

**SOUTHMERE FIELD, LANGSTONE ROAD,
LANGSTONE, HAVANT**

**SHADOW HABITATS REGULATIONS
ASSESSMENT**

Final Document

July 2021

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EclA • HRA • Management Plans
Habitats • Badger • Bats • Hazel Dormouse • Birds • Reptiles • Amphibians • Invertebrates • Riparian and Aquatic Species

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**SOUTHMERE FIELD, LANGSTONE ROAD,
LANGSTONE, HAVANT, HAMPSHIRE**

SHADOW HABITATS REGULATIONS ASSESSMENT

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1.0 INTRODUCTION

1.1 Background

Ecological Survey and Assessment Limited (ECOSA) have been appointed by Persimmon Homes South Coast to prepare a Shadow Habitats Regulations Assessment in relation to the proposed residential development of Southmere Field, Langstone Road, Langstone, Havant, Hampshire PO9 1RB (hereafter referred to as the site).

This Shadow Habitats Regulations Assessment will be submitted in combination with an Ecological Impact Assessment (ECOSA, 2021) and Biodiversity Mitigation and Enhancement Plan (ECOSA, 2021). Reference should be made to these documents for the overall impact assessment and on-site mitigation, compensation and enhancement strategy in respect of ecology.

1.2 The Site

The site is located in Langstone, Hampshire, centred on National Grid Reference (NGR) SU 7154 0516 (**Map 1**).

The site comprises a parcel of an agricultural field of approximately 2.6 hectares and is bounded by residential development to the north, the remainder of the field to the south, Langstone Road A3023 to the east, and a woodland belt and a wet ditch to the west. A river lies beyond the woodland belt which drains into Langstone Harbour.

The wider landscape is dominated by residential development of Langstone and Havant to the north, green space to the east and west, and the coastal environment of Bridge Lake and Hayling Island to the south.

1.3 Aims and Scope of Report

This Shadow Habitats Regulations Assessment assess the Likely Significant Effects of the proposals upon international/European designated sites (hereafter referred to as European Sites) and their qualifying features. The objectives of this assessment are:

- To identify any aspects of the proposed development that would have a Likely Significant Effect on European Sites (see Paragraph 2.3) either alone or in combination with other plans and projects; and
- To advise on appropriate mechanisms for delivering mitigation where such effects are identified and undertake an Appropriate Assessment of the proposals to assess whether there is any effect on the integrity of European sites following the implementation of proposed mitigation.

1.4 Site Proposals

The proposals for the site comprise the construction of 65 new residential dwellings in the northern-most two-thirds of the site, with access roads and associated parking. Access will be created to the north of the site from The Mallards. The southern third of the site will comprise green space. The planning application is due to be in outline with all matters reserved except for access.

The Ecological Impact Assessment is based on the Layout Structure Plan produced by Persimmon Homes dated 2nd June 2021 (Drawing No. A-02-111-SD No Revision) (**Appendix 1**). Outline planning consent is due to be sought in 2021, current timescales for construction are unknown.

2.0 HABITATS REGULATIONS ASSESSMENT PROCESS

2.1 Introduction

This section provides an outline of the Habitats Regulations and the Habitats Regulations Assessment process.

2.2 The Habitats Regulations

The Conservation of Habitats and Species Regulations 2017 (as amended), hereafter referred to as 'the Habitats Regulations', is a piece of national legislation derived from European Directive 2009/147/EC on the conservation of wild birds (the Birds Directive) and European Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive).

The aim of the Habitats Directive is to conserve habitats and species in Europe by establishing a network of important sites referred to as Natura 2000 sites. Under Article 6(3) of the Habitats Directive, an Appropriate Assessment of its implications for the European Site in view of the site's conservation objectives is required where a plan or project is likely to have a significant effect upon a European site, either alone or in combination with other projects (Infrastructure Planning Commission, 2011).

Under Article 6(4), where an Appropriate Assessment has been carried out and any proposed avoidance or mitigation measures anticipated are unable to reduce the potential effect, so it is no longer significant, or if uncertainty remains over the significant effect, consent will only be granted if:

- There are no alternative solutions;
- There are imperative reasons of over-riding public interest for the development; and
- Compensatory measures have been secured.

The ultimate aim of the Habitats Regulations is to "maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest" (Habitats Regulations, Article 2(2)). This aim relates to habitats and species, not the Natura 2000 sites themselves, although the sites have a significant role in delivering favourable conservation status.

Habitats Directive 1992

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination

with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives."

Conservation of Habitats and Species Regulations 2017 (as amended)

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

2.3 European Sites

Types of European sites considered in the Habitats Regulation Assessment (HRA) process are detailed in **Table 1**. This report considers Natura 2000 site otherwise known as European sites or internationally designated sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and, as a matter of National Planning Policy Ramsar sites¹. In addition, it is a matter of law that candidate SAC (cSAC) are considered in this process. It is also a matter of UK Government policy that potential SACs (pSACs) and potential SPAs (pSPA) are considered. For the purposes of this report these sites are collectively referred to as European sites.

Table 1: European Sites considered in HRA

Designation Type	Origin	Description
Special Protection Area (SPA)	EU Birds Directive	Strictly protected sites classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory bird species. SPAs form part of the Natura 2000 network.
Potential SPA (pSPA)	EU Birds Directive	Sites that are proposed as SPAs but have yet to be formally classified. pSPA sites form part of the Natura 2000 network. These sites are assessed within HRA in accordance with National Planning Policy.
Special Area of Conservation (SAC)	EU Habitats Directive	Strictly protected sites forming part of a European network of important high-quality conservation sites that will make a significant contribution to conserving the habitat types and species identified in Annexes I and II of the Directive (as amended). The listed habitat types and species are those considered to be most in need of conservation at a European level (excluding birds). SACs form part of the Natura 2000 network.

¹ Whilst Ramsar sites are not European designated sites National Planning Policy is to subject them to the same HRA process as if Natura 2000 sites

Table 1: European Sites considered in HRA

Designation Type	Origin	Description
Candidate SAC (cSAC)	EU Habitats Directive	Sites that are proposed as SACs and have been submitted to the European Union but have yet to be formally designated. cSACs form part of the Natura 2000 network. These sites are assessed within HRA in accordance with National Planning Policy.
Ramsar site	Ramsar Convention	Internationally important wetland habitats are recognised under the Ramsar Convention, with Ramsar sites overlying SPA classifications and SAC designations. While the criteria differ from those of SPAs and SACs, the criteria for Ramsar sites are equally significant in terms of maintaining the ecological integrity of the site. Ramsar designated sites are not part of the Natura 2000 network (although by proxy they relate to the same sites). However, they are assessed within HRA in accordance with National Planning Policy

2.3.1 Conservation Objectives

SPAs and SACs

Each SPA and SAC has set conservation objectives defining what constitutes a favourable conservation status of each primary qualifying feature. These are set out by Natural England and describe the targets to be met in order for the feature to qualify as 'favourable'. Conservation objectives vary from site to site but follow the same general principles:

- To avoid deterioration of the qualifying habitats and the habitats of qualifying species;
- To avoid significant disturbance of qualifying species;
- To ensure the integrity of the site is maintained; and
- To ensure that the site makes a full contribution to achieving the favourable conservation status of each of the qualifying features.

The aims are broadly to maintain or restore the structure, function, extent, distribution and supporting processes of qualifying natural habitats and habitats of qualifying species, and to maintain or restore the populations and distribution of qualifying species.

Ramsar Sites

While Ramsar sites lack set conservation objectives, the correlation between Ramsar qualifying criteria and SAC/SPA qualifying features is such that the objectives of SPAs and SACs negate the need for separate objectives. For sites that are designated both

as a Natura 2000 site and a Ramsar site, the conservation objectives of SPAs and SACs incorporate the designated features of the Ramsar site.

2.3.2 Conservation Status

The conservation status of a habitat is defined as:

'The sum of the influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species'. (European Economic Community (EEC), 1992)

The conservation status of a species is defined as:

'The sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations'.

Favourable conservation status of a site is defined as when (McLeod, 2005):

'Its natural range and areas 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; and the conservation status of its typical species is favourable'.

European sites often have associations with, or are overlaid by, Sites of Special Scientific Interest (SSSIs). SSSIs are assessed on the basis of their condition at the time of the most recent assessment survey in order to determine whether the site meets its objectives. The assessment of SSSIs draws upon recent and historic condition assessments, capable of establishing whether a site or component unit is *declining* or *recovering*.

European sites are assessed in more depth, on the basis of their conservation status, including an assessment of the presence of specific structure and functions required for its long-term maintenance. It also takes account of whether these necessary structures and functions are likely to persist into the future.

2.4 Habitat Regulations Assessment Process

The four stages of HRA (Infrastructure Planning Commission, 2011) are detailed in **Table 2**. If the proposed development cannot be screened out as being unlikely to lead to significant effects, then Appropriate Assessment (AA) is required which will include detailed analysis of identified likely significant effects in order to develop appropriate mitigation that will enable the Local Planning Authority (LPA) in their role as 'competent authority' to conclude that no adverse effect on the integrity of Natura 2000 sites will result.

Table 2: HRA screening process

Stage	Description
Stage 1 Screening	The process to identify the likely impacts of a project upon a European site, either alone or in combination with other plans and projects, and consider whether there is a Likely Significant Effect.
Stage 2 Appropriate Assessment	The consideration of the impacts on the integrity of the European site, either alone or in combination with other plans and projects, with regard to the site's structure and function and its conservation objectives. Where there are adverse impacts, an assessment of mitigation options is carried out to determine adverse effect on the integrity of the site. If these mitigation options cannot avoid adverse effects, and that there will an adverse effect on site integrity, then development consent can only be given if stages 3 and 4 are followed.
Stage 3 Assessment of Alternative Solutions	Examining alternative ways of achieving the objectives of the project to establish whether there are solutions that would avoid or have a lesser effect on European sites.
Stage 4 Imperative Reasons of Overriding Public Interest (IROPI)	This is the assessment where no alternative solution exists and where adverse impacts remain. The process to assess whether the development is necessary for IROPI and, if so, the potential compensatory measures needed to maintain the overall coherence of the site or integrity of the European site network.

The Habitats Regulations apply the precautionary principle to European sites. This means that it is presumed that a likely significant effect may occur unless it can be demonstrated with a sufficient level of confidence that it will not.

Throughout this document the phrase Habitats Regulations Assessment (HRA) has been used to refer to the overall process required, while Appropriate Assessment (AA) is used for the specific stage of the process in which it is necessary to determine in more detail adverse effects on the integrity of Natura 2000 sites and mitigation required.

2.4.1 Screening

The screening stage is a high level risk assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. During the screening stage it is necessary to establish:

“Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?”

Likely Significant Effect

The process will firstly involve identifying any effects on the ecological functionality of European sites likely to arise from the proposed development, either alone or in combination with other development projects in the area.

These effects would be considered significant if they undermine any of the European site's conservation objectives.

The likelihood of each significant effect is then determined. A likely effect is defined as one which cannot be ruled out based on the objective information available.

A 2018 European Court of Justice ruling (People Over Wind and Peter Sweetman v Coillte Teoranta - Case C323/17, 2018) has determined that it is not sufficient to screen out projects that include mitigation if that mitigation would not form part of the plan or project were it not for the consideration of the conservation objectives of Natura 2000 sites. In other words, the project must be screened on its own merits and if mitigation would be required to prevent Likely Significant Effects on European sites then this must be subject to full Appropriate Assessment.

With regard to those European sites where it is considered not possible to 'screen out' the project without detailed appraisal, it is necessary to progress to the later Appropriate Assessment stage to explore the adverse effects and devise mitigation.

In Combination

HRA takes into account the impacts of proposals both in their own right and in combination with other developments in the vicinity. It is possible for a proposed development to have no significant impact when taken in isolation, but in conjunction with other proposed development projects it may contribute to a likely significant effect. This is known as an 'in combination' effect, whether or not the proposals have a likely significant effect alone.

2.4.2 Appropriate Assessment

An Appropriate Assessment is required when HRA screening of the proposals and the in-combination assessment cannot rule out the possibility that a European site's conservation objectives (see Paragraph 2.3.1) will be undermined, because of one or more likely significant effects.

Integrity

An effect that directly or indirectly affects a European site's qualifying features resulting in harm to the ecological structure and functioning of the site, its supporting processes and/or adversely affects the site's ability to meet conservation objectives would be considered an adverse effect on the integrity of the site. Site integrity is defined as (Jones, 2002):

'The coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified'.

3.0 PLANNING POLICY CONTEXT

3.1 Introduction

This section summarises the planning policy in relation to ecology and biodiversity within the Havant Borough Council administrative area with specific reference to those elements in relation to European sites.

3.2 National Policy

The National Planning Policy Framework (NPPF) sets out the government's requirements for the planning system in England. The original document was published in 2012 with the most recent revision published in February 2019. A number of sections of the NPPF are relevant when taking into account development proposals and the environment. As set out within Paragraph 11 of the NPPF *"Plans and decisions should apply a presumption in favour of sustainable development"*. However, Paragraph 177 goes on to state that *"The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site² (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site."*

The general impetus of the NPPF in relation to ecology and biodiversity is for development proposals to not only minimise the impacts on biodiversity but also to provide enhancement. Paragraph 170 states that the planning system should contribute to and enhance the natural environment by *"...minimising impacts on biodiversity and providing net gains in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures..."*.

A number of principles are set out in Paragraph 175, including that where harm cannot be adequately avoided then it should be mitigated for, or as a last resort, compensated for. Where impacts occur on nationally designated sites, the benefits must clearly outweigh any adverse impact and incorporating biodiversity in and around developments should be encouraged. Specific reference is also made to the protection of irreplaceable habitats³. Where loss to irreplaceable habitats occurs planning permission would normally be refused unless there are wholly exceptional reasons and an adequate compensation strategy is in place. Paragraph 175 also states *"development whose primary objective is to conserve or enhance biodiversity should*

² The NPPF defines a habitats site as *"Any site which would be included within the definition at regulation 8 of the Conservation of Habitats and Species Regulations 2017 for the purpose of those regulations, including candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation, Special Protection Areas and any relevant Marine Sites."*

³ The NPPF defines irreplaceable habitats as *"Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen."*

be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity". Protection of sites proposed as Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites or acting as compensation for SPAs, SACs and Ramsar sites, should receive the same protection as habitat sites.

Government Circular ODPM06/2005 (ODPM, 2005) accompanies the NPPF, adding the following in relation to European sites⁴:

'Regulation 48 of the Habitats Regulations restricts the granting of planning permission for development which is likely to significantly affect a European site...by requiring that an appropriate assessment is first carried out of the implications of the development for the site's conservation objectives...

The decision on whether an appropriate assessment is necessary should be made on a precautionary basis. An appropriate assessment is required where there is a probability or a risk that the plan or project will have significant effects.... either individually or in combination with other projects.... this means that the planning authority should identify the potential risks so far as they may be reasonably foreseeable in light of such information as can reasonably be obtained, and put in place a legally enforceable framework with the aim of preventing the risks from materialising....

Regulation 54(4) of the Habitats Regulations prohibits the grant of outline planning permission unless the planning authority is satisfied, whether by reason of the conditions or limitations imposed on the permission, or otherwise, that no development likely to adversely affect the integrity of a European site could be carried out under the permission...

If the decision-taker is unable to conclude that the proposed development will not adversely affect the integrity of the site, and this effect, or possible effect, will not be removed by conditions or other restrictions, they must not grant planning permission.'

3.3 Local Policy

Local planning policy within Havant Borough is provided by the Havant Borough Core Strategy 2011, adopted March 2011. Three policies refer in part to ecology and biodiversity:

⁴ ODPM06/2005 was published prior to the 2017 update to the Habitats Regulations and therefore, specific Regulation numbers have since been amended

- **Policy CS11: Protecting and Enhancing the Special Environment and Heritage of Havant Borough**

This policy refers to protecting and enhancing statutory and non-statutory designated sites, and features of ecological interest including wildlife habitats and corridors, through appropriate mitigation measures.

- **Policy DM9: Development in the Coastal Zone**

This policy refers to the protection of the coastal zone and states that permissions will only be granted in this zone where it can be demonstrated that there will be no harmful effects on internationally, nationally and locally designated sites.

Production of an updated Havant Borough Local Plan 2036 has been underway since 2016 and is currently in its consultation phase, with adoption proposed to be in late 2021. Three policies within the Havant Borough Local Plan 2036 refer specifically to European sites:

- **Policy E14: The Local Ecological Network**

This policy refers to protecting, conserving and enhancing internationally, nationally, and locally designated sites for nature conservation, and the requirement for a net gain in biodiversity.

- **Policy E16: Solent Special Protection Areas**

This policy refers to protecting SPAs within the Solent, and states mitigation measures required if significant effects on the SPAs are anticipated.

- **Policy E17: Solent Waders and Brent Goose Feeding and Roosting Sites**

This policy refers to protecting sites associated with the Solent Waders and Brent Goose Strategy (SWBGS).

4.0 ASSESSMENT METHODS

4.1 Introduction

This section presents the methodology employed during this Shadow Habitats Regulation Assessment.

4.2 Habitats Regulations Assessment Methodology

Currently there is only limited guidance on HRA screening methodology, namely Planning for the Protection of European Sites: Appropriate Assessment guidance (DCLG, 2006) and Habitats Regulations Appraisal of Plans: Guidance for Plan-making Bodies in Scotland (David Tyldesley and Associates, 2012). These documents have been used for the purpose of this exercise, along with supporting guidance (Infrastructure Planning Commission, 2011). This HRA exercise has been completed in the following stages:

- European Sites have been identified within the Zone of Influence;
- The vulnerabilities and potential development effects, both alone and in combination have been established;
- The development proposals have been screened for likelihood of significant effect on those European Sites; and
- Measures are introduced to avoid any identified likely significant effect which have been considered as part of the Appropriate Assessment.

The results of the Screening exercise are presented in Section 5.0, including details of the geographical scope of the assessment, the particular characteristics of the European sites within that area and consideration of how the proposed works may affect those European Sites. Following the completion of the screening exercise the Appropriate Assessment is detailed in Section 6.0.

4.3 Consultation Resources

This report has involved consultation of the following resources to identify designated sites and their features that may be affected by the proposed works:

- Multi-Agency Geographic Information for the Countryside (MAGIC) (DEFRA, 2020);
- Hampshire Biodiversity Information Centre Desktop Study;
- Solent Wader and Brent Goose Strategy (Whitfield, 2019); and
- Solent Recreation Mitigation Strategy (Bird Aware Solent, 2017).

4.3.1 Zone of Influence

Plans and projects have the potential to impact on European sites beyond the confines of the individual sites themselves. Guidance on Ecological Impact Assessment (CIEEM, 2018) states that potential impacts should be investigated which occur within the Zone of Influence that arises during the whole lifespan of the proposed plan or project. The potential Zone of Influence is defined as:

- Areas outside a European site which could be used by individuals of a species qualifying as a primary ecological feature of that site and potentially associated with that site;
- Areas directly within the land take for the proposed development or plans;
- Areas which will be temporarily affected;
- Areas likely to be impacted by hydrological changes; and
- Areas where there is a risk of pollution and disturbance.

Given the current guidance available in relation to potential recreational impacts on the European designated sites in the Solent (Bird Aware Solent, 2017) a Zone of Influence of 5.6 kilometres was deemed appropriate for this assessment for European sites. In addition a Zone of Influence of one kilometre was used to consider potential effects on functionally linked land with specific reference to the Solent Wader and Brent Goose strategy. For all other impacts the Zone of Influence was defined as those sites which are potentially connected by a Pathway of Impact (for example hydrological linkages).

4.3.2 In Combination Scope

The impacts and effects of any plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European sites in question. In practice, 'in combination assessment' is of greatest importance when a plan or project would otherwise be screened out because the individual contribution is inconsequential.

For the purposes of this assessment, we have determined that, due to the nature of the identified impacts, the key plans and projects that are likely to result in 'in-combination' effects with the proposed development relate to additional housing developments within 5.6 kilometres of the Chichester and Langstone Harbour SPA/Ramsar site, Solent and Dorset Coast SPA, Solent Maritime SAC and Solent and Isle Wight Lagoons SAC when considering potential impacts as a result of increased recreational pressure (Bird Aware Solent, 2017). When considering potential impacts in relation to nitrate discharge the in-combination scope would be any housing developments likely to result in increased wastewater into Langstone Harbour (Natural England, 2020). Therefore,

where any effect can be identified, however inconsequential, it is assumed that this could have an in combination effect at the screening stage. Where mitigation proposals can achieve no effect at the Appropriate Assessment stage then no further in combination assessment is undertaken.

5.0 SCREENING

5.1 Introduction

This section details the screening for likely significant effects process and a discussion of the findings to establish how the likely significant effect outcome was determined.

5.2 Relevant European Sites

The Multi-Agency Geographic Information for the Countryside (MAGIC) database was consulted on 11th November 2020 for locations of statutory nature conservation sites of national and international importance within the Zones of Influence of the application site to allow an assessment of the likely impacts of the proposals on European sites.

The European sites identified within the Zone of Influence are as follows:

- Chichester and Langstone Harbours Ramsar site – located approximately 100 metres south-west of the site;
- Chichester and Langstone Harbours SPA – located approximately 100 metres south-west of the site;
- Solent and Dorset Coast SPA – located approximately 100 metres south-west of the site;
- Solent Maritime SAC – located approximately 290 metres south of the site; and
- Solent and Isle of Wight Lagoons SAC – located approximately 3.4 kilometres south-west of the site.

The boundaries of the European sites in relation to the site are provided on **Map 2**.

5.3 Effects

The European sites within the Zone of Influence are vulnerable to a range of direct and indirect effects. Those activities associated with development projects causing specific harm to habitats or species within, or originating from the European site that are primary reasons for designation, would cause direct effects.

Article 6(2) of the Habitats Directive defines the two main effects upon European sites as habitat deterioration and species disturbance.

Habitat deterioration can occur when: the extent of a qualifying habitat decreases; or the structure and functions of that habitat that are necessary for its long-term maintenance no longer exist or are threatened; or the conservation status of its typical species is no longer favourable, as a result of a process or event. The sources of deterioration, the likelihood of these occurring and whether those effects would be significant are considered.

Species disturbance is defined as a process or event contributing to the long-term decline of a species population on a site.

5.4 Characteristics of the European Sites

A summary of qualifying features of each of the European sites within the Zone of Influence can be found in the sections below. **Appendix 2** to **Appendix 4** provides citations for each of the European sites considered, with the exception of Solent and Dorset Coast SPA, the formal citation has yet to be published.

5.4.1 Chichester and Langstone Harbour SPA/Ramsar site

Chichester and Langstone Harbours SPA/Ramsar site covers two large, estuarine basins. Urban development surrounds the west of Langstone Harbour, whereas farmland surrounds the majority of Chichester Harbour. Together, with neighbouring Portsmouth Harbour, the area forms one of the most sheltered intertidal areas on the South Coast of England. Both Chichester and Langstone Harbours contain extensive intertidal mudflats and sandflats with areas of seagrass beds, saltmarsh, shallow coastal waters, coastal lagoons, coastal grazing marsh and shingle ridges and islands. The qualifying features of the Chichester and Langstone Harbours SPA/Ramsar site are detailed in **Table 3** and **Table 4**, respectively.

Table 3: Chichester and Langstone Harbours SPA qualifying features

Qualifying Feature		Population
During the Breeding Season	Little tern <i>Sternula albifrons</i>	100 pairs representing up to 4.2% of the breeding population in Great Britain (5 year mean, 1992-1996)
	Sandwich tern <i>Sterna sandvicensis</i>	158 pairs representing up to 1.1% of the breeding population in Great Britain (1998)
On passage	Little egret <i>Egretta garzetta</i>	137 individuals representing up to 17.1% of the population in Great Britain (Count as at 1998)
	Ringed plover <i>Charadrius hiaticula</i>	2,471 individuals representing up to 4.9% of the Europe/Northern Africa - wintering population (5 year peak mean 1991/2 - 1995/6)
Over Winter	Bar-tailed godwit <i>Limosa lapponica</i>	1,692 individuals representing up to 3.2% of the wintering population in Great Britain (5 year peak mean 1991/2 - 1995/6)
	Little egret <i>Egretta garzetta</i>	100 individuals representing up to 20.0% of the wintering population in Great Britain (Count as at 1998)

Qualifying Feature		Population
	Black-tailed godwit <i>Limosa limosa</i> of the Icelandic subspecies <i>islandica</i>	1,003 individuals representing up to 1.4% of the wintering Iceland - breeding population (5 year peak mean 1991/2 - 1995/6)
	Dark-bellied brent goose <i>Branta bernicla bernicla</i>	17,119 individuals representing up to 5.7% of the wintering Western Siberia/Western Europe population (5 year peak mean 1991/2 - 1995/6)
	Dunlin <i>Calidris alpina alpina</i>	44,294 individuals representing up to 3.2% of the wintering Northern Siberia/Europe/Western Africa population (5 year peak mean 1991/2 - 1995/6)
	Grey plover <i>Pluvialis squatarola</i>	3,825 individuals representing up to 2.5% of the wintering Eastern Atlantic - wintering population (5 year peak mean 1991/2 - 1995/6)
	Redshank <i>Tringa totanus</i>	1,788 individuals representing up to 1.2% of the wintering Eastern Atlantic - wintering population (5 year peak mean 1991/2 - 1995/6)
	Ringed plover	846 individuals representing up to 1.7% of the wintering Europe/Northern Africa - wintering population (5 year peak mean 1991/2 - 1995/6)
Assemblage Qualification	Chichester and Langstone Harbours SPA is also designated under Article 4.2 for regularly supporting at least 20,000 waterfowl.	

Table 4: Chichester and Langstone Harbours Ramsar site qualifying features

Ramsar Criteria	Importance
Ramsar Criterion 1 Site contains representative, rare or unique wetland types	Two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes
Ramsar Criterion 5 Site regularly supports 20,000 or more waterbirds	The site supports internationally important bird assemblages with peak counts in winter: 76,480 waterfowl (5 year peak mean 1998/99-2002/2003)
Ramsar Criterion 6 Site regularly supports 1% of the individuals in a population of one species/subspecies of waterbirds	Qualifying Species/populations occurring at levels of international importance: Species with peak counts in spring/autumn: - Ringed plover, Europe/Northern Africa: 853 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9-2002/3) - Black-tailed godwit Iceland/Western Europe: 906 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/9-2002/3)

Ramsar Criteria	Importance
	- Redshank: 2,577 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3) Species with peak counts in winter: - Dark-bellied brent goose, 12,987 individuals, representing an average of 6% of the population (5 year peak mean 1998/9-2002/3) - Shelduck, North West Europe: 1,468 individuals, representing an average of 1.8% of the population (5 year peak mean 1998/9-2002/3) - Grey plover, East Atlantic/ West Africa wintering: 3,043 individuals, representing an average of 1.2% of the population (5 year peak mean 1998/9-2002/3) - Dunlin, Western Siberia/ Western Europe: 33,436 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/9-2002/3)

5.4.2 Solent and Dorset Coast SPA

The site is located along the coasts of Dorset, Hampshire, the Isle of Wight and West Sussex and overlaps a number of existing SPA, SACs and Ramsar sites. The qualifying features of the Solent and Dorset Coast SPA are detailed in **Table 5**.

Table 5: Solent and Dorset Coast SPA qualifying features

Qualifying Feature			Proportion of National Population (%)
During the Breeding Season	Sandwich tern <i>Sterna sandvicensis</i>		441 pairs representing at least 4.01% of the breeding population in Great Britain (2013)
	Common tern <i>Sterna hirundo</i>		492 pairs representing at least 4.47% of the breeding population in Great Britain (2013)
	Little tern <i>Sterna albifrons</i>		63 pairs representing at least 3.31% of the breeding population in Great Britain (2013)

5.4.3 Solent Maritime SAC

The Solent Maritime SAC covers a major estuarine system on the south coast of England which includes the largest number of small estuaries in the tightest cluster anywhere in Great Britain and situated within one of the only major sheltered channels in European. The qualifying features of the Solent Maritime SAC are set out in **Table 6**.

Table 6: Solent Maritime SAC qualifying features

Category	Qualifying Features
Annex I habitats that are primary reason for the selection of the site	Estuaries
	<i>Spartina Spartinion maritimae</i> swards
	Atlantic salt meadows <i>Glauco-Puccinellietalia maritimae</i>
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
	Mudflats and sandflats not covered by seawater at low tide
	Coastal lagoons
	Annual vegetation of drift lines
	Perennial vegetation of stony banks
	Salicornia and other annuals colonizing mud and sand
	"Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")"
Annex II species present as a qualifying feature, but not a primary reason for site selection	Desmoulin's whorl snail <i>Vertigo moulinsiana</i>

5.4.4 Solent and Isle of Wight Lagoons SAC

The Solent and Isle of Wight Lagoons SAC cover a series of coastal lagoons and marshes situated through the Solent and the Isle of Wight. The qualifying features the Solent and Isle of Wight Lagoons SAC site are detailed in **Table 7**.

Table 7: Solent and Isle of Wight Lagoons SAC qualifying features

Category	Qualifying Features
Annex 1 habitats that are primary reason for the selection of the site	Coastal Lagoons

5.5 Potential Effects on European Sites

Details of the effects on each of the European sites, as defined by JNCC in the relevant citations (refer to **Appendix 2** to **Appendix 4**) are summarised in **Table 8**⁵. Those which are relevant to the proposed development are highlighted and discussed in further detail.

⁵ No formal designation document had been published for the Solent and Dorset Coast SPA at the time of preparation of this document. Therefore no formally identified effects and included in **Table 8**.

Table 8: Effects on European sites and relevance to development at the application site

European Site	Potential Effect	Relevant
Chichester and Langstone Harbour SPA/Ramsar site	Pollution to groundwater (point sources and diffuse sources)	N
	Fishing and harvesting aquatic resources	N
	Changes in abiotic conditions	Y
	Changes in biotic conditions	N
	Outdoor sports and leisure activities, recreational activities	Y
Solent Maritime SAC	Pollution to groundwater (point sources and diffuse sources)	N
	Changes in abiotic conditions	Y
	Fishing and harvesting aquatic resources	N
	Changes in biotic conditions	N
	Outdoor sports and leisure activities, recreational activities	Y
Solent and Isle of Wight Lagoons SAC	Pollution to groundwater (point sources and diffuse sources)	N
	Changes in abiotic conditions	Y
	Fishing and harvesting aquatic resources	N
	Changes in biotic conditions	N
	Outdoor sports and leisure activities, recreational activities	Y

5.5.1 Pollution to Ground Water/Surface Water

Construction Activities

The site lies approximately 15 metres from the river Lavant (Hampshire) which, separated from the site by an existing plantation woodland belt. This river feeds directly into Langstone Harbour. Therefore, in the absence of mitigation, there is the potential that any pollution events as part of construction could result in chemical pollution to Langstone Harbour.

In the absence of mitigation there is **a likely significant effect** either alone or in-combination with other plans or projects on Chichester and Langstone Harbour SPA/Ramsar site, Solent and Dorset Coast SPA and Solent Maritime SAC in combination with other plans or projects.

Given the removed nature of the application site from Solent and Isle of Wight Lagoons SAC and lack of direct hydrological connectivity it is concluded there is **no likely significant effect** either alone or in-combination with other plans on projects on this site in relation to construction phase pollution.

Operational Phase

During the operational phase there is the potential for an increase in pollutants through surface water run-off entering the river which is hydrologically linked to Chichester and Langstone Harbour SPA/Ramsar site, Solent and Dorset Coast SPA and Solent Maritime SAC. Therefore, in the absence of mitigation there is a **likely significant effect** either alone or in-combination with other plans or projects.

Given the removed nature of the application site from Solent and Isle of Wight Lagoons SAC and a lack of hydrological connectivity it is concluded there is **no likely significant effect** either alone or in-combination with other plans or projects on this site.

5.5.2 Change in Abiotic Conditions

Change in Nitrogen Output

The proposals would result in waste water discharge from the site, which has the potential to result in an increase in nutrient output into the Solent waters and associated European sites. This in turn has the potential to result in increased eutrophication and dense mats of green algae and other negative effects on marine ecology. It is, therefore, necessary to determine whether or not the proposals can deliver nutrient neutrality. The output of nitrogen has been calculated using Natural England's current methodology for calculating nutrient output (Natural England, 2020).

The most recent guidance from Natural England indicates that when calculating additional nutrient outputs an occupancy rate of 2.4 residents per dwelling should be utilised which indicates the new development would support approximately 156 residents.

Based on an assumed waste water generation of 110 litres per day (Natural England, 2020) this would result in 17,160.00 litres per day of waste water from the development. It is anticipated that the waste water will be treated at Budds Farm Waste Water Treatment Works which has an environmental permit limit of 9.7 milligrams per litre. Assuming the water is treated at 90% of the consent limit this would result in a total discharge of 8.73 milligrams of nitrogen per litre. Natural England's most recent guidance indicates that 2 milligrams of nitrogen per litre can be subtracted to account for baseline nitrogen in groundwater and rivers which means 6.73 milligrams per litre needs to be taken into account in the calculation. This gives a total generation of 115,486.80 milligrams of total nitrogen per day or 42.2 kilograms of total nitrogen generated by the development per year.

The second stage of the calculation is to determine the amount total nitrogen currently discharged through existing land uses. The site is currently a greenfield site which

outputs 5.0 kilograms of nitrogen per hectare per year. Therefore, based on the 2.9 hectare red line boundary the estimated total nitrogen generated through existing uses is 14.50 kilograms of total nitrogen per year.

The third stage of the calculation is to determine the nitrogen load from future land use. A figure of 14.3 kilograms of nitrogen per hectare is used to calculate leaching from urban space and a figure of 5.0 kilograms of nitrogen per hectare for open space. The urban area is calculated as being 1.82 hectares and the open space 1.08 hectares. Therefore, this would result in an output of 31.43 kilograms of nitrogen in the catchment from leaching.

In summary, the nitrogen from wastewater generated a result of the scheme totals 42.15 kilograms of total nitrogen which the change in land use would generate 16.93 kilograms of total nitrogen. This would result in an increase of 59.08 kilograms of total nitrogen per year which when the precautionary 20% buffer is applied in accordance with the guidance this results in an overall net increase of 70.9 kilograms of total nitrogen per year. A summary of this calculation is provided in Natural England's standard Nitrogen Budget Calculator which has been completed for the site (**Appendix 5**).

Therefore, in the absence of mitigation there would be **a likely significant effect** in-combination with other plans or projects on Chichester and Langstone Harbour SPA/Ramsar site, Solent and Dorset Coast SPA and Solent Maritime SAC in respect of nitrogen output.

5.5.3 Recreational Activities

A range of research has been undertaken by the Solent Disturbance and Mitigation Project and Bird Aware Solent which has identified that any residential development within 5.6 kilometres of the Solent SPAs has the potential to result in a likely significant effect on the Solent SPAs either alone or in-combination with other plans or projects as a result of an increase in visitors to the Solent SPAs and associated disturbance to overwintering birds utilising the Solent SPAs (Bird Aware Solent, 2017).

Therefore, in the absence of mitigation there would be **a likely significant effect** in-combination with other plans or projects on Chichester and Langstone Harbour SPA/Ramsar site and Solent and Dorset Coast SPA.

5.5.4 Functionally Linked Land

A review was also undertaken of the Solent Wader and Brent Goose Strategy sites (SWBGS sites) which are present within one kilometre of the site boundary. These sites are identified by the Solent Wader and Brent Goose Strategy Partnership as being utilised by either Brent goose or waders associated with the Solent SPAs (including

Chichester and Langstone Harbour SPA). Each site which is identified and surveyed is classified based on their importance for brent goose or waders as Core Area, Primary Support Areas, Secondary Support Areas, Low Use sites or Candidate sites where further data is required in order to classify the site.

A search area of one kilometre has been used in this assessment in order to consider direct impacts (such as habitat loss) and indirect impacts (such as disturbance) which could then give rise to an effect on the qualifying features of the Chichester and Langstone Harbours SPA/Ramsar site either alone or in-combination with other plans or projects.

Those identified within a one kilometre radius of the site are:

- H27 Secondary Support Area – situated within the red line boundary;
- H25B, H25C, H24A, H24C and H25D Primary Support Area – clustered together approximately 520 metres east,
- H90 Primary Support Area – located approximately 590 metres west;
- H28A Secondary Support Area – located approximately 340 metres west;
- H25D Low Use – located approximately 330 metres east
- H11 Low Use - located approximately 900 metres north; and
- H29 Candidate Site – located approximately 570 metres west.

The location of these SWBGS sites in relation to the site boundary is shown on **Map 3**.

The proposals will result in the partial loss of SWBGS Site H27 which is classified as a Secondary Support Area. The records which have been recorded on H27 as part of the Solent Wader and Brent Goose Strategy are for curlew (peak count 47 in 2014), oystercatcher (peak count three in 2014), lapwing (peak count nine in 2013) and brent goose with 90 recorded on a single occasion in 2017.

The total loss of this area would total 2.9 ha (approximately 76% of the H27 site). In addition 0.9 hectares of the H27 site at the southern end of the field will become isolated and enclosed by residential development to the north which will likely result in the overall loss of functionality of H27. The Solent Wader and Brent Goose Strategy defines Secondary Support Areas as (SWBGS Steering Group, 2018):

“The Secondary Support Areas offer a supporting function to the Core and Primary Support ecological network, but are generally used less frequently by significant numbers of SPA geese and waders. These sites become important when wader or brent goose populations are higher or when the habitat is in suitable management. In-combination, these sites are essential to secure a long term, permanent network as this ensures a geographical spread of sites across the wider ecological network,

thereby meeting the needs of each discrete subpopulation. The Secondary Support Areas network also provide suitable and favoured sites in years when the population includes high numbers of juveniles, as well as ensuring future resilience."

Therefore, it is possible to conclude a **likely significant effect** on Chichester and Langstone Harbours SPA/Ramsar site as a result of direct impacts on functionally linked land in-combination with other plans or projects.

5.6 Conclusion

Potential effects as a result of the development either alone or in-combination with other plans and projects have been identified as part of the screening exercise. In accordance with current case law (People Over Wind and Peter Sweetman v Coillte Teoranta - Case C323/17, 2018) it is not possible to consider proposed mitigation measures as part of the screening stage of Habitats Regulation Assessment. Therefore, in conclusion, it is not possible to screen out likely significant effects on Chichester and Langstone Harbours SPA/Ramsar site, Solent and Dorset Coast SPA, Solent Maritime SAC or Solent and Isle of Wight Lagoons at the screening stage.

6.0 APPROPRIATE ASSESSMENT

6.1 Introduction

The section presents the Appropriate Assessment and sets out relevant mitigation in order to address the likely significant effects identified as part of the screening stage.

6.2 Summary of Likely Significant Effects

The potential likely significant effects identified as part of the screening process are as follows:

- Potential for pollution events as a result of the construction and operational phase of the development and effects on Chichester and Langstone Harbours SPA/Ramsar site, Solent and Dorset Coast SPA and Solent Maritime SAC (Paragraph 6.3.1 and 6.3.2);
- Increase in total nitrogen discharged throughout waste water into Chichester and Langstone Harbours SPA/Ramsar site, Solent and Dorset Coast SPA and Solent Maritime SAC in-combination with other plans or projects (Paragraph 6.3.3).
- Increase in recreational pressure on Chichester and Langstone Harbours SPA/Ramsar site, Solent Maritime SAC and Solent and Isle of Wight Lagoons SAC in-combination with other plans or projects (Paragraph 6.3.4); and
- Loss of SWBGS Site H27 which has the potential to result in an in-combination effect with other future plans or projects on the wider SWBGS site network and a likely significant effect on Chichester and Langstone Harbours SPA/Ramsar site in-combination with other plans or projects (Paragraph 6.3.5).

6.3 Proposed Mitigation

6.3.1 *Pollution to Ground/Surface Water – Construction Phase*

In order to mitigate for the potential pollution events during construction a Construction Environmental Management Plan (CEMP) will be implemented as part of the construction process. This will include the following measures:

- Location of site compound, materials and chemicals all of which are to be located away from the eastern site boundary; and
- Pollution prevention measures and waste disposal in order to ensure no potential pollution into the unnamed river and thus Langstone Harbour, including the installation of a silt barrier along the western boundary of the site to avoid any silt run off into the woodland and water course beyond.

It is anticipated that the detail of the CEMP would be secured by Havant Borough Council as part of a planning condition.

6.3.2 *Pollution to Ground/Surface Water – Operational Phase*

Pollution Events

The proposals will include a suitable SuDs drainage strategy which will remove any pollutants from the development prior to re-entering the ground water/watercourse. For further information refer to the Flood Risk Assessment and Drainage Strategy associated with the proposals.

6.3.3 *Change in Abiotic Conditions*

In the absence of mitigation the proposals will result in a net increase of 70.90 kilograms of total nitrogen discharged into the Chichester and Langstone Harbours SPA/Ramsar site, Solent and Dorset Coast SPA and Solent Maritime SAC per year.

In order to deliver nutrient neutrality at the site a contribution will be made towards Havant Borough Council's Mitigation Plan (Havant Borough Council, 2020). This contribution will be used to secure offsetting land at Warblington Farm which is to be gradually removed from its existing dairy use and converted into a nature reserve. The current cost per kilogram contribution is £1,235.00 plus a £23.00 fee per legal agreement. Therefore, in order to offset the identified increase a total contribution of £87,584.50 would be made towards this scheme.

Given that the proposals will be able to demonstrate nutrient neutrality following the measures to implemented at Warblington Farm by Havant Borough Council it is possible to conclude that the development will be nitrate neutral and therefore, there will be no effect on Chichester and Langstone Harbour SPA/Ramsar and Solent Maritime SAC as a result of the proposals.

6.3.4 *Recreational Activities*

The proposals will be required to make contributions towards the Bird Aware Solent Strategy at the time of writing the contributions to the strategy are set out in **Table 9**.

Table 9: Bird Aware Solent Strategy Contributions

Property	Contribution	Number	Total
2 Bedroom Dwelling	£487.00	24	£11,688.00
3 Bedroom Dwelling	£637.00	34	£21,658.00
4 Bedroom Dwelling	£749.00	7	£5,423.00
			£38,589.00

These contributions will go towards the wider Bird Aware Solent strategy which includes provisions for rangers, communication, marketing and education initiatives, dog walking initiatives, codes of conduct development, creation and enhancement of greenspaces, site-specific access management and monitoring. The strategy is designed to mitigate the in-combination effect of recreational pressure in the Solent.

In addition, in order to provide further education and advise to new residents a wildlife awareness leaflet, with specific focus on minimising disturbance to wildlife at coastal areas will be distributed to new residents within the development. Whilst this measure would not be required to mitigate the impact it will further support the work being undertaken by the Bird Aware Solent strategy.

6.3.5 Loss of Functional Land

The development of the site will result in the loss of the majority of SWBGS site H27. The remainder of the site (outside the red line boundary) will be retained. However, given the relatively small proportion to be retained and that this will be between two areas of residential development it is considered that this will render the remaining area unsuitable for regularly supporting numbers of wader and brent goose. Therefore, in order to compensate for the loss of this habitat an offsite solution will be required.

The Solent Wader and Brent Goose Strategy mitigation strategy (SWBGS Steering Group, 2018) currently states the following in respect of Secondary Support Areas:

Where the functional area of a Secondary Support Area is to be lost in its entirety with no direct replacement of habitats by the applicant then additional measures will be necessary to ensure the continued ecological function of the network. Appropriate measures include the use of companies such as the Environment Bank to ensure appropriate sites are provided elsewhere within the network, the funding of an identified strategic offsetting site or project that has been agreed by the SWBGS Steering Group, or in addition an additional agreed level of funding for land purchase. In such cases the final compensation package will be determined on a case-by-case basis.

The funding secured, via section 106 agreements, will be used to enhance, manage and monitor the wider solent wader and brent goose ecological network. This funding will be managed by the respective local authority and will be used to support schemes across the network, this includes those in neighbouring authority boundaries"

The current figure for compensation costs of a Secondary Support Area according to the mitigation strategy is £85,464 per hectare, assuming there would be no need for any additional land purchase. Therefore, a contribution towards this strategy will be made to Havant Borough Council in order to implement these strategic measures. Given that the entirety of the H27 SWBGS site will be lost as a result of the proposals,

the 3.7 hectares of the site will require offsetting which will result in a financial contribution of £316,216.80. It is anticipated that this contribution will be secured as part of a Section 106 agreement.

Should this contribution be secured and invested towards appropriate mitigation/compensation strategy which accords with the Solent Wader and Brent Goose mitigation strategy then the overall functionality of the network would be retained. However, further discussions may be necessary with Havant Borough Council in order to confirm that the contribution could be put towards a suitable compensation strategy. Should this not be the case then an alternative approach would need to be sought and a re-assessment made in order to conclude that there would be no effect on the Chichester and Langstone Harbour SPA/Ramsar site in combination with other plans or projects.

6.4 In-Combination Effects

6.4.1 *Pollution to Ground/Surface Water*

Given the mitigation measures set out in Paragraph 6.3.1 and Paragraph 6.3.2, no impacts on ground/surface water will result from the proposed development. Therefore, given that it is possible to conclude no impacts, no in combination effects with other plans or project will result from the development.

6.4.2 *Change in Abiotic Conditions*

Subject to the implementation of the appropriate mitigation using the Havant Borough Council Mitigation Strategy the development will deliver nutrient neutrality in accordance with current Natural England guidance. Therefore, there will be no effect on the Chichester and Langstone Harbour SPA/Ramsar site, Solent and Dorset Coast SPA and Solent Maritime SAC. Given that it is possible to conclude no effect in isolation there will be no effect in combination with any other plans or projects.

6.4.3 *Recreational Activities*

The Solent Bird Aware Strategy is intended to provide mitigation for recreational pressure either alone or in combination with other plans or projects for schemes across the Solent. Therefore, no in combination effects with other plans or project will result from the development.

6.4.4 *Loss of Functional Habitat*

Subject to agreement with Havant Borough Council on the delivery of compensation which is in accordance with the Solent Wader and Brent Goose Strategy guidelines it would be possible to address potential in combination effects as a result of the loss of functional land on Chichester and Langstone Harbour SPA/Ramsar site.

6.5 Conclusion

Following the implementation of the mitigation measures set out in this section and the Appropriate Assessment undertaken, **no adverse effects** on Solent and Dorset Coast SPA, Solent Maritime SAC and Solent and Isle of Wight Lagoons SAC will result from the proposed development either alone or in-combination with other plans or projects.

Following the implementation of mitigation no adverse effects either alone or in-combination with other plans or projects would result from pollution, recreational activities or nitrogen discharge on the Chichester and Langstone Harbour SPA/Ramsar site. However, a finalised compensation scheme/mechanism will be required in order to reach this conclusion in relation to loss of functional land.

7.0 CONCLUSION

The screening stage concluded that there would be a likely significant effect as a result of the proposals on European sites within the Zone of Influence of the proposals when considered both in-combination with other plans or projects including potentially pollution events, increased total nitrogen output, recreational disturbance and loss to SWBGS site H27. Therefore, an Appropriate Assessment was required in order to determine whether the proposals would have an effect on the integrity of these sites.

Following the incorporation of appropriate mitigation, including an appropriate nutrient neutrality strategy, financial contributions to the Solent Bird Aware strategy and implementation of appropriate construction methods it has been concluded that there would be no adverse impact on site integrity either alone or in-combination with other plans or projects on Solent and Dorset Coast SPA, Solent Maritime SAC and Solent and Isle of Wight Lagoons SAC. A finalised compensation scheme/mechanism in relation to loss of functional land in the form of Secondary Support Area H27 associated with the Chichester and Langstone Harbour SPA/Ramsar site will be required.

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Map 1 Site Location



SOUTHMERE FIELD, LANGSTONE ROAD, LANGSTONE, HAVANT, HAMPSHIRE

SHADOW HABITATS REGULATION ASSESSMENT

Map 1 - Site Location Plan

Client:	Persimmon Homes South Coast
Date:	December 2020
Status:	Final

KEY

Site Boundary



Scale at A4: 1:10,000
 0 100 200 400 Metres

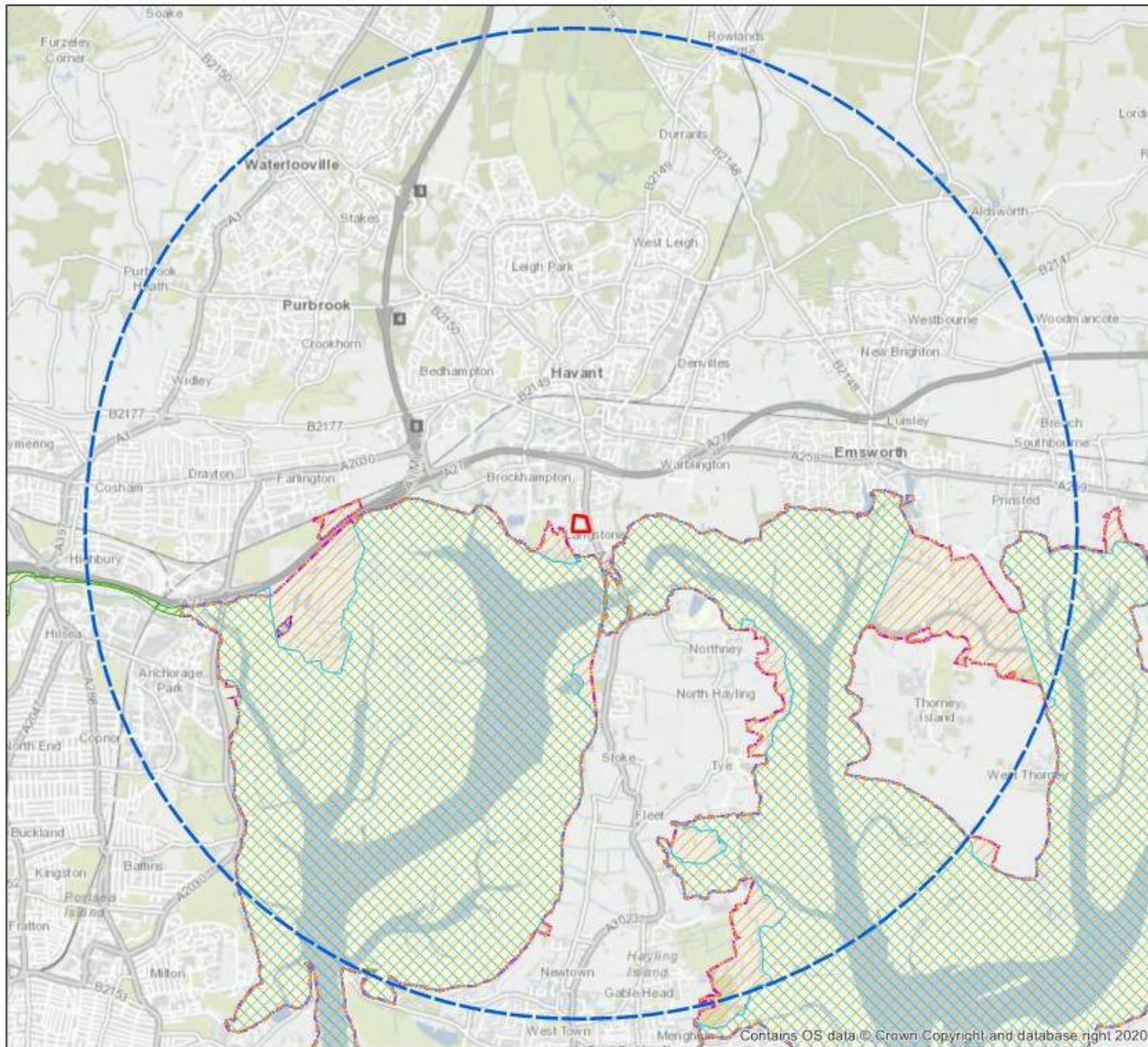


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Map 2 Site Location in Relation to European Sites



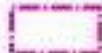
SOUTHERE FIELD, LANGSTONE ROAD, LANGSTONE, HAVANT, HAMPSHIRE

SHADOW HABITATS REGULATION ASSESSMENT

Map 2 - Site Location in Relation to European Sites

Client:	Persimmon Homes South Coast
Date:	December 2020
Status:	Final

KEY

-  Site Boundary
-  European Sites Buffer: 5.6km
-  Chichester and Langstone Harbours Ramsar Site
-  Solent and Isle of Wight Lagoons SAC
-  Solent Maritime SAC
-  Chichester and Langstone Harbours SPA
-  Solent and Dorset Coast SPA



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Map 3 Solent Wader and Brent Goose Strategy Sites



SOUTHMERE FIELD, LANGSTONE ROAD, LANGSTONE, HAVANT, HAMPSHIRE

SHADOW HABITATS REGULATION ASSESSMENT

Map 3 - Solent Wader and Brent Goose Strategy Sites

Client:	Persimmon Homes South Coast
Date:	December 2020
Status:	Final

KEY

- Site Boundary
- Solent Wader and Brent Goose Strategy Buffer: 1km
- Solent Wader and Brent Goose Strategy Site Classification**
- SPA Site
- Primary Support Area
- Secondary Support Area
- Low Use
- Candidate

N.B. Solent Wader and Brent Goose Strategy classifications are taken from the Hampshire & Isle of Wight Solent Waders and Brent Goose Strategy 2019 and Current Use Mapping 2018 data (<https://solentwbgs.wordpress.com/page-2/>) accessed on 15th December 2020.

Scale at A4: 1:12,000



ECOSA

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Web: www.ecosa.co.uk

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Appendix 1 Site Proposals



-  Principal elevation
-  Primary Street
-  Secondary Street
-  Private Drive

Rev	Chg	Revision Details	1	1
 PERSIMMON Together, we make a home				
Job Title Southmere Field, Langstone				
Drawing Title Layout Structure				
Job No.	Design No.	Rev		
-	A-02-111-SD	-		
Drawn	Checked	Date		
br	gs	02.08.21		
Scale 1:500 @ A1 / 1:1000 @ A3				
				
APPROVAL				

Appendix 2 Chichester and Langstone Harbours SPA/Ramsar site Citations

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX.22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

Joint Nature Conservation Committee
Monkstone House
City Road
Peterborough
Cambridgeshire PE1 1JY
UK
Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948
Email: RIS@JNCC.gov.uk

FOR OFFICE USE ONLY.

DD MM YY

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Designation date

--	--	--	--	--	--

Site Reference Number

2. Date this sheet was completed/updated:

Designated: 28 October 1987

3. Country:

UK (England)

4. Name of the Ramsar site:

Chichester and Langstone Harbours

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area:

**** Important note:** If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) **hard copy** (required for inclusion of site in the Ramsar List): *yes* ✓ -or- *no* ☐;
- ii) **an electronic format** (e.g. a JPEG or ArcView image) *Yes*
- iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** *yes* ✓ -or- *no* ☐.

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinates (latitude/longitude):

50 48 23 N 00 55 12 W

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Portsmouth

The site lies on the central south coast of mainland England, approximately 1 km east of Portsmouth.

Administrative region: Hampshire; West Sussex

10. Elevation (average and/or max. & min.) (metres): 11. Area (hectares): 5810.03

Min. -2
Max. 4
Mean 0

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Chichester and Langstone Harbours are large, sheltered estuarine basins comprising extensive mud and sand flats exposed at low tide. The site is of particular significance for over-wintering wildfowl and waders and also a wide range of coastal and transitional habitats supporting important plant and animal communities.

13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 5, 6

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 1

Two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes.

Ramsar criterion 5

Assemblages of international importance:

Species with peak counts in winter:

76480 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar criterion 6 – species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

Species with peak counts in spring/autumn:

Ringed plover , <i>Charadrius hiaticula</i> , Europe/Northwest Africa	853 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9- 2002/3)
Black-tailed godwit , <i>Limosa limosa islandica</i> , Iceland/W Europe	906 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/9- 2002/3)
Common redshank , <i>Tringa totanus totanus</i> ,	2577 individuals, representing an average of 1% of the population (5 year peak mean 1998/9- 2002/3)

Species with peak counts in winter:

Dark-bellied brent goose, <i>Branta bernicla bernicla</i> ,	12987 individuals, representing an average of 6% of the population (5 year peak mean 1998/9- 2002/3)
Common shelduck , <i>Tadorna tadorna</i> , NW Europe	1468 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1998/9-2002/3)
Grey plover , <i>Pluvialis squatarola</i> , E Atlantic/W Africa -wintering	3043 individuals, representing an average of 1.2% of the population (5 year peak mean 1998/9-2002/3)
Dunlin , <i>Calidris alpina alpina</i> , W Siberia/W Europe	33436 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/9-2002/3)

Species/populations identified subsequent to designation for possible future consideration under criterion 6.

Species regularly supported during the breeding season:

Little tern , <i>Sterna albifrons albifrons</i> , W Europe	130 apparently occupied nests, representing an average of 1.1% of the breeding population (Seabird 2000 Census)
---	---

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

Details of bird species occurring at levels of National importance are given in Section 22

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	neutral, shingle, sand, mud, alluvium, nutrient-rich, sedimentary, clay, gravel
Geomorphology and landscape	lowland, coastal, floodplain, shingle bar, subtidal sediments (including sandbank/mudbank), intertidal sediments (including sandflat/mudflat), enclosed coast (including embayment), estuary, islands, lagoon, pools
Nutrient status	eutrophic, mesotrophic
pH	circumneutral
Salinity	brackish / mixosaline, saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Bognor Regis, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/bognor_regis.html) Max. daily temperature: 13.7° C Min. daily temperature: 7.7° C Days of air frost: 24.0 Rainfall: 717.4 mm Hrs. of sunshine: 1902.9

General description of the Physical Features:

Chichester and Langstone Harbours are large, sheltered estuarine basins comprising extensive sand- and mud-flats exposed at low tide. The two harbours are joined by a stretch of water that separates Hayling Island from the mainland. Tidal channels drain the basin and penetrate far inland. The basin contains a wide range of coastal habitats.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

Chichester and Langstone Harbours are large, sheltered estuarine basins comprising extensive sand- and mud-flats exposed at low tide. The two harbours are joined by a stretch of water that separates Hayling Island from the mainland. Tidal channels drain the basin and penetrate far inland.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Shoreline stabilisation and dissipation of erosive forces, Sediment trapping, Maintenance of water quality (removal of nutrients)

19. Wetland types:

Marine/coastal wetland

Code	Name	% Area
G	Tidal flats	46
H	Salt marshes	21.4
Other	Other	14.3
F	Estuarine waters	14.1
B	Marine beds (e.g. sea grass beds)	1.7
Ts	Freshwater marshes / pools: seasonal / intermittent	0.9
E	Sand / shingle shores (including dune systems)	0.8
Tp	Freshwater marshes / pools: permanent	0.4
Sp	Saline / brackish marshes: permanent	0.3
W	Shrub-dominated wetlands	0.07
M	Rivers / streams / creeks: permanent	0.02
J	Coastal brackish / saline lagoons	0.01

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

The site comprises two large, interconnected sheltered estuarine basins providing extensive intertidal mud and sand flats with eelgrass *Zostera* spp. beds, large areas of mixed saltmarsh and extensive cord-grass *Spartina* spp. swards in an advanced state of degeneration. Fringing habitats include shingle spits, saline, brackish and freshwater lagoons, coastal grazing marsh and deciduous woodland. The site supports important overwintering populations of migratory waterfowl.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Nationally important species occurring on the site.

Higher plants.

*Polypogon monspeliensis, Zostera angustifolia, Zostera marina, Zostera noltei***22. Noteworthy fauna:**

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Birds**Species currently occurring at levels of national importance:****Species regularly supported during the breeding season:**

Mediterranean gull, <i>Larus melanocephalus</i> , Europe	47 apparently occupied nests, representing an average of 43.5% of the GB population (Seabird 2000 Census)
Black-headed gull, <i>Larus ridibundus</i> , N & C Europe	3180 apparently occupied nests, representing an average of 2.4% of the GB population (Seabird 2000 Census)

Common tern , *Sterna hirundo hirundo*, N & E Europe

127 apparently occupied nests, representing an average of 1.2% of the GB population (Seabird 2000 Census)

Species with peak counts in spring/autumn:

Little egret , *Egretta garzetta*, West Mediterranean

224 individuals, representing an average of 13.5% of the GB population (5 year peak mean 1998/9-2002/3)

Eurasian oystercatcher , *Haematopus ostralegus ostralegus*, Europe & NW Africa -wintering

3403 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9-2002/3)

Whimbrel , *Numenius phaeopus*, Europe/Western Africa

192 individuals, representing an average of 6.4% of the GB population (5 year peak mean 1998/9-2002/3 - spring peak)

Eurasian curlew , *Numenius arquata arquata*, N. a. arquata Europe (breeding)

3108 individuals, representing an average of 2.1% of the GB population (5 year peak mean 1998/9-2002/3)

Spotted redshank , *Tringa erythropus*, Europe/W Africa

6 individuals, representing an average of 4.4% of the GB population (5 year peak mean 1998/9-2002/3)

Common greenshank , *Tringa nebularia*, Europe/W Africa

215 individuals, representing an average of 36% of the GB population (5 year peak mean 1998/9-2002/3)

Ruddy turnstone , *Arenaria interpres interpres*, NE Canada, Greenland/W Europe & NW Africa

569 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:

Little grebe , *Tachybaptus ruficollis ruficollis*, Europe to E Urals, NW Africa

131 individuals, representing an average of 1.6% of the GB population (5 year peak mean 1998/9-2002/3)

Black-necked grebe , *Podiceps nigricollis nigricollis*, Europe, N Africa

14 individuals, representing an average of 11.6% of the GB population (5 year peak mean 1998/9-2002/3)

Great bittern , *Botaurus stellaris stellaris*, W Europe, NW Africa

1 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9-2002/3)

Eurasian teal , *Anas crecca*, NW Europe

2226 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)

Red-breasted merganser , *Mergus serrator*, NW & C Europe

306 individuals, representing an average of 3.1% of the GB population (5 year peak mean 1998/9-2002/3)

Water rail , *Rallus aquaticus*, Europe

12 individuals, representing an average of 2.6% of the GB population (5 year peak mean 1998/9-2002/3)

Bar-tailed godwit , *Limosa lapponica lapponica*, W Palearctic

1189 individuals, representing an average of 1.9% of the GB population (5 year peak mean 1998/9-2002/3)

Species Information

17 British Red Data Book species and 84 nationally scarce species have been recorded from Chichester and Langstone Harbours Ramsar site.

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic
 Aquatic vegetation (e.g. reeds, willows, seaweed)
 Archaeological/historical site
 Environmental education/ interpretation
 Fisheries production
 Livestock grazing
 Non-consumptive recreation
 Scientific research
 Sport fishing
 Sport hunting
 Subsistence fishing
 Tourism
 Traditional cultural
 Transportation/navigation

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland;
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland;
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples;
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland;

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	+
Local authority, municipality etc.	+	+
National/Crown Estate	+	+
Private	+	+
Public/communal	+	+

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Recreation	+	+
Current scientific research	+	

Cutting of vegetation (small-scale/subsistence)		+
Fishing: commercial	+	+
Fishing: recreational/sport	+	+
Marine/saltwater aquaculture	+	
Gathering of shellfish	+	
Bait collection	+	
Arable agriculture (unspecified)		+
Permanent arable agriculture		+
Livestock watering hole/pond	+	
Permanent pastoral agriculture	+	
Hay meadows	+	+
Hunting: recreational/sport	+	+
Industry	+	+
Sewage treatment/disposal	+	+
Harbour/port	+	+
Flood control	+	+
Irrigation (incl. agricultural water supply)		+
Mineral exploration (excl. hydrocarbons)		+
Transport route	+	+
Domestic water supply		+
Urban development		+
Non-urbanised settlements	+	+
Military activities	+	+
Horticulture (incl. market gardening)		+

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Erosion	2		+		+
Eutrophication	1		+		+
Pollution – domestic sewage	1			+	

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?
Erosion - Coastal Defence Strategies, regulation of private coastal defences, shoreline management plans are in place or are being developed.

Some larger-scale saltmarsh re-creation projects, beneficial usage of maintenance dredgings and managed realignment scheme to offset losses to coastal squeeze have been proposed. CHaMPs identify potential areas suitable for managed realignment.

Is the site subject to adverse ecological change? YES

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	+
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	
Management agreement	+	+
Site management statement/plan implemented	+	
Area of Outstanding National Beauty (AONB)	+	+
Special Area of Conservation (SAC)	+	

b) Describe any other current management practices:

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Contemporary.

Fauna.

Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

Bird Ringing by Solent Shorebirds Study Group.

Environment.

Coastal Sediment (SCOPAC)

Water Quality/Eutrophication (EA/Southern Water).

Various research and educational establishments carry out ongoing research into a number of different aspects of the environment.

Flora.

Spartina survey (EN project).

Completed.

Environment.

Extensive research and survey into:

Tidal regimes.

Proposed:

Intertidal Habitat Monitoring (EN/EA project).

Sediment movement.

Flora and Fauna.

The distribution of all major plant and animal groups/communities.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

Interpretation facilities and interpretative panels exist at strategic locations on the Harbour footpaths; all nature reserve areas are covered by warden and ranger services with an educational remit. An Education Officer is employed by the Chichester Harbour Conservancy to instruct both school parties and adults in the cultural and nature conservation aspects of the harbour.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities, Facilities provided and Seasonality.

Walking, including dog walking: all year.

Birdwatching: all year.

Angling and bait-digging: all year.

Swimming (in restricted areas) - mostly summer.

Sailing, windsurfing, canoeing, waterskiing.

Sept-Feb wildfowling.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs,
European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol,
BS1 6EB

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House,
Northminster Road, Peterborough, PE1 1UA, UK

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Site-relevant references

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NATURA 2000 – STANDARD DATA FORM

Special Protection Areas under the EC Birds Directive.

Each Natura 2000 site in the United Kingdom has its own Standard Data Form containing site-specific information. The data form for this site has been generated from the Natura 2000 Database submitted to the European Commission on the following date:

22/12/2015

The information provided here, follows the officially agreed site information format for Natura 2000 sites, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

The Standard Data Forms are generated automatically for all of the UK's Natura 2000 sites using the European Environment Agency's Natura 2000 software. The structure and format of these forms is exactly as produced by the EEA's Natura 2000 software (except for the addition of this coversheet and the end notes). The content matches exactly the data submitted to the European Commission.

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

Further technical documentation may be found here
http://bd.eionet.europa.eu/activities/Natura_2000/reference_portal

As part of the December 2015 submission, several sections of the UK's previously published Standard Data Forms have been updated. For details of the approach taken by the UK in this submission please refer to the following document:
http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

More general information on Special Protection Areas (SPAs) in the United Kingdom is available from the [SPA home page on the JNCC website](#). This webpage also provides links to Standard Data Forms for all SPAs in the UK.

Date form generated by the Joint Nature Conservation Committee
25 January 2016.



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK9011011
SITENAME Chichester and Langstone Harbours

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES](#)
- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type A	1.2 Site code UK9011011	Back to top
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1.3 Site name

Chichester and Langstone Harbours

1.4 First Compilation date 1987-10	1.5 Update date 2015-12
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1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee
Address: Joint Nature Conservation Committee Monkstone House City Road Peterborough PE1 1JY
Email:

1.7 Site indication and designation / classification dates

Date site classified as SPA:	1987-10
National legal reference of SPA designation	Regulations 12A and 13-15 of the Conservation Habitats and Species Regulations 2010, (http://www.legislation.gov.uk/ukxi/2010/490/contents/made) as amended by The Conservation of Habitats and Species (Amendment) Regulations 2011 (http://www.legislation.gov.uk/ukxi/2011/625/contents/made).

2. SITE LOCATION

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2.1 Site-centre location [decimal degrees]:

Longitude

-0.92

Latitude

50.80638889

2.2 Area [ha]:

5810.95

2.3 Marine area [%]

87.8

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

UKJ3	Hampshire and Isle of Wight
UKJ2	Surrey, East and West Sussex

2.6 Biogeographical Region(s)

Atlantic (100.0
%)

3. ECOLOGICAL INFORMATION

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3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo
B	A054	Anas acuta			w	330	330	i		G	C		C	
B	A056	Anas clypeata			w	100	100	i		G	C		C	
B	A052	Anas crecca			w	1824	1824	i		G	C		C	
B	A050	Anas penelope			w	2055	2055	i		G	C		C	
B	A169	Arenaria interpres			w	430	430	i		G	C		C	
B	A675	Branta bernicla bernicla			w	17119	17119	i		G	A		C	
B	A144	Calidris alba			w	236	236	i		G	C		C	
B	A672	Calidris alpina alpina			w	44294	44294	i		G	B		C	
B	A137	Charadrius hiaticula			w	846	846	i		G	B		C	

B	A157	Limosa lapponica			w	1692	1692	i		G	B		C	
B	A069	Mergus serrator			w	297	297	i		G	B		C	
B	A160	Numenius arquata			w	1861	1861	i		G	C		C	
B	A141	Pluvialis squatarola			w	3825	3825	i		G	B		C	
B	A195	Sterna albifrons			r	100	100	p		G	B		C	
B	A193	Sterna hirundo			r	33	33	p		G	C		C	
B	A191	Sterna sandvicensis			r	31	31	p		G	C		C	
B	A048	Tadorna tadorna			w	2410	2410	i		G	B		C	
B	A162	Tringa totanus			w	1788	1788	i		G	C		C	

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

3.3 Other important species of flora and fauna (optional)

Species					Population in the site				Motivation					
Group	CODE	Scientific Name	S	NP	Size		Unit	Cat.	Species Annex		Other categories			
					Min	Max		C R V P	IV	V	A	B	C	D
B	WATR	Waterfowl assemblage			93230	93230	i						X	

- **Group:** A = Amphibians, B = Birds, F = Fish, Fu = Fungi, I = Invertebrates, L = Lichens, M = Mammals, P = Plants, R = Reptiles
- **CODE:** for Birds, Annex IV and V species the code as provided in the reference portal should be used in addition to the scientific name
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Unit:** i = individuals, p = pairs or other units according to the standard list of population units and codes in accordance with Article 12 and 17 reporting, (see [reference portal](#))
- **Cat.:** Abundance categories: C = common, R = rare, V = very rare, P = present
- **Motivation categories:** IV, V: Annex Species (Habitats Directive), A: National Red List data; B: Endemics; C: International Conventions; D: other reasons

4. SITE DESCRIPTION

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4.1 General site character

Habitat class	% Cover
N02	63.0
N23	0.2
N16	0.8
N10	1.7
N07	0.5
N14	11.7
N03	21.5
N06	0.4
N04	0.3
N08	0.1
Total Habitat Cover	100.2

Other Site Characteristics

1 Terrestrial: Soil & Geology: nutrient-rich, shingle, alluvium, sand, sedimentary, neutral, mud 2 Terrestrial: Geomorphology and landscape: coastal, lowland, floodplain 3 Marine: Geology: sand, clay, shingle, mud, sedimentary, gravel 4 Marine: Geomorphology: pools, lagoon, estuary, subtidal sediments (including sandbank/mudbank), enclosed coast (including embayment), islands, shingle bar, intertidal sediments (including sandflat/mudflat)

4.2 Quality and importance

ARTICLE 4.1 QUALIFICATION (79/409/EEC) During the breeding season the area regularly supports: *Sterna albifrons* (Eastern Atlantic - breeding) 4.2% of the GB breeding population 5 year mean, 1992-1996 *Sterna hirundo* (Northern/Eastern Europe - breeding) 0.3% of the GB breeding population 5 year mean, 1992-1996 *Sterna sandvicensis* (Western Europe/Western Africa) 0.2% of the GB breeding population 5 year mean, 1993-1997 Over winter the area regularly supports: *Limosa lapponica* (Western Palearctic - wintering) 3.2% of the GB population 5 year peak mean 1991/92-1995/96 ARTICLE 4.2 QUALIFICATION (79/409/EEC) Over winter the area regularly supports: *Anas acuta* (North-western Europe) 1.2% of the population in Great Britain 5 year peak mean 1991/92-1995/96 *Anas clypeata* (North-western/Central Europe) 1% of the population in Great Britain 5 year peak mean 1991/92-1995/96 *Anas crecca* (North-western Europe) 0.5% of the population 5 year peak mean 1991/92-1995/96 *Anas penelope* (Western Siberia/North-western/North-eastern Europe) 0.7% of the population in Great Britain 5 year peak mean 1991/92-1995/96 *Arenaria interpres* (Western Palearctic - wintering) 0.7% of the population in Great Britain 5 year peak mean 1991/92-1995/96 *Branta bernicla bernicla* (Western Siberia/Western Europe) 5.7% of the population 5 year peak mean 1991/92-1995/96 *Calidris alba* (Eastern Atlantic/Western & Southern Africa - wintering) 0.2% of the population 5 year peak mean 1991/92-1995/96 *Calidris alpina alpina* (Northern Siberia/Europe/Western Africa) 3.2% of the population 5 year peak mean 1991/92-1995/96 *Charadrius hiaticula* (Europe/Northern Africa - wintering) 3% of the population in Great Britain 5 year peak mean 1991/92-1995/96 *Mergus serrator* (North-western/Central Europe) 3% of the population in Great Britain 5 year peak mean 1991/92-1995/96 *Numenius arquata* (Europe - breeding) 1.6% of the population in Great Britain 5 year peak mean 1991/92-1995/96 *Pluvialis squatarola* (Eastern Atlantic - wintering) 2.3% of the population 5 year peak mean 1991/92-1995/96 *Tadorna tadorna* (North-western Europe) 3.3% of the population in Great Britain 5 year peak mean 1991/92-1995/96 *Tringa totanus* (Eastern Atlantic - wintering) 1% of the population 5 year peak mean 1991/92-1995/96 ARTICLE 4.2 QUALIFICATION (79/409/EEC): AN INTERNATIONALLY IMPORTANT ASSEMBLAGE OF BIRDS Over winter the area regularly supports: 93230 waterfowl (5 year peak mean 1991/92-1995/96) Including: *Branta bernicla bernicla*, *Tadorna tadorna*, *Anas penelope*, *Anas crecca*, *Anas acuta*, *Anas clypeata*, *Mergus serrator*, *Charadrius hiaticula*, *Pluvialis squatarola*, *Calidris alba*, *Calidris alpina alpina*, *Limosa lapponica*, *Numenius arquata*, *Tringa totanus*, *Arenaria interpres*

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
H	H02		B
H	M01		B
H	M02		B
H	F02		I
H	G01		I

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
H	B02		I
H	D05		I
H	A02		I
H	A04		I

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

4.5 Documentation

Conservation Objectives - the Natural England links below provide access to the Conservation Objectives (and other site-related information) for its terrestrial and inshore Natura 2000 sites, including conservation advice packages and supporting documents for European Marine Sites within English waters and for cross-border sites. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

<http://publications.naturalengland.org.uk/category/3212324>

<http://publications.naturalengland.org.uk/category/6490068894089216>

5. SITE PROTECTION STATUS (optional)

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5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK04	100.0				

6. SITE MANAGEMENT

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6.1 Body(ies) responsible for the site management:

Organisation:	Natural England
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☐	Yes
☐	No, but in preparation
☒	No

6.3 Conservation measures (optional)

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EXPLANATION OF CODES USED IN THE NATURA 2000 STANDARD DATA FORMS

The codes in the table below are also explained in the [official European Union guidelines for the Standard Data Form](#). The relevant page is shown in the table below.

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	Designated Special Protection Area	53
B	SAC (includes candidates Special Areas of Conservation, Sites of Community Importance and designated SAC)	53
C	SAC area the same as SPA. Note in the UK Natura 2000 submission this is only used for Gibraltar	53

3.1 Habitat representativity

CODE	DESCRIPTION	PAGE NO
A	Excellent	57
B	Good	57
C	Significant	57
D	Non-significant presence	57

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophaë rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, screes and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	15%-100%	58
B	2%-15%	58
C	< 2%	58

3.1 Conservation status habitat

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global grade habitat

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	15%-100%	62
B	2%-15%	62
C	< 2%	62
D	Non-significant population	62

3.2 Conservation status species (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' Or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Assemblages types

CODE	DESCRIPTION	PAGE NO
WATR	Non breeding waterfowl assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code
BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Scree, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK02	Marine Nature Reserve	67
UK04	Site of Special Scientific Interest (UK)	67

Appendix 3 Solent Maritime SAC Citation

NATURA 2000 – STANDARD DATA FORM

Special Areas of Conservation under the EC Habitats Directive (includes candidate SACs, Sites of Community Importance and designated SACs).

Each Natura 2000 site in the United Kingdom has its own Standard Data Form containing site-specific information. The data form for this site has been generated from the Natura 2000 Database submitted to the European Commission on the following date:

22/12/2015

The information provided here, follows the officially agreed site information format for Natura 2000 sites, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011](#) (2011/484/EU).

The Standard Data Forms are generated automatically for all of the UK's Natura 2000 sites using the European Environment Agency's Natura 2000 software. The structure and format of these forms is exactly as produced by the EEA's Natura 2000 software (except for the addition of this coversheet and the end notes). The content matches exactly the data submitted to the European Commission.

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

Further technical documentation may be found here
http://bd.eionet.europa.eu/activities/Natura_2000/reference_portal

As part of the December 2015 submission, several sections of the UK's previously published Standard Data Forms have been updated. For details of the approach taken by the UK in this submission please refer to the following document:
http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

More general information on Special Areas of Conservation (SACs) in the United Kingdom is available from the [SAC home page on the JNCC website](#). This webpage also provides links to Standard Data Forms for all SACs in the UK.

Date form generated by the Joint Nature Conservation Committee
25 January 2016.



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0030059
SITENAME Solent Maritime

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- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES](#)
- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0030059	Back to top
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1.3 Site name

Solent Maritime

1.4 First Compilation date 1998-10	1.5 Update date 2015-12
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1.6 Respondent:

Name/Organisation:	Joint Nature Conservation Committee
Address:	Joint Nature Conservation Committee Monkstone House City Road Peterborough PE1 1JY
Email:	

Date site proposed as SCI:	1998-10
Date site confirmed as SCI:	2004-12
Date site designated as SAC:	2005-04
National legal reference of SAC designation:	Regulations 11 and 13-15 of the Conservation of Habitats and Species Regulations 2010 (http://www.legislation.gov.uk/ukxi/2010/490/contents/made).

2. SITE LOCATION

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			94.44		P	A	A	C	A
1330			2023.76		M	B	B	B	B
2120			112.43		M	C	B	B	C
2130	X		112.43		M	D			

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- **Cover:** decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
M	1355	Lutra lutra			p				P	DD	D			
M	1365	Phoca vitulina			p				P	DD	D			
I	1016	Vertigo moulinsiana			p				R	DD	B	B	B	C

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

4.1 General site character

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Habitat class	% Cover
N02	59.0
N03	23.0
N16	0.5

N01	14.0
N05	3.0
N04	0.5
Total Habitat Cover	100

Other Site Characteristics

1 Terrestrial: Soil & Geology: shingle, sedimentary, sand, alluvium, mud, neutral, nutrient-rich, clay 2 Terrestrial: Geomorphology and landscape: island, lowland, coastal 3 Marine: Geology: sand, clay, sedimentary, gravel, mud, limestone/chalk, shingle, sandstone/mudstone 4 Marine: Geomorphology: open coast (including bay), estuary, enclosed coast (including embayment), shingle bar, subtidal sediments (including sandbank/mudbank), intertidal sediments (including sandflat/mudflat), islands, lagoon

4.2 Quality and importance

Sandbanks which are slightly covered by sea water all the time for which the area is considered to support a significant presence. Estuaries for which this is considered to be one of the best areas in the United Kingdom. Mudflats and sandflats not covered by seawater at low tide for which the area is considered to support a significant presence. Coastal lagoons for which the area is considered to support a significant presence. Annual vegetation of drift lines for which the area is considered to support a significant presence, which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 100 hectares. Perennial vegetation of stony banks for which the area is considered to support a significant presence. Salicornia and other annuals colonising mud and sand for which the area is considered to support a significant presence. Spartina swards (*Spartina maritima*) for which this is one of only two known outstanding localities in the United Kingdom, which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 100 hectares. Atlantic salt meadows (*Glauco-Puccinellietalia maritima*) for which this is considered to be one of the best areas in the United Kingdom. Shifting dunes along the shoreline with *Ammophila arenaria* (?white dunes?) for which the area is considered to support a significant presence. *Vertigo moulinsiana* for which the area is considered to support a significant presence.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
H	H02		B
H	M01		B
H	F02		I
H	M02		B
H	G01		I

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
H	A04		I
H	A02		I
H	D05		I
H	A03		I
H	B02		I
H	D05		I

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

4.5 Documentation

Conservation Objectives - the Natural England links below provide access to the Conservation Objectives (and other site-related information) for its terrestrial and inshore Natura 2000 sites, including conservation advice packages and supporting documents for European Marine Sites within English waters and for cross-border sites. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): <http://publications.naturalengland.org.uk/category/6490068894089216>

<http://publications.naturalengland.org.uk/category/3212324>

http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

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5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK04	71.4	UK00	28.6	UK01	4.5

6. SITE MANAGEMENT

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6.1 Body(ies) responsible for the site management:

Organisation:	Natural England
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☐	Yes
☐	No, but in preparation
☒	No

6.3 Conservation measures (optional)

For available information, including on Conservation Objectives, see Section 4.5.

EXPLANATION OF CODES USED IN THE NATURA 2000 STANDARD DATA FORMS

The codes in the table below are also explained in the [official European Union guidelines for the Standard Data Form](#). The relevant page is shown in the table below.

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	Designated Special Protection Area	53
B	SAC (includes candidates Special Areas of Conservation, Sites of Community Importance and designated SAC)	53
C	SAC area the same as SPA. Note in the UK Natura 2000 submission this is only used for Gibraltar	53

3.1 Habitat representativity

CODE	DESCRIPTION	PAGE NO
A	Excellent	57
B	Good	57
C	Significant	57
D	Non-significant presence	57

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophaë rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, screes and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	15%-100%	58
B	2%-15%	58
C	< 2%	58

3.1 Conservation status habitat

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global grade habitat

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	15%-100%	62
B	2%-15%	62
C	< 2%	62
D	Non-significant population	62

3.2 Conservation status species (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' Or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Assemblages types

CODE	DESCRIPTION	PAGE NO
WATR	Non breeding waterfowl assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code
BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Scree, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK02	Marine Nature Reserve	67
UK04	Site of Special Scientific Interest (UK)	67

Appendix 4 Solent and Isle of Wight Lagoons SAC Citation

NATURA 2000 – STANDARD DATA FORM

Special Areas of Conservation under the EC Habitats Directive (includes candidate SACs, Sites of Community Importance and designated SACs).

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22/12/2015

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The Standard Data Forms are generated automatically for all of the UK's Natura 2000 sites using the European Environment Agency's Natura 2000 software. The structure and format of these forms is exactly as produced by the EEA's Natura 2000 software (except for the addition of this coversheet and the end notes). The content matches exactly the data submitted to the European Commission.

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

Further technical documentation may be found here
http://bd.eionet.europa.eu/activities/Natura_2000/reference_portal

As part of the December 2015 submission, several sections of the UK's previously published Standard Data Forms have been updated. For details of the approach taken by the UK in this submission please refer to the following document:
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More general information on Special Areas of Conservation (SACs) in the United Kingdom is available from the [SAC home page on the JNCC website](#). This webpage also provides links to Standard Data Forms for all SACs in the UK.

Date form generated by the Joint Nature Conservation Committee
25 January 2016.



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0017073
SITENAME Solent and Isle of Wight Lagoons

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- [5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES](#)
- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0017073	Back to top
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1.3 Site name

Solent and Isle of Wight Lagoons

1.4 First Compilation date 1996-10	1.5 Update date 2015-12
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1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee
Address: Joint Nature Conservation Committee Monkstone House City Road Peterborough PE1 1JY
Email:

Date site proposed as SCI:	1996-10
Date site confirmed as SCI:	2004-12
Date site designated as SAC:	2005-04
National legal reference of SAC designation:	Regulations 11 and 13-15 of the Conservation of Habitats and Species Regulations 2010 (http://www.legislation.gov.uk/uksi/2010/490/contents/made).

2. SITE LOCATION

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2.1 Site-centre location [decimal degrees]:

Longitude

-1.136944444

Latitude

50.775

2.2 Area [ha]:

37.93

2.3 Marine area [%]

91.7

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

UKJ3

Hampshire and Isle of Wight

2.6 Biogeographical Region(s)

Atlantic (100.0%)

3. ECOLOGICAL INFORMATION

3.1 Habitat types present on the site and assessment for them

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Annex I Habitat types						Site assessment			
Code	PF	NP	Cover [ha]	Cave [number]	Data quality	A B C D	A B C		
						Representativity	Relative Surface	Conservation	Global
1150B	X		0.38		P	B	C	B	B
1310B			0.38		G	D			
1330B			3.14		G	D			

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- **Cover:** decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

4. SITE DESCRIPTION

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4.1 General site character

Habitat class	% Cover
N03	8.3
N02	91.7
Total Habitat Cover	100

Other Site Characteristics

1 Terrestrial: Soil & Geology: mud,sedimentary,nutrient-rich,neutral,alluvium,clay 2 Terrestrial: Geomorphology and landscape: coastal,floodplain,lowland 3 Marine: Geology: sedimentary,mud,shingle 4 Marine: Geomorphology: lagoon

4.2 Quality and importance

Coastal lagoons for which this is considered to be one of the best areas in the United Kingdom.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
H	M01		B
H	H04		B
H	J02		B
H	I01		B
H	K04		I

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
H	D05		I
H	A02		I
H	B02		I

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

4.5 Documentation

Conservation Objectives - the Natural England links below provide access to the Conservation Objectives (and other site-related information) for its terrestrial and inshore Natura 2000 sites, including conservation advice packages and supporting documents for European Marine Sites within English waters and for cross-border sites. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): <http://publications.naturalengland.org.uk/category/3212324>

<http://publications.naturalengland.org.uk/category/6490068894089216>

http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

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5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK04	100.0				

6. SITE MANAGEMENT

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6.1 Body(ies) responsible for the site management:

Organisation:	Natural England
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☐	Yes
☐	No, but in preparation
☒	No

6.3 Conservation measures (optional)

For available information, including on Conservation Objectives, see Section 4.5.

EXPLANATION OF CODES USED IN THE NATURA 2000 STANDARD DATA FORMS

The codes in the table below are also explained in the [official European Union guidelines for the Standard Data Form](#). The relevant page is shown in the table below.

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	Designated Special Protection Area	53
B	SAC (includes candidates Special Areas of Conservation, Sites of Community Importance and designated SAC)	53
C	SAC area the same as SPA. Note in the UK Natura 2000 submission this is only used for Gibraltar	53

3.1 Habitat representativity

CODE	DESCRIPTION	PAGE NO
A	Excellent	57
B	Good	57
C	Significant	57
D	Non-significant presence	57

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophaë rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, screes and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	15%-100%	58
B	2%-15%	58
C	< 2%	58

3.1 Conservation status habitat

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global grade habitat

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	15%-100%	62
B	2%-15%	62
C	< 2%	62
D	Non-significant population	62

3.2 Conservation status species (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' Or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Assemblages types

CODE	DESCRIPTION	PAGE NO
WATR	Non breeding waterfowl assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code
BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Scree, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK02	Marine Nature Reserve	67
UK04	Site of Special Scientific Interest (UK)	67

Appendix 5 Nitrogen Budget

Nitrogen Budget Calculation

Planning Application Reference No.	
Site Name:	Southmere Field, Havant
Additional Information:	
Date:	16 December 2020

Stage 1	Calculate total Nitrogen in kg per year derived from the development that would exit the Wastewater Treatment Works (WwTW) into Solent catchments after treatment	
Step 1	Calculate additional population	
	Enter the number of units proposed	65
	Net population increase per housing unit	2.40
	Total net population increase generated by the development	156.00
Step 2	Calculate wastewater volume generated by the development	
	Water use in litres per person per day	110
	Total wastewater volume generated by the development (litres per day)	17,160
Step 3	Confirm receiving WwTW and permit limit	
	Select the wastewater treatment works the development will connect to	Budds Farm
	Wastewater treatment works' permit limit (mg per litre)	9.7
	Wastewater treatment works' discharge level (mg per litre)	8.7
Step 4	Calculate total nitrogen in kg per year discharged by the WwTW	
	Deduct acceptable Nitrogen loading in wastewater (mg per litre)	6.7
	Total Nitrogen discharged by WwTW (mg per day)	115,486.8
	Total Nitrogen discharged by WwTW (kg per day)	0.1155
	Total Nitrogen discharged by WwTW (kg per year)	42.2

Stage 2	Calculate existing (pre-development) nitrogen from current land use of the development site	
Step 1	Total area of development site	
	Enter the total area of the development site (hectares)	2.90
Step 2	Identify current land uses of the development site	
	Enter area currently used for urban development (hectares)	0.00
	Enter area currently used for open space / greenfield (hectares)	2.90
	Enter area currently used for woodland (hectares)	0.00
	Enter area currently used for community food growing / catchment average (hectares)	0.00
	Enter area currently used for cereals (hectares)	0.00
	Enter area currently used for dairy (hectares)	0.00
	Enter area currently used for general cropping (hectares)	0.00
	Enter area currently used for horticulture (hectares)	0.00
	Enter area currently used for pig farming (hectares)	0.00
	Enter area currently used for lowland grazing (hectares)	0.00
	Enter area currently used for mixed farming (hectares)	0.00
	Enter area currently used for poultry farming (hectares)	0.00
	Check to help ensure that sum total of land uses in Step 2 equals site area in Step 1	2.9
Step 3	Calculate nitrogen load from current land usage	
	Total Nitrogen load from current land usage (kg per year)	14.5

Nitrogen Budget Calculation

Stage 3	Calculate nitrogen load for the non-built land uses proposed for the development site	
Step 1	Identify proposed land uses of the development site	
	Enter the total urban area to be created (hectares)	1.82
	Enter the total designated open space / SANG area to be created (hectares)	1.08
	Enter the total nature reserve area to be created (hectares)	0.00
	Enter the total woodland area to be created (hectares)	0.00
	Enter the total community orchard area to be created (hectares)	0.00
	Enter the total community food growing / allotment area to be created (hectares)	0.00
	<i>Check to help ensure that sum total of proposed land uses equals site area in Stage 2</i>	2.90
Step 2	Calculate total Nitrogen load from proposed land uses	
	<i>Total Nitrogen load from future land uses (kg per year)</i>	31.43

Stage 4	Calculate the net change in Nitrogen load from the proposed development	
Step 1	Identify Nitrogen load from wastewater (Stage 1)	
	<i>Nitrogen leaving wastewater treatment works (kg per year)</i>	42.15
Step 2	Calculate net change in Nitrogen load from land use changes	
	<i>Total Nitrogen load from future land use (kg per year)</i>	16.93
Step 3	Calculate total Nitrogen budget for the development site	
	<i>Nitrogen budget for the site (kg per year)</i>	59.08
Step 4	Calculate precautionary buffer if Nitrogen budget exceeds zero	
	<i>Precautionary Nitrogen buffer (kg per year)</i>	11.82

Total Nitrogen budget for the proposed development (kg per year)	70.9
Development will generate additional Nitrogen - Mitigation is required Please liaise with your Local Planning Authority for advice on next steps	