse effect is related to contamination of habitats within the SAC/SPA/Ramsar as a result of construction run-off and increased discharge from industrial and residential uses into the Estuary.
- 7.4 Mitigation measures are set out which, if fully implemented, could reduce the adverse effects to levels whereby they are unlikely to cause a significant effect on the integrity of the designated sites either alone or in-combination with other plans and projects. Many of these mitigation measures can be enforced through the development and planning control



- process by Wyre Borough Council and many of the measures will require the developer or Wyre Borough Council to consult with Natural England, BTO, RSPB and Flyde Bird Club.
- As the assessment has been undertaken on a plan rather than specific project, full details of the component developments within the plan area are not known and the assessment has been undertaken at a strategic level. Subsequent development proposals within the AAP area are expected to be brought forward through the planning and development control process and will be detailed in respect of specific development proposals at particular locations.
- As project specific details within the AAP are not currently known, it is not possible to accurately predict the precise effects of any single developments within the AAP on the designated sites. Therefore individual developments within the AAP will require appropriate assessment screening to determine whether there will be any likely significant adverse effects on the Morecambe Bay SAC/SPA/Ramsar site. The developer will need to design appropriate mitigation measures as necessary in order to satisfy Natural England that there will be no significant adverse affects on the integrity of the designated sites either from the development alone or in-combination with other developments and in light of current water quality conditions within the Estuary.
- 7.7 The broad zoning set out in the AAP preferred option, and the indicative land uses, are not expected to result in adverse effects on the integrity of the European site(s) and the Ramsar site as long as appropriate mitigation measures are fully implemented.
- 7.8 Due to the mitigation measures proposed some of the proposals within the AAP will need to be undertaken at particular times of year to reduce disturbance levels to birds at times of year when they are most vulnerable. Some of the mitigation measures also need to occur in a particular sequence, such as the provision of an alternative inland lagoon site to act as a refuge for birds which may be disturbed whilst using an existing lagoon during contamination remediation. Further work is required in respect of certain mitigation measures, in consultation with organisations such as Natural England to ensure implementation, for example the production of eco-landscape plans which will include designs of screening and restriction of public access to the estuary foreshore and inland lagoons to reduce disturbance effects to the internationally important assemblages of birds.
- 7.9 Given full implementation of all the mitigation issues, it is considered that there will be no need for compensatory measures seeking to redress residual harm to the international interests resulting from the broad land use allocations set out in the Fleetwod-Thornton AAP.



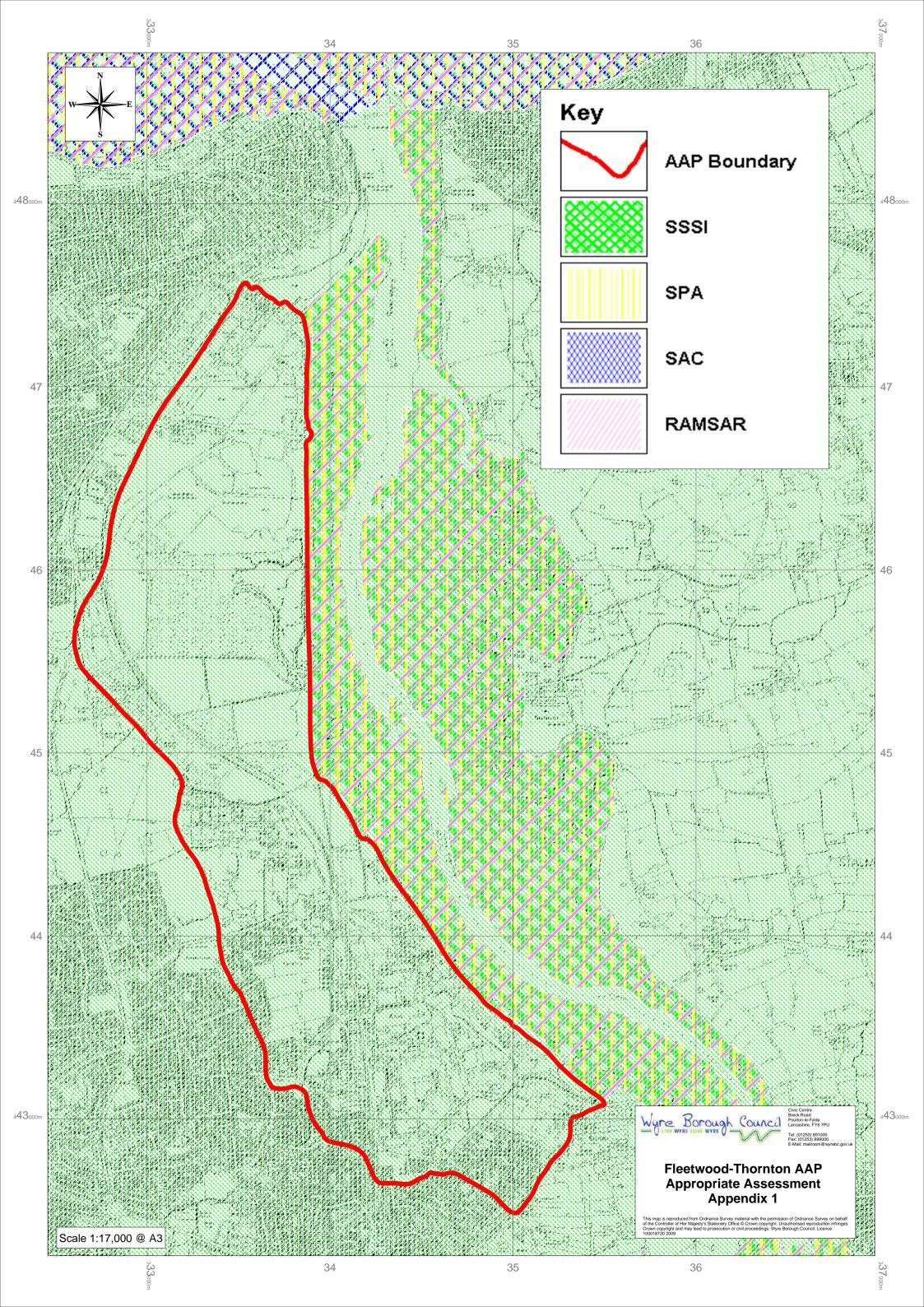
8. References

- o Natura 2000 Standard Data Forms (www.jncc.gov.uk)
- o Information Sheet on Ramsar Wetlands (www.jncc.gov.uk)
- Wyre Estuary SSSI citation sheet (<u>www.english-nature.org.uk</u>)
- o www.magic.gov.uk (digitised designation site boundaries)
- WeBS Data for Wyre Estuary Lagoons (Sector 57413) and Arm Hill (Sector 5714), 2000-2005
- Planning for the Protection of European Sites: Appropriate Assessment, Guidance for Regional Spatial Strategies and Local Development Plan Documents (Department for Communities and Local Government, August 2006)
- Planning Policy Statement 9: Biodiversity and Geological Conservation Statutory obligations and their impact within the planning system (PPS9)
- Government Circular ODPM Circular 6/2005 and Defra Circular 1/2005 to accompany PPS9: Biodiversity and Geological Conservation – Statutory obligations and their impact within the planning system.
- Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the habitats Directive 92/43/EEC, November 2001, European Union.
- Habitats Regulations Guidance Notes 1-6: English Nature (various dates 1997 2001).



APPENIDX 1

DESIGNATION CITATIONS AND BOUNDARIES IN RELATION TO AAP





APPENDIX 2 SCREENING MATRIX



APPENDIX 3

WeBS DATA



Wyre Estuary Lagoons – WeBS Data

The Wyre Estuary Lagoons (WeBS Sector 57413) comprises four main lagoon areas, two of which are within the AAP boundary, one close to Fleetwood Dock and one within the central landfill area. The other two lagoon areas are adjacent to the western boundary of the AAP, one south-east of Fleetwood Town Centre and the other just north of Stanah.

In terms of the qualifying features within Morecambe Bay SPA, WeBS counts from 2000 to 2005 at the Wyre Estuary Lagoons (WeBS county sectors to the west of the estuary) provide the following information.

(i) Breeding species

Counts of over 30,000 are regularly recorded at the lagoons during the breeding season, including large numbers of shelduck, ringed plover, lapwing, knot, dunlin and redshank.

The numbers of herring gull and lesser black-backed gull recorded at the lagoons during the breeding season is low – between 10 and 50 birds of each species compared to the Morecambe Bay SPA site counts of 11,000 and 22,000 pairs respectively; this area is not considered to be significant for these species.

(ii) Sandwich terns and little terns

The Sandwich tern colony has moved to the Duddon Estuary in recent years. At Wyre Estuary Lagoons, a maximum of 55 Sandwich terns have been recorded during the breeding season (June 2003), with none recorded in the last 3 years. However, around 300 Sandwich terns have been recorded using Wyre Estuary Lagoons during September 2004 and 2005, which is when birds are preparing to migrate. Three hundred birds represent approximately half of the Morecambe Bay/Duddon Estuary breeding population, suggesting that the Wyre Estuary Lagoons may provide important pre-migratory habitat.

Little terns are rarely recorded at the lagoons and this is not considered to be significant habitat for them.

(iii) Ringed plover and sanderling on passage

Counts at Wyre Estuary Lagoons indicate that a significant number of ringed plover use the estuary throughout the passage and wintering months, but that in particular, there are high numbers during the autumn months and spring months, when birds are on passage. This is illustrated in Table 1. Whilst a large number of sanderlings use the lagoons, they are not of internationally qualifying levels. However, it is clear that the lagoons play an important role in habitat provision for this species on passage, a time when many species are vulnerable.



Table 1. Ringed plover and sanderling at Wyre Estuary Lagoons

		Autumn	Winter	Summer
Ringed plover				
Reaches qualifying lev	internationally els	Yes	No	Yes
% qualifying t	hreshold	195%	46%	270%
Mean 5 year p	oeak	1,971	335	1,422
Sanderling				
Reaches qualifying lev	internationally els	No	No	No
% qualifying t	hreshold	72%	37%	N/A
Mean 5 year p	oeak	865	448	719

N/A = qualifying levels have not been set

(iv) Wintering wildfowl

Table 2 shows the five year summary table for 2000 – 2005 shows the number of wintering birds that have been recorded at Wyre Estuary Lagoons and the month in which the peak was recorded. This shows that the area recorded from the Wyre Estuary Lagoons supports a significant number of wildfowl and, in particular, a significant proportion of the 200,000+ birds that use the SPA in winter.

Table 2. Wyre Estuary Lagoons Wintering Bird Counts - Summary table

	Peak	Monthly			
Year	Total	•	Autumn Peak	Winter Peak	Spring Peak
00/01	131437 ((OCT)	154,142	140,892	1,868
01/02	119034 ((NOV)	102,278	154,305	38,991
02/03	152269 ((DEC)	106,876	167,001	37,318
03/04	143074 ((DEC)	74,060	161,428	28,111
04/05	128066 ((JAN)	102,606	155,829	11,954
MEAN			107,992	155,891	23,648



Table 3 below, shows:

- the species that are present within the Morecambe Bay SPA and which are present in internationally important numbers within the SPA;
- whether the numbers recorded at the Wyre Estuary Lagoons reach the qualifying levels used to assess whether or not a site holds internationally important numbers of a given species, and in which season (in bold).

This shows that the lagoons form an important component of habitat used by these species, some of which use the lagoons in numbers that are important in a European context.

Table 3. Species using Wyre Estuary Lagoons in internationally important numbers

	International			
Species	Reaches internationally qualifying levels	% threshold in autumn	% threshold in winter	% threshold in spring
Pintail	No	7%	17%	0%
Pink-footed goose	Yes	81%	147%	0%
Turnstone	Yes	26%	39%	N/A
Dunlin	Yes	166%	168%	N/A
Knot	Yes	361%	782%	60%
Oystercatcher	No	29%	41%	12%
Bar-tailed godwit	Yes	98%	234%	59%
Curlew	Yes	44%	44%	24%
Grey plover	No	58%	63%	N/A
Shelduck	Yes	231%	116%	N/A
Redshank	Yes	288%	179%	141%
Golden plover	Yes	N/A	407%	28%



Arm Hill (east of the river) - WeBS Data

There is poor coverage of this sector, with missing data for seasons throughout 2002 to 2004, as indicated in Table 1. This is commented on in the various sections below.

In terms of the qualifying features listed above, WeBS counts from 2000 to 2005 at Arm Hill provide the following information.

(v) Breeding species

Counts of around 2,000 are regularly recorded at the lagoons during the breeding season, with oystercatcher, dunlin, lapwing, curlew and redshank present in the largest numbers.

The average monthly counts of herring gull and lesser black-backed gull recorded at Arm Hill during the breeding season is low – less than 30 birds compared to the Morecambe Bay SPA site counts of 11,000 and 22,000 pairs respectively; this area is not considered to be significant for these species.

(vi) Sandwich terns and little terns

The Sandwich tern colony has moved to the Duddon Estuary in recent years. No Sandwich terns have been recorded at Arm Hill during the breeding season, although they have been recorded there is small numbers during preparation for migration. Little terns have not been recorded at Arm Hill during the 2000 – 2005 period. These data are based on three complete counts so are considered to represent a reasonable picture of tern activity in this area, despite the generally poor coverage of this sector. This area is not considered to be significant habitat for these species.

(vii) Ringed plover and sanderling on passage

Neither ringed plover nor sanderling has been recorded at Arm Hill between 2000 and 2005, based on three complete counts.

(viii) Wintering wildfowl

Table 1 shows the five year summary table for 2000 – 2005 shows the number of wintering birds that have been recorded at Arm Hill and the month in which the peak was recorded. This shows that the area recorded does not support a significant number of wildfowl especially as a proportion of the 200,000+ birds that use the SPA in winter.

Table 1. Summary table

Year	Peak Total	Monthly	Autumn Peak	Winter Peak	Spring Peak
00/01	2353	(JUL)	3203	2536	N/C
01/02	4262	(SEP)	4262	N/C	1491
02/03	3680	(FEB)	N/C	3747	N/C
03/04	1801	(MAY)	N/C	N/C	2450
04/05	5957	(FEB)	9113	9467	2320
MEAN			5526	5250	2087

N/C indicates season not counted

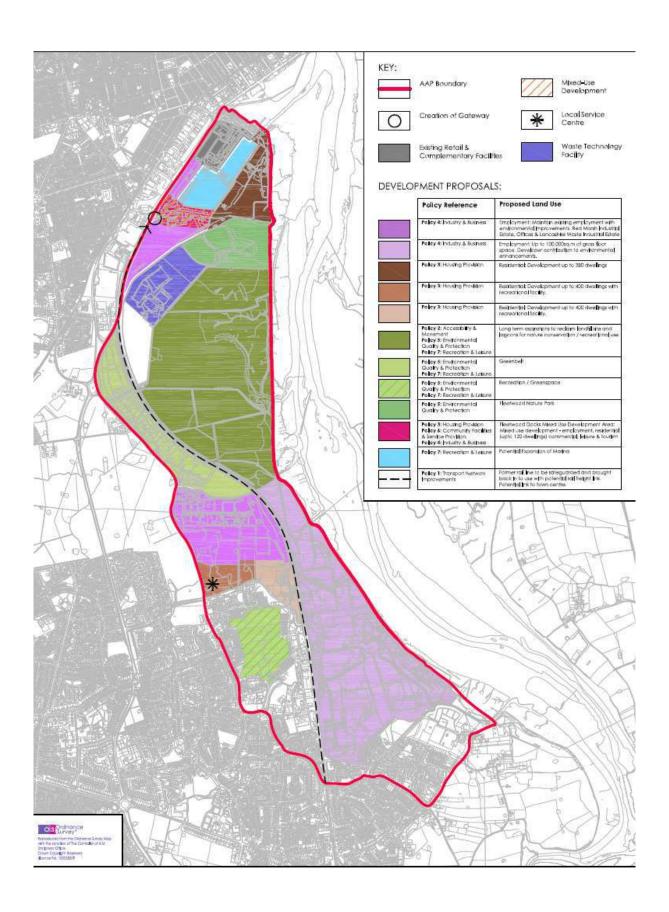
Of the eleven species that are qualifying features of the SPA on account of their presence in numbers that are important in a European context (refer to Table 3 for Wyre Estuary Lagoons), none have been recorded at Arm Hill in significant numbers.



APPENDIX 4

AAP PREFERRED OPTION DRAWING







APPENDIX 5 CONSULTATION RESPONSES



Organisation	Date o	Date response	of	Brief description of response	Action as result of response
Natural England	26/06/07	21/08/07		Requested further details of in-combination effects and mitigation, plus a number of minor comments.	response sent to NE
Natural England		20/02/08		Assessment and mitigation needs to address future disturbance to birds from future developments undertaken at a later date by householders, in particular, the addition of security lighting.	Text of plan amended to include consideration of light spill into the
				Otherwise Natural England satisfied that the revised Appropriate Assessment Report would allow a conclusion of no significant effect on the Morecambe Bay European marine site.	

APPENDIX D

Further Information Statement-Ecology. Fleetwood Fish Park



Further Information Statement - Ecology

Project: Fish Park, Fleetwood **Ref:** BMD.15.016.RP.803A

Subject: Designated Sites Date: July 2015

INTRODUCTION

The planning application for the proposed industrial park on land to the south of Windward Avenue, East of Amounderness Way, Fleetwood is currently being considered. As part of the planning consultation further information has been requested on the potential impacts of the scheme on the nearby statutory protected sites; Morecambe Bay SPA/SAC/Ramsar site and Wyre Estuary SSSI (which forms part of the European designated site).

The extended phase 1 habitat survey submitted with the application concluded that:

"Two designated sites are present in the locality. The scheme is at a scale that is not anticipated to adversely affect the nature conservation interest of the extensive Wyre Estuary." (Para 6.2.1)

The extended phase 1 habitat survey for the scheme concluded that impacts would be minimal on the BHS stating that:

"Other than a narrow access road between the Fish Park and the proposed Energy Park, the high value areas of the BHS will remain unaffected by the proposed development and the BHS will be screened from the Energy Park land by the existing high bunds." (Para 6.2.4).

Natural England and Greater Manchester Ecology Unit (GMEU) have requested more information on the potential impacts of the scheme on the designated features and have also identified the need to assess whether Fleetwood Marsh Nature Park (which is a Biological heritage Site (BHS)) supports significant numbers of over-wintering birds and whether mitigation is required.

This further information statement aims to provide further consideration of the potential impacts on the statutory sites to inform the planning decision.

PREVIOUS ASSESSMENTS

The application site is situated within the Fleetwood-Thornton Area which has an adopted development plan (2009). The development plan also included a detailed Appropriate Assessment (AA) undertaken in 2009 which considered the potential impacts of the full development area on European designated sites in the locality.

The study was commissioned by Wyre Borough Council and was undertaken by Atkins Ltd. The aim of the assessment was to assess the effects of the Fleetwood and Thornton Area Action Plan (hereafter referred to the AAP) on the Morecambe Bay SAC, SPA and Ramsar Site.

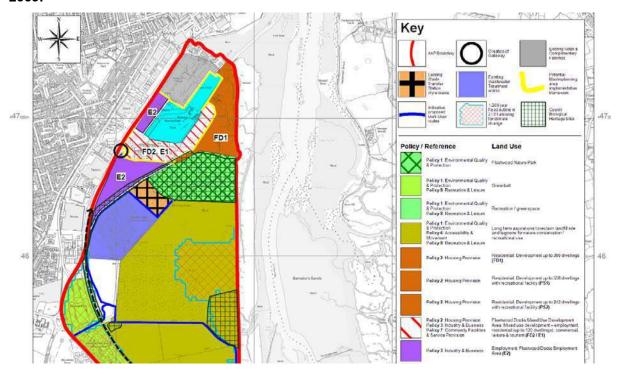
This document will present information relevant to the application site that forms a small part of the wider AAP and will include relevant extracts with regard to site conditions, consideration of potential impacts and any mitigation requirements that are relevant to the anticipated level of impact.



DESCRIPTION OF FLEETWOOD TO THORNTON AAP

The proposed development site is situated within the AAP and is designated as Fleetwood Docks Employment Area (see Figure 1) in a sector labelled E2. The employment area is situated to the west of residential and mixed-use residential development areas.

Figure 1. Extract from Fleetwood-Thornton Area Action Plan Appendix a, Proposals Map, Sept 2009:



POTENTIAL EFFECTS UPON THE INTEGRITY OF THE DESIGNATED SITES & PROPOSED MITIGATION MEASURES (RELEVANT TO THE PROPOSED DEVELOPMENT SITE)

The following sections considers the potential impacts identified during the previous AA and considers the relevance of such impacts with regard to the scale of the proposed development. As per the detail of the AA this stage represents the following:

"Subsequent development proposals within the AAP area are expected to be brought forward through the planning and development control process and will be detailed in respect of specific development proposals at particular locations." (Para 5.4)

Direct loss of habitat which is outside of the designated site(s) but that is key to overwintering and migratory bird population (applicable to SPA and Ramsar site only)

Baseline

The cited interest features of the SPA/Ramsar which occurs outside of the designated boundary is the overwintering and migratory bird population, with breeding bird populations occurring outside of the SPA/Ramsar boundary being of lesser importance.

The proposed development will not result in direct habitat loss or physical damage to features recognised as important for overwintering birds outside of the SPA/Ramsar area. The site itself is dominated by rough grassland and scrub mosaic and as such is not considered to provide high tide



habitat for waders or wildfowl. The previous AA did not identify the area as important for over-wintering birds.

The nearest suitable feature is the Fleetwood Marsh Nature Reserve. The previous AA states that the Fleetwood Nature Park forms part of a series of lagoons that are:

"...considered to be important high tide roost sites (personal communication, Jean Roberts, BTO)." (Para 3.13)

Impact

The development proposals would not directly impact on the Fleetwood Marsh Nature Park and the park is separated from the development site by a high bund feature (associated with the adjacent former waste transfer centre on Jameson Road site) and a stand of tall scrub along the northern/western boundary of the park itself which would minimise other impacts such as visual disturbances and excessive noise disturbance (considered further below).

It should be recognised that the Harbour Village residential development has since come forward and as such the Fleetwood Marsh Nature Reserve is likely to have a higher number of visitors from the adjacent residential area potentially reducing its overall importance for more sensitive over-wintering bird species. The reserve does have restricted access to certain areas including the lagoon nearest to the application site.

Mitigation

No mitigation has been identified as there will be no net loss of lagoon habitat. Due to the small scale of the development site and location within designated industrial/business area there is no opportunity or other requirement (e.g. drainage needs) for wetland habitat creation.

Residual Impact

The residual impact is considered non-significant as no loss of high-tide habitat is anticipated as no lagoon/wetland feature will be directly lost or impacted upon.

Indirect impacts are considered in more detail below.

Increased disturbance of wintering and migratory bird populations due to increased human activity, leading to a change in dynamics of the estuary bird populations as a result of loss of some roosting and feeding sites (applicable to SPA, Ramsar only)

Baseline

The previous AA identifies the greatest potential for disturbance to birds using the habitat within the SPA and Ramsar boundary to be from increased human presence which is likely to come from new housing associated with the AAP.

Disturbance from increased levels of artificial lighting associated with both residential and industrial lighting along the river were also identified as an impact that could affect roosting and feeding behaviour of birds using the estuary and lagoons at any time of year.

The AA recognised that the AAP could have the potential to cause disturbance to wintering and migratory birds using the Wyre Estuary Lagoons (plus the Fleetwood Marshes Nature Park). The AA recognised that the lagoons within the Nature Park were currently publicly accessible with the larger lagoon (the lagoon nearest the application site) designed to reduce public accessibility and therefore disturbance.

The AA recognised that it is difficult to assess the effect of disturbance on the wintering and migratory bird populations in terms of the effects on the integrity of the SPA/Ramsar site. The part of the SPA/Ramsar site adjacent to the AAP area is only a small proportion of the total low tide roost habitat available to birds. The area around Fleetwood adjacent to the estuary already has a high degree of



residential and industrial use and Natural England assessed the designated site(s) as robust with no current significant effects on the favourable condition of the site (s).

The AA considered that there was potential for an adverse effect upon the SPA/Ramsar from increased human disturbance but that this could be mitigated to reduce the effects to an acceptable (and therefore insignificant) level upon integrity of the site.

Impact

The proposed development is for employment and as such no increase in human activity within the boundaries of the SPA/Ramsar are anticipated as such an impact is associated with residential developments in the area.

There will also be no direct access (due to fencing and high soil bund) to the Fleetwood Marshes Nature Park from the application site that could result in incidental disturbances from the workforce using the proposed development.

Mitigation

The high soil bund associated with the former waste transfer centre on Jameson Road to the south of the Fish Park scheme would be retained and would continue to reduce the impacts associated with visual and noise disturbance to birds using the nearby lagoon. The stand of mature scrub along the northern and western boundary of the lagoon will also remain in place, further reducing indirect disturbances on the lagoon feature. As well as the scrub boundary there is also a high steel fence along the northern and western boundary of the reserve.

The proposed development will be fenced with security fencing and as such the risk of staff accessing the Nature Park would be minimised.

It is considered that the above features would restrict public access to the Nature Park from the proposed development area and the bund would also act as a visual screen/acoustic barrier.

Security lighting for the application site will be minimised and designed to minimise light throw on the boundaries adjacent to the BHS/Nature Park area as per the recommendations set out in the extended phase 1 habitat report (para 6.4.15 of the report). As the site is industrial, the risk of unauthorised light installations post planning permission (which can occur in residential areas and was identified as a potential risk in the AA) is considered to be negligible as lighting can be controlled at the planning stage.

Residual Impact

Residual impacts are considered to be non-significant as the above measures in place would reduce impacts on birds using the larger lagoon of the Fleetwood Marsh Nature Park.

Disturbance to bird populations during construction works (applicable to SPA and Ramsar site only)

Baseline

The previous AA recognised that construction of individual elements of the AAP will cause short-term disturbances (mainly of acoustic and visual nature). The AA considered that there would only be a potential for likely significant adverse impacts on the SPA/Ramsar site if all construction within the AAP area occurred concurrently. The AA recognised that this would be unlikely as construction would be phased and would also take place in existing urban and industrial areas. The high risk area was considered to be the housing site (Harbour village area) along the continuous river route.

Impact

The proposed development site is set back from the continuous river route and it is considered to be within existing urban and industrial areas with a busy road to the west, an ongoing residential



development to the east and a sewage treatment plant to the south and as such there is a level of noise and visual disturbance in the area already. Busy industrial areas are also present to the north.

As such, significant increases in noise are not anticipated during construction and no heavy construction activities e.g. deep piling are proposed on the application site.

The likely impacts would be localised impacts associated with an increase in site operatives, machines and minor construction noise during the construction stage.

The AA identified the lagoons of the Wyre Estuary (including Fleetwood Nature Park) as non-significant for some of the key breeding species of the SPA/Ramsar site such as herring gull, lesser black-backed gull, little tern, ringed plover or sanderling. The lagoons are known to support over 30,000 birds during the breeding season including large numbers of shelduck, ringed plover, lapwing, knot, dunlin and redshank.

The Wyre Estuary lagoons also have some importance for birds that use the SPA in winter including high numbers of sandwich terns during preparation for migration.

Mitigation

The Wyre Estuary lagoons include a number of lagoon features of which the nearest to the development site is Fleetwood Marshes Nature Park. The AA recognises the most important habitat for breeding sandwich terms to be the foreshore shingle habitat of the SPA/Ramsar site which are habitat features distant from the application site and not associated with the nearest lagoon of the Nature Park.

It is considered that the bund and scrub screening between the proposed development site and the adjacent Nature Park would reduce the potential impacts (light spill, noise and visual disturbances) on wintering birds using the nature park during construction stage. This would reduce the risk of bird abandoning wintering and pre-migratory habitat in the locality.

Should excessive noise construction activities be required (e.g. piling), these should be undertaken outside of the migration/wintering period to avoid negative impacts on species using the nearby lagoons.

Residual Impact

Residual impacts are considered to be non-significant as the above measures would reduce impacts on birds using the larger lagoon of the Fleetwood Marsh Nature Park and minimise more far-reaching impacts to distant features of importance.

Increased disturbance of breeding Sandwich term population (applicable to SPA and Ramsar site only)

Baseline

The previous AA confirmed that no habitat within the SPA/Ramsar site used by the breeding sandwich tern colony would be directly affected by the AAP proposals.

The Wyre Estuary lagoons (that include the Nature Park) were not considered to be significant habitat for breeding.

Impacts were considered to be from the residential development scheme along the continuous river route.

Impact

The proposed development site is set back from the continuous river route and it is considered to be within existing urban and industrial areas.



Mitigation

None required other than measures detailed above to reduce general impacts in the locality.

Residual Impact

Not significant

Contamination from emissions to water as a result of increased industrial use or increased housing density. This could be a result of increased pollution per se or an increase in the number of pollution sources, or both. An increase in water pollution could result in cumulative effects on the qualifying interests. For example, if the quality of the feeding habitat becomes poorer, this could reduce the number of birds that any one area can support. This pollution can also affect mudflats, sandflats and Salicornia vegetation, for example by siltation leading to degradation and reduced productivity (applicable to SAC, SPA and Ramsar).

Baseline

The previous AA considered sources of contamination to be:

- increased run-off during construction activities (leading to potential siltation of habitats and turbidity of water which could particularly affect eel grass communities and coastal lagoons) within the designated sites:
- increased discharges of industrial processes leading to potential toxic and non-toxic discharges to the estuary; and
- increased sewage and storm water discharges to the estuary from the increase in residential development.

It was recognised in the previous AA that the increase in types and amounts of contaminants entering the estuary and thus the designated sites through discharges has the potential to cause significant adverse effects on the integrity of the designated sites. However, it was considered that there were standard mitigation practices for pollution prevention and published compliance criteria in relation to controlled water. Additionally discharges to controlled waters may be subject to consent conditions in relation to contaminant concentrations such as trade effluent discharge consents.

Impact

There could be risks of contamination at construction and operational stage. The proposed development is set back from the main estuary but is in close proximity to the Nature Park lagoons.

Mitigation

All construction will follow construction best practice and incorporate pollution prevention measures.

There are no proposed discharges into the estuary with regard to the scheme.

Residual Impact

Not significant with the above measures in place.

BENEFICIAL EFFECTS

The proposed development is a relatively small parcel of land within the AAP and as such the opportunities for ecological enhancements are limited.

The scheme will not directly impact upon wintering bird habitat and as such no habitat compensation requirements have been identified.

The scheme will impact on grassland/scrub habitat and there are proposals for some minor habitat enhancement works to the adjacent BHS area (former railway cutting) to enhance the area for species such as nesting passerines, reptiles and common amphibians.



CONCLUSIONS

The extended phase 1 habitat survey and reptile report prepared for the proposed scheme and this further information statement aim to meet a key principle of the AAP; Principle 5 – Protecting the Environment:

"Careful consideration will be given to the effect of new development on the various nature conservation interests associated with the Area and its surrounding environment including the adjacent European Marine Site together with land associated with the Wyre Estuary which includes nationally and internationally important sites of nature conservation value. Where appropriate planning applications will be required to be accompanied by appropriate surveys or assessments to assess the direct and indirect impacts of the proposals on habitats and species."

This further information statement aims to satisfy concerns raised at consultation stage by Natural England and GMEU with regard to potential impacts on the Wyre Estuary SSSI and Morecambe Bay SPA/SAC/Ramsar sites with particularly emphasis on impacts relating to the wintering birds using the sites

As discussed above there would be no direct impact on the important habitats associated with the statutory sites. There would also be no impact on the non-statutory sites of interest that include features such as the Fleetwood Marshes Nature Park. These sites are known to have some importance with regard to wintering bird activity and as such appropriate mitigation has been set out in this document (informed by the previous AA) to ensure impacts are minimised.

The current scheme as submitted does not require an EIA and as such significant and far-reaching impacts are considered to be minimal. The proposed mitigation therefore aims to minimise impacts on local features of interest such as nearby BHS's and other habitat features of interest.

Based on the level of impact assessment required for the scheme and the known baseline conditions in the locality the mitigation measures as set out above are considered appropriate and would result in non-significant residual impacts on the local nature conservation interest.

The scheme is at a scale and location that is considered unlikely to have an adverse effect on the integrity of the SPA as set out in the reasons above. There will also be no direct impact on habitat optimal for over-wintering birds (wetland, lagoons, etc) and no direct impact on designated sites. The proposed mitigation follows the recommendations as set out in the AA (relevant to the location and scale of the scheme) which concluded that:

"Mitigation measures are set out which, if fully implemented, could reduce the adverse effects to levels whereby they are unlikely to cause a significant effect on the integrity of the designated sites either alone or in-combination with other plans and projects." (Para 7.4).

The previous AA points out that individual applications will require appropriate assessment screening to determine whether there will be likely significant adverse effects on the Morecambe Bay SAC/SPA/Ramsar site, which this further information statement aims to provide.

Given that the planning application is submitted in outline, with all matters except access reserved for future approval, there is limited details available relating to noise and construction management plans etc. More detailed assessments will only be prepared in support of future reserved matters submissions when details relating to end users, noise generation, site layout and other matters will be known. The implications of these details can therefore be assessed through future reserved matters submissions.

APPENDIX E

Information from NE - Buffer distances in relation to European sites

Bird Group	Birds	Extent of Functional Habitat from site	Note
Birds 1	All breeding bird assemblages (excluding ground- nesting heathland species, stone-curlew, marsh harrier & nightjar)	500m	Breeding SSSI birds of prey (peregrine, merlin, hen harrier & honey buzzard) can also forage up to 4km. It is not thought likely, however, that these species would make significant use of farmland habitat beyond semi-natural areas encompassed by protected site boundaries.
Birds 2	All wintering birds (except wintering waders and grazing wildfowl; wigeon and geese)1,2	500m	Home ranges of dabbling ducks such as teal, mallard and gadwall could extend beyond site boundaries at coastal sites, but less likely to do so at inland water bodies. Where functional habitat of dabbling ducks does extend beyond site boundaries then this is likely to be accommodated by presence of wigeon, geese or waders. Wintering marsh harrier and hen harrier can forage 10s of km and are likely to make significant use of farmland habitat beyond semi-natural areas encompassed by site boundaries. Owing to extensive presence of farmland within 10s of km and low densities of birds, the standard distance of 500m relating to all wintering birds is deemed acceptable.
Birds 3	Wintering waders (except golden plover and lapwing), brent goose & wigeon1,3 marsh harrier ^{4,5}	2km	Breeding marsh harrier can also forage up to 4km and are likely to make significant use of farmland habitat beyond semi-natural areas encompassed by site boundaries. Owing to extensive presence of farmland and low densities of birds, a reduced distance of 2km is deemed acceptable.
Birds 4	Ground nesting heathland species, breeding nightjar & stone curlew	2km	Many sites (e.g. TBH/ Dorset Heaths) have issues of recreational disturbance. Buffers need to take into account travel to sites from proposed residential developments. Nightjar - up to 4km foraging distance for nightjars but unlikely to be >2km beyond site boundary. Likely to need site specific assessment as depending on adjacent land use there may be extensive or no functional habitat beyond the site boundary e.g. discrete heathland SSSI amongst grassland and woodland in comparison to discrete heathland site surrounded by development
Birds 5	Wintering lapwing and golden plover	15-20km	Golden plover can forage up to 15km from a roost site within a protected site. Lapwing can also forage similar distances. Both species use lowland farmland in winter, so difficult to distinguish between European populations and those present within the wider environment unconnected to a European site. Reduced sensitivity beyond 10km
Birds 6	Wintering white-fronted goose, greylag goose, Bewick's swan, whooper swan & wintering bean goose.	10km	No information
Birds 7	Wintering pink-footed goose, barnacle goose	15-20km	No information

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