

# Habitats Regulations Assessment for the Gosport Borough Local Plan 2038

**Screening Assessment Report** 

August 2021



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**Screening Assessment Report** 

| Client:  | Gosport Borough Council                |  |  |
|--|--|--|--|
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## **Abbreviations**

AADT Average Annual Daily Traffic

APIS Air Pollution Information System

CJEU Court of Justice of the European Union

DO Dissolved Oxygen

DWF Dry Weather Flow

EUNIS European Nature Information System

FLL Functionally Linked Land

HRA Habitats Regulations Assessment

HTL Hold the Line

IAQM Institute of Air Quality Management

IWMS Integrated Water Management Study

kgN/ha/yr Kilograms of nitrogen per hectare per year

keq/ha/yr Kilogram equivalents per hectare per year

MI/d Megalitres per day

MR Managed Realignment

NAI No Active Intervention

NH<sub>3</sub> Ammonia

NOx Nitrogen oxides

PfSH Partnership for South Hampshire

RHCP Regional Habitat Creation Programme

SAC Special Area of Conservation

SIP Site Improvement Plan

SMP Shoreline Management Plan



SRMS Solent Recreation Mitigation Strategy

SRTM Sub Regional Transport Model

SPA Special Protection Area

SPD Supplementary Planning Document

SSSI Site of Special Scientific Interest

WAFU Water Available for Use

WRMP Water Resources Management Plan

WRZ Water Resource Zone

WWTW Waste Water Treatment Works



## **0** Executive Summary

#### 0.1 Introduction

- 0.1.1 This report has been prepared for Gosport Borough Council (GBC) as part of the Habitats Regulations Assessment (HRA) for the Local Plan 2038. The report accompanies the Regulation 18 Consultation Draft Local Plan and forms part of the evidence base upon which it is based.
- 0.1.2 The objective of this HRA Report is to identify any aspects of the plan that are likely to have a significant effect on internationally protected sites within the national site network either alone or in combination with other plans or projects. For those aspects of the plan where likely significant effects are identified, an Appropriate Assessment will be undertaken subsequently to determine whether there are any adverse effects to the integrity of the protected sites following mitigation.
- 0.1.3 HRA is a requirement of the Conservation of Habitats and Species Regulations 2017 (as amended; commonly referred to as 'the Habitats Regulations') and must be applied to any plan or project not directly connected with or necessary to the management of a protected site, if it is likely to have a significant effect on a protected site either alone or in combination with other plans or projects. An effect is likely in this context if the risk cannot be excluded on the basis of objective information (see chapter 2).

#### 0.2 Scope of the Assessment

- 0.2.1 Acknowledging that the Local Plan is not directly connected with or necessary to management of the sites for nature conservation, the HRA considers the following internationally designated sites for likely significant or adverse effects on integrity:
  - Solent & Isle of Wight Lagoons SAC
  - Chichester & Langstone Harbours SPA
  - Solent & Dorset Coast SPA
  - Chichester & Langstone Harbours Ramsar
  - Solent & Southampton Water Ramsar
- Solent Maritime SAC
- Portsmouth Harbour SPA
- Solent & Southampton Water SPA
- Portsmouth Harbour Ramsar
- 0.2.2 Chapter 3 presents information about each site including their qualifying features and conservation objectives.

#### 0.3 Impact Pathways

- 0.3.1 The following impact pathways are considered for likely significantly effects on the protected sites:
  - Atmospheric pollution



- Coastal squeeze
- Recreational disturbance
- Water abstraction
- Water quality
- Site specific impacts
- 0.3.2 Chapter 5 describes the available evidence about these impact pathways in relation to the designated sites.

#### 0.4 Summary of Findings

- 0.4.1 No likely significant effects were identified in relation to atmospheric pollution, coastal squeeze or water abstraction for any of the SAC/SPA/Ramsar.
- 0.4.2 Likely significant effects were identified in relation to recreational disturbance impacts on Chichester and Langstone Harbours SPA/Ramsar, Portsmouth Harbour SPA/Ramsar, and Solent and Southampton Water SPA/Ramsar.
- 0.4.3 Likely significant effects were identified in relation to water quality impacts on Solent Maritime SAC, Chichester and Langstone Harbours SPA/Ramsar, Portsmouth Harbour SPA/Ramsar, and Solent and Southampton Water SPA/Ramsar.
- 0.4.4 Likely significant effects were identified in relation to site specific impacts on Portsmouth Harbour SPA/Ramsar, Solent and Dorset Coast SPA, Solent and Isle of Wight Lagoons SAC, and Solent and Southampton Water SPA/Ramsar.

#### 0.5 Conclusions

0.5.1 The Gosport Borough Local Plan will now be taken forward for Appropriate Assessment in view of the sites' conservation objectives, taking account of mitigation, to determine whether there will be adverse effects on site integrity.



## 1 Introduction

#### 1.1 Purpose of this Report

- 1.1.1 This report has been prepared for Gosport Borough Council (GBC) as part of the Habitats Regulations Assessment (HRA) for the Local Plan 2038. The report accompanies the Regulation 18 Consultation Draft Local Plan and forms part of the evidence base upon which it is based.
- 1.1.2 The objective of this HRA Report is to identify any aspects of the plan that are likely to have a significant effect on internationally protected sites within the national site network either alone or in combination with other plans or projects. For those aspects of the plan where likely significant effects are identified, an Appropriate Assessment will be undertaken subsequently to determine whether there are any adverse effects to the integrity of the protected sites following mitigation.

#### 1.2 The Gosport Borough Local Plan 2038

- 1.2.1 Currently the development plan for Gosport Borough is comprised of the following documents:
  - The Gosport Borough Local Plan 2011-2029 (adopted October 2015);
  - Supplementary Planning Documents (SPD) including the Gosport Waterfront and Town Centre SPD; and
  - Hampshire Minerals and Waste Plan (adopted October 2013).
- 1.2.2 The new Local Plan will set the planning strategy for the Borough and address emerging housing and employment needs for a period of 17 years from 2021 up to 2038. The Regulation 18 Consultation Draft Local Plan sets out proposed strategic and development management policies, development allocations and actions to meet the environmental, social and economic challenges facing the Borough. When adopted the Local Plan will provide a strategy for the distribution, scale and form of development and supporting infrastructure, a set of proposals to deliver the strategy, policies against which to assess planning applications, and proposals for monitoring the success of the plan.

#### 1.3 Habitats Regulations Assessment

1.3.1 Habitats Regulations Assessment must be applied to any plan or project not directly connected with or necessary to the management of a 'European site', if it is likely to have a significant effect on a European site either alone or in combination with other plans or projects. HRA is a requirement of the Conservation of Habitats and Species Regulations 2017 (as amended; henceforth 'the Habitats Regulations'), the UK' transposition of European Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ('the Habitats Directive'). Now that the UK has left the EU the Habitats Directive no longer applies directly to the assessment of plans and projects in the UK. The Conservation of Habitats and Species



(Amendment) (EU Exit) Regulations 2019 amend parts of the 2017 Regulations so that they continue to operate effectively<sup>1</sup>.

- 1.3.2 European sites <sup>2</sup> provide ecological infrastructure for the protection of rare, endangered or vulnerable natural habitats and species of exceptional importance. European sites consist of Special Areas of Conservation (SAC) and Special Protection Areas (SPA) and together form part of the new national site network in the UK to replace the EU Natura 2000 network. Additionally, the National Planning and Policy Framework (NPPF; MHCLG, 2021) and Circular 06/05 (ODPM, 2005) require that Ramsar sites (UNESCO, 1971) are treated as if they are fully designated sites for the purposes of considering development proposals that may affect them.
- 1.3.3 The HRA Report responds to recent case law from the Court of Justice of the European Union (CJEU) and Natural England's position in relation to nutrient neutral development in south Hampshire.

#### 1.4 Scope and Structure of this Document

- 1.4.1 The document is structured around the following sections:
  - Chapter Two: HRA methodology;
  - Chapter Three: European sites, qualifying features, conservation objectives, and condition status;
  - Chapter Four: Information about the Gosport Borough Local Plan, including incorporated mitigation measures;
  - Chapter Five: Identifying impact pathways and screening for likely significant effects;
  - Chapter Six: Summary and conclusions.

<sup>&</sup>lt;sup>2</sup> Although the term is not used in the Habitats Directive, a statutory definition of 'European site' is given in regulation 8 of the Habitats Regulations 2017. This document therefore refers collectively to SAC/SPA as European sites



<sup>&</sup>lt;sup>1</sup> Defra (2021): Changes to the Habitats Regulations Assessment 2017. Accessed online [09/04/2021] at: <a href="https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017/chan

## 2 Methodology

#### 2.1 Good Practice Guidance

- 2.1.1 The latest guidance on HRA has been published by MHCLG (2019) and DEFRA (2021), with more detailed guidance issued by the European Commission (2018). The Habitats Regulations Assessment Handbook (Tyldesley & Chapman, 2013) was developed to provide a definitive source of detailed practical guidance consistent with case law, examples of recent good practice and government guidance. The Handbook is regularly updated. The Screening Assessment and Appropriate Assessment for the Proposed Development have been undertaken with reference to the HRA Handbook and other guidance documents.
- 2.1.2 The requirement for HRA stems from Regulations 63 and 64 of the Habitats Regulations, which are represented by four stages within the HRA process as listed in Table 2.1. This report focusses on Stage 1: HRA screening.

Table 2.1: Stages of HRA in Guidance from Tyldesley & Chapman (2013)

#### **HRA Handbook Stage**

Stage 1: Screening for Likely Significant Effects

Stage 2: Appropriate Assessment & Integrity Test

Stage 3: Alternative Solutions

Stage 4: Imperative Reasons of Overriding Public Interest and Compensatory Measures

2.1.3 In The Habitats Regulations Assessment Handbook (Tyldesley & Chapman, 2013) section F.1.1.2 (Introduction and overview to 'Plan' assessment) it is recognised that the assessment of a plan may not be as precise and detailed as that of a project at application stage. Plans, and in particular strategic plans such as a Local Plan, also vary in their degree of specificity ranging from very general statements and policy aspirations which may cover a wide geographic area to more prescriptive proposals that are scale and location specific.

#### 2.2 Screening

2.2.1 Screening is the process which identifies whether a proposed plan or project is likely to result in significant effects to European sites, either alone or in combination with other plans or projects. A significant effect is any effect that would undermine the conservation objectives for a European site. There must be a causal connection or link between the plan or project and the qualifying features of the site which could result in significant effects, but this may be direct or indirect (Tyldesley & Chapman, 2013).



- 2.2.2 Regulation 63 of the Habitats Regulations 2017 states that where a likely significant effect on a European site is identified, then an appropriate assessment of the implications of the plan or project must be made for that site in view of that site's conservation objectives.
- 2.2.3 Where adverse effects are anticipated changes must be made to the plan or project. The process is characterised by the precautionary principle, defined as (European Commission, 2000):

"If a preliminary scientific evaluation shows that there are reasonable grounds for concern that a particular activity might lead to damaging effects on the environment, or on human, animal or plant health, which would be inconsistent with the protection normally afforded to these within the European Community, the Precautionary Principle is triggered.

Decision-makers then have to determine what action to take. They should take account of the potential consequences of taking no action, the uncertainties inherent in scientific evaluation, and they should consult interested parties on the possible ways of managing the risk. Measures should be proportionate to the level of risk, and to desired level of protection. They should be provisional in nature pending the availability more reliable scientific data.

Action is then undertaken to obtain further information enabling a more objective assessment of the risk. The measures taken to manage the risk should be maintained as long as the scientific information remains inconclusive and the risk unacceptable."

- 2.2.4 The precautionary approach applies at both screening and appropriate assessment stages and means that:
  - At screening stage, if a risk of a significant effect on a European site cannot be ruled out on the basis of objective information, the effect is "likely" and an appropriate assessment must be carried out. The words "likely" and "unlikely" are used in this HRA applying that approach (unless otherwise indicated).
  - Following an appropriate assessment, if a competent authority cannot rule out all reasonable scientific doubt of an adverse effect on a site's integrity, the plan or project can only be authorised if the statutory derogation tests are satisfied.
- 2.2.5 Whilst the UK is no longer part of the EU, the UK government's ongoing commitment to the precautionary principle is enacted in section 16(2) of the EU (Withdrawal) Act 2018 and further detail is to be provided within the Environment Bill. The precautionary principle therefore continues to be applicable to the HRA process.

#### 2.3 Appropriate Assessment

2.3.1 The purpose of the Appropriate Assessment stage is to further analyse likely significant effects identified during the screening stage, as well as those effects which were uncertain or lacked sufficient data and were taken forward for assessment in accordance with the precautionary principle. The Appropriate Assessment evaluates the implications of the project, either alone or in combination with other plans or projects, in light of the conservation objectives of affected European sites.



2.3.2 The Appropriate Assessment stage includes a test of whether the project proposals will result in adverse effects on site integrity which can be defined as (ODPM, 2005):

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

2.3.3 In the 2018 *Holohan* judgment<sup>3</sup>, the CJEU ruled that an Appropriate Assessment must consider the interest features of European sites even where those features may be found outside the strict boundaries of those sites and must also consider other habitat types or species, which are present on the site, but for which that site has not been listed but which are necessary to the conservation of the habitat types and species listed for the protected area. The former matter is normally captured in Appropriate Assessment in England (and in this HRA) through consideration of the concept of Functionally Linked Land (FLL) (e.g. land outside the Solent SPA boundaries which supports wintering Brent goose and waders). The latter is addressed where, for example, habitats within a European site that are not themselves designated are nonetheless considered when assessing impacts because of their functional role in enabling the site to meet its conservation objectives (e.g. marginal vegetation in the River Itchen SAC which is used by southern damselfly for egg laying).

#### 2.4 Counteracting Measures

- 2.4.1 This section draws on Principle C.5 of the HRA Handbook (Tyldesley & Chapman, 2013) to identify different types of counteracting measure and describe how they should be considered within the HRA. There is a well-established policy and ethical approach to assessment which recognises a hierarchy of counteracting measures, which prefers avoidance of adverse effects in the first instance, then cancellation, then reduction, and finally compensatory measures where these can be adequately justified. This approach is embedded in guidance (e.g. CIEEM, 2018; MHCLG, 2019), professional standards (BS42020:2013) and the National Planning Policy Framework (para. 175; MHCLG, 2021).
- 2.4.2 A distinction must be drawn between measures intended to avoid, cancel or reduce adverse effects on European sites (collectively referred to as mitigation measures) and those which are intended to compensate for adverse effects (compensatory measures); the latter must only be considered following application of the Imperative Reasons of Overriding Public Interest test:
  - Mitigation: Avoidance measures: intended to stop or prevent effects from occurring, or to eliminate the risk of them occurring. Successful avoidance measures mean there will be no adverse effect, and hence no requirement to assess effects in combination.
  - Mitigation: Cancellation measures: intended to completely neutralise adverse effects. In this context a proposal will have a potential effect, but its potentially negative outcomes have been cancelled without residual effect, and there is no requirement to assess effects in combination.

<sup>&</sup>lt;sup>3</sup> Case C 461/17 Court of Justice of the European Union (2018): Holohan v. An Bord Pleanála.



- Mitigation: Reduction measures: intended to diminish an effect either by reducing the scale of the effect, or its likelihood of occurring, or both. Such measures can reduce the severity/likelihood of an effect to the point where it can no longer be regarded as a likely significant effect but may result in a risk of residual effects. Residual effects need to be considered for their potential to lead to cumulative or in combination effects.
- Compensatory measures: intended to offset the harm to the integrity of an internationally protected site that would occur as a result of a plan or project. They are considered only after having established that the harm to the site itself cannot be further reduced by mitigation or alternative solutions, and are the measures required to ensure that the overall coherence of the national site network is protected.
- 2.4.3 In the 2018 People Over Wind judgment<sup>4</sup>, the CJEU ruled that measures intended to avoid or reduce the harmful effects of a plan or project on a European site (i.e. mitigation measures) cannot be taken into account by a competent authority when considering, at the HRA screening stage, whether the plan or project is likely to have a significant effect on a European site. The July 2019 updates to Planning Practice Guidance on HRA note that features that are integral to the design or physical characteristics of the project / plan that is being assessed (as opposed to factors that have been introduced to avoid or reduce harm) may be considered at the screening stage. However, this will need to be determined on a case by case basis.
- 2.4.4 Thus where mitigation measures are incorporated into the plan or project, are effective, reliable, timely, guaranteed and of sufficient duration, they should be taken into account at the integrity test stage (Stage 2). A competent authority can impose additional mitigation measures over and above incorporated mitigation, if necessary, so as to ensure that a plan or project would not adversely affect the integrity of an internationally protected site, either alone or in combination with other plans and projects. Additional mitigation measures should also be considered at the integrity test stage.

#### 2.5 In-combination Effects

- 2.5.1 Other plans and projects being prepared or implemented in the area may have the potential to cause negative effects on European sites. These effects may act in combination with the effects of the Local Plan, possibly leading an insignificant effect to become significant. It is therefore important to consider which other plans and projects could generate similar effects as the Local Plan, at the same European sites, and which may act in-combination.
- 2.5.2 The plans and projects listed below were identified at the screening stage for consideration during in combination assessment. Table 2.2 summarises the housing requirements set out in the Local Plans of neighbouring authorities.
  - > Strategic development at Tipner and Horsea Island, Portsmouth
  - Fareham Core Strategy (adopted August 2011)
  - Fareham Development Sites and Policies (DSP) Plan (adopted June 2015)

<sup>&</sup>lt;sup>4</sup> Case C 323/17 Court of Justice of the European Union (2018): People Over Wind, Peter Sweetman v Coillte Teoranta.



- Fareham Borough Welborne Plan (adopted 2015)
- Fareham Revised Publication Local Plan 2037 (emerging)
- The Portsmouth Plan (adopted 2012)
- Portsmouth City Draft Local Plan 2014-2034 (emerging)
- Partnership for South Hampshire (PfSH) Spatial Position Statement 2016-2034
- North Solent Shoreline Management Plan (2010)
- Hampshire Local Transport Plan (2011-2031)
- Joint Hampshire Minerals and Waste Plan (adopted 2013) (includes Portsmouth, Southampton, New Forest National Park and South Downs National Park)

Table 2.2: Housing numbers to be delivered in neighbouring authorities

| Local authority | Plan period and status | Annual housing requirement average | Total housing over plan period |
|-----------------|------------------------|------------------------------------|--------------------------------|
| Fareham         | 2021 – 2037 (emerging) | 662                                | 10,594                         |
| Portsmouth      | 2010 – 2027 (adopted)  | 490                                | 8,330                          |



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## 3 National Site Network

#### 3.1 Scope of the Assessment

- 3.1.1 All European sites falling partially within or close to Gosport Borough are considered within the scope of this assessment, together with internationally important Ramsar sites.
- 3.1.2 Special Areas of Conservation (SAC): SAC are strictly protected sites originally designated under the EC Habitats Directive, which is transposed into national law via 'The Conservation of Habitats and Species Regulations 2017', and now amended by 'The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.' SAC make a significant contribution to conserving the 189 habitat types and 788 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 which are conserved by SPA see below). Under the 2019 Regulations the selection and designation of SACs is based on the criteria set out in Annex III of the Habitats Directive insofar as it applies to the UK.
- 3.1.3 Special Protection Areas (SPA): The European Community adopted the *Council Directive on the Conservation of Wild Birds* (2009/147/EC), usually referred to as the Birds Directive. The Birds Directive is transposed into national law via the 'Wildlife and Countryside Act 1981' and 'The Conservation of Habitats and Species Regulations 2017', now amended by 'The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019'. It provides for the protection, management and control of all species of naturally occurring wild birds in the European territory of Member States. In particular it requires Member States to identify areas to be given special protection for the rare or vulnerable species listed in Annex I (Article 4.1) and for regularly occurring migratory species (Article 4.2) and for the protection of wetlands, especially wetlands of international importance. These areas are known as Special Protection Areas. Following the UK's exit from the EU the EC no longer has a role in designating SPAs in the UK and they are instead designated under the Habitats Regulations 2019.
- 3.1.4 Ramsar: Ramsar sites are wetlands of international importance designated under the Ramsar Convention (UNESCO, 1971). In the UK, the first Ramsar sites were notified in 1976 and since then many more have been designated. The initial emphasis was on selecting sites of importance to waterbirds, and consequently many Ramsar sites are also Special Protection Areas.
- 3.1.5 Acknowledging that the Local Plan is not directly connected with or necessary to management of the sites for nature conservation, the HRA considers the following protected sites for likely significant or adverse effects on integrity; see Figure 3.1:
  - Solent & Isle of Wight Lagoons SAC
  - Chichester & Langstone Harbours SPA
  - Solent & Dorset Coast SPA
  - Chichester & Langstone Harbours Ramsar
- Solent Maritime SAC
- Portsmouth Harbour SPA
- Solent & Southampton Water SPA
- Portsmouth Harbour Ramsar



#### Solent & Southampton Water Ramsar

3.1.6 These sites have been designated to conserve a wide variety of habitats of international importance, along with species populations of high conservation significance. Table 3.1 and Table 3.2 set out the qualifying features for SAC and SPA designations. Ramsar sites do not have qualifying features, however the relevant Ramsar criteria applicable to each site is set out in Table 3.3. Appendix I presents more detailed site accounts, feature descriptions, and qualifying species count data for each SPA at the time of citation.

#### 3.2 Conservation Objectives for SAC and SPA

3.2.1 The Habitats Regulations require the appropriate authority to maintain or where appropriate restore qualifying habitats and species populations to favourable conservation status. Site conservation objectives are referred to in the Habitats Regulations and are for use when there is a need to undertake an Appropriate Assessment under the relevant parts of the legislation. The conservation objectives are set for each feature (habitat or species) of an SAC / SPA. Where the objectives are met, the site can be said to demonstrate a high degree of integrity and the site itself makes a full contribution to achieving the aims of the National Site Network. The conservation objectives defined by Natural England for the SAC and SPA included within the scope of this HRA are given in Table 3.4. Natural England has published supplementary advice on conserving and restoring site features for each site<sup>5</sup>.

#### 3.3 Conservation Objectives for Ramsar Sites

3.3.1 Ramsar sites do not have agreed conservation objectives, but in most instances overlap with SPA site boundaries. However, it should be noted that Ramsar qualifying features can include a range of habitats and non-bird species common to SAC designations, as well as bird species and assemblages and their supporting habitats, which are common to SPA. Of the Ramsar sites around Gosport, the qualifying Ramsar Convention criteria for the Solent and Southampton Water, Portsmouth Harbour, and Chichester and Langstone Harbours sites overlap substantially with the features of their equivalent SPA. No additional conservation objectives are defined to assess these features, and those relating to the equivalent SPA can be used in the assessment.

Natural England (2019): Conservation Advice for Marine Protected Areas: Solent and Southampton Water SPA: Supplementary Advice on Conservation Objectives. 13 September 2019.



<sup>&</sup>lt;sup>5</sup> Natural England (2018): Conservation Advice for Marine Protected Areas: Solent and Isle of Wight Lagoons SAC: Supplementary Advice on Conservation Objectives. 14 September 2018.

Natural England (2020): Conservation Advice for Marine Protected Areas: Solent Maritime SAC: Supplementary Advice on Conservation Objectives. 13 March 2020.

Natural England (2019): Conservation Advice for Marine Protected Areas: Chichester and Langstone Harbours SPA: Supplementary Advice on Conservation Objectives. 13 September 2019.

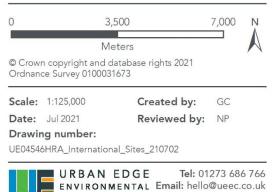
Natural England (2018): Conservation Advice for Marine Protected Areas: Portsmouth Harbour SPA: Supplementary Advice on Conservation Objectives. 14 September 2018.

Natural England (2021): Conservation Advice for Marine Protected Areas: Solent and Dorset Coast SPA: Supplementary Advice on Conservation Objectives. 19 March 2021.

## Gosport Local Plan Habitats Regulations Assessment



Figure 3.1: European Sites in and around Gosport Borough



CONSULTING Web: www.ueec.co.uk

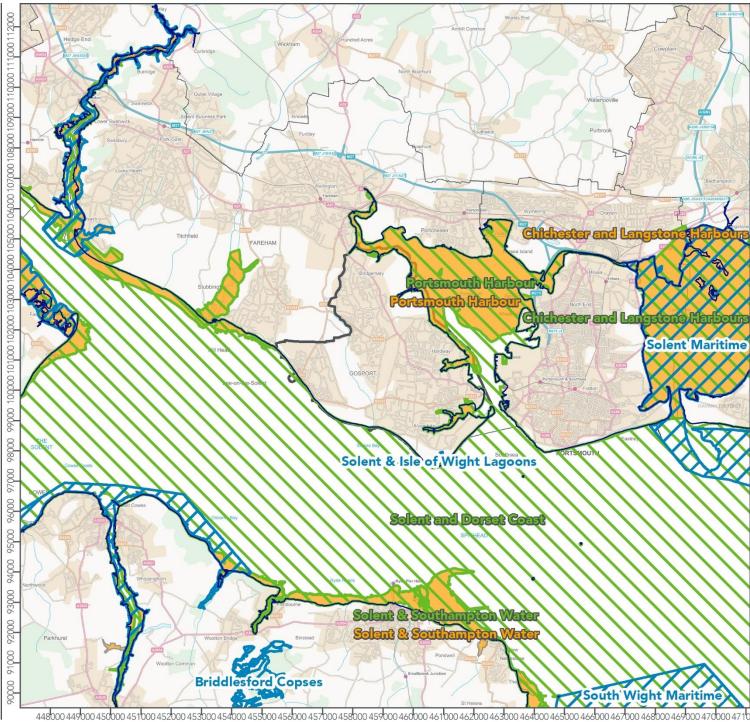


Table 3.1: SAC Qualifying Features

| Site Name       | Description  | Qualifying Features  |
|-----------------|--|--|
| Solent and Isle | The Solent and Isle of Wight Lagoons SAC covers an area of approximately 36 ha and                   | Annex I Habitat  |
| of Wight        | encompasses a series of coastal lagoons, including percolation, isolated and sluiced lagoons.        | - Coastal lagoons*   |
| Lagoons SAC     | The site includes eight lagoons in the marshes in the Keyhaven to Lymington area, one lagoon         |  |
|                 | at Farlington Marshes in Langstone Harbour, four lagoons located behind the sea-wall at              |  |
|                 | Bembridge Harbour and one lagoon at Gilkicker, near Gosport. Each lagoon has its own unique          |  |
|                 | conditions with salinities varying from brackish to hypersaline and substrates ranging from soft     |  |
|                 | mud to muddy sand with a high proportion of shingle. These sheltered conditions support a            |  |
|                 | diverse fauna including large populations of three notable species: the nationally rare foxtail      |  |
|                 | stonewort (Lamprothamnium papulosum), the nationally rare lagoon sand shrimp (Gammarus               |  |
|                 | insensibilis) and the nationally scarce starlet sea anemone (Nematostella vectensis).                |  |
| Solent          | The Solent Maritime SAC comprises a major estuarine system covering an area of                       | Annex I Habitat  |
| Maritime SAC    | approximately 11,325 ha on the south coast of England. The Solent and its inlets are unique in       | - Annual vegetation of drift lines                               |
|                 | Britain and Europe for their unusual tidal regime, including double tides and long periods of        | - Atlantic salt meadows (Glauco-Puccinellietalia maritimae)      |
|                 | tidal stand at high and low tide. As a result, the Solent Maritime SAC is a unique suite of          | - Coastal lagoons*   |
|                 | functionally linked estuaries and dynamic marine and estuarine habitats. The site has the largest    | - Spartina swards  |
|                 | number of small estuaries in the tightest cluster anywhere in Great Britain, with examples of        | - Estuaries  |
|                 | coastal plain estuaries (Yar, Medina, King's Quay Shore and Hamble) and bar-built estuaries          | - Mudflats and sandflats not covered by seawater at low tide     |
|                 | (Newtown Harbour, Beaulieu, Langstone Harbour, Chichester Harbour). It is located in one of          | - Perennial vegetation of stony banks                            |
|                 | the only major sheltered channels in Europe, lying between a substantial island (the Isle of         | - Salicornia and other annuals colonising mud and sand           |
|                 | Wight) and the mainland. Sediment habitats within the site include extensive areas of intertidal     | - Sandbanks which are slightly covered by sea water all the time |
|                 | mudflats and sandflats, often supporting eelgrass (Zostera sp.), subtidal sandbanks, saltmarsh       | - Shifting dunes along the shoreline with Ammophila arenaria     |
|                 | and natural shoreline transitions such as drift line vegetation. The Solent Maritime SAC is of       | ("white dunes")  |
|                 | particular interest as it is the only site to support all four species of cordgrass (Spartina) found | Annex II Species   |
|                 | in the UK, including the rare native small cordgrass (Spartina maritima). The Solent Maritime        | - Desmoulin's Whorl Snail <i>Vertigo moulinsiana</i>             |
|                 | SAC also includes a number of coastal lagoons, sand dunes at East Head and at the time of            |  |
|                 | designation supported a population of the rare Desmoulin's whorl snail (Vertigo moulinsiana).        |  |

Annex I priority habitats are denotated by an asterisk (\*)



Table 3.2: SPA Qualifying Features

| Site Name      | Description  | Qualifying Features   |
|----------------|--|---|
| Chichester and | Chichester and Langstone Harbours are located on the south coast of England in Hampshire         | Wild Birds Directive Article 4.1 Qualification: Annex I Species   |
| Langstone      | and West Sussex, covering an area of approximately 5,811 ha. They are large, sheltered           | - Little Tern Sterna albifrons (Breeding)                         |
| Harbours SPA   | estuarine basins comprising extensive sand- and mud-flats exposed at low tide. The two           | - Common Tern Sterna hirundo (Breeding)                           |
|                | harbours are joined by a stretch of water that separates Hayling Island from the mainland.       | - Sandwich Tern Sterna sandvicensis (Breeding)                    |
|                | Tidal channels drain the basin and penetrate far inland. The mud-flats are rich in invertebrates | - Bar-tailed Godwit <i>Limosa lapponica</i> (Non-breeding)        |
|                | and also support extensive beds of algae, especially Enteromorpha sp., and                       | Wild Birds Directive Article 4.2 Qualification: Migratory Species |
|                | eelgrasses Zostera spp. The basin contains a wide range of coastal habitats supporting           | not listed in Annex I   |
|                | important plant and animal communities. The site is of particular significance for waterbirds,   | - Pintail <i>Anas acuta</i> (Non-breeding)                        |
|                | especially in migration periods and in winter. It also supports important colonies of breeding   | - Shoveler <i>Anas clypeata</i> (Non-breeding)                    |
|                | terns.   | - Eurasian Teal <i>Anas crecca</i> (Non-breeding)                 |
|                |  | - Wigeon <i>Anas Penelope</i> (Non-breeding)                      |
|                |  | - Turnstone Arenaria interpres (Non-breeding)                     |
|                |  | - Dark-bellied Brent Goose Branta bernicla bernicla (Non-         |
|                |  | breeding)   |
|                |  | - Sanderling Calidris alba (Non-breeding)                         |
|                |  | - Dunlin Calidris alpina alpine (Non-breeding)                    |
|                |  | - Ringed Plover Charadrius hiaticula (Non-breeding)               |
|                |  | - Red-breasted Merganser Mergus serrator (Non-breeding)           |
|                |  | - Eurasian Curlew <i>Numenius arquata</i> (Non-breeding)          |
|                |  | - Grey Plover Pluvialis squatarola (Non-breeding)                 |
|                |  | - Shelduck <i>Tadorna tadorna</i> (Non-breeding)                  |
|                |  | - Redshank <i>Tringa tetanus</i> (Non-breeding)                   |
|                |  | Waterbird Assemblage  |
| ortsmouth      | Portsmouth Harbour SPA covers an area of approximately 1,249 ha comprising a large,              | Wild Birds Directive Article 4.2 Qualification: Migratory Species |
| Harbour SPA    | industrialised estuary. Together with the adjacent Chichester and Langstone Harbours, it         | not listed in Annex I   |
|                | forms one of the most important sheltered intertidal areas on the south coast of England.        | - Dark-bellied Brent Goose Branta bernicla bernicla (Non-         |
|                | The harbour has been classified as an SPA due to internationally and nationally important        | breeding)   |
|                | numbers of birds and specifically protects the following features: dark-bellied Brent goose;     | - Dunlin <i>Calidris alpina alpine</i> (Non-breeding)             |



| Site Nam | ne    | Description   | Qualifying Features   |
|----------|-------|---|---|
|          |       | red-breasted merganser; dunlin; and black-tailed godwit. The SPA is composed of extensive         | - Black-tailed Godwit Limosa limosa islandica (Non-breeding)    |
|          |       | intertidal mudflats and sandflats with seagrass beds, areas of saltmarsh, shallow coastal         | - Red-breasted Merganser <i>Mergus serrator</i> (Non-breeding)  |
|          |       | waters, coastal lagoons and coastal grazing marsh. At low tide the extensive mudflats are         |   |
|          |       | exposed, the water drained by channels and creeks uniting to form a narrow exit into the          |   |
|          |       | Solent. There is comparatively little freshwater input to Portsmouth Harbour. The largest         |   |
|          |       | input is the River Wallington, which flows into Fareham Creek in the north-west of Portsmouth     |   |
|          |       | Harbour. The estuarine sediments support rich populations of intertidal invertebrates, which      |   |
|          |       | provide an important food source for overwintering birds. There are approximately 77 ha of        |   |
|          |       | seagrass beds in Portsmouth Harbour, which are found mainly in the north-west of the              |   |
|          |       | harbour. These beds include both Zostera marina (found on the low shore) and Zostera              |   |
|          |       | noltii (on the upper to mid shore). The seagrass beds are amongst the most extensive in           |   |
|          |       | Britain and are an important food source for dark-bellied Brent goose. The saltmarsh areas        |   |
|          |       | are mainly comprised of cordgrass (Spartina) swards and provide feeding and roosting areas        |   |
|          |       | for overwintering birds.  |   |
| Solent   | and   | The Solent and Dorset Coast SPA was formally designated in February 2020. The SPA is              | Wild Birds Directive Article 4.1 Qualification: Annex I Species |
| Dorset   | Coast | located along the coasts of Dorset, Hampshire, Isle of Wight and West Sussex and adjacent         | - Little Tern Sterna albifrons (Breeding)                       |
| SPA      |       | areas offshore. The site comprises approximately 255 square nautical miles (SNM) and              | - Sandwich Tern <i>Sterna sandvicensis</i> (Breeding)           |
|          |       | extends from the Isle of Purbeck in the West to Bognor Regis in the East, following the           | - Common Tern <i>Sterna albifrons</i> (Breeding)                |
|          |       | coastline on either side to the Isle of Wight and into Southampton Water. The site is             |   |
|          |       | intended to protect important foraging areas at sea used by breeding colonies in nearby           |   |
|          |       | SPA.  |   |
|          |       | There are already four SPA within the Greater Solent that are designated for breeding terns.      |   |
|          |       | These are Chichester & Langstone Harbours SPA (for Sandwich and little tern), the Solent          |   |
|          |       | and Southampton Water SPA (for common, Sandwich and little tern) and Pagham Harbour               |   |
|          |       | SPA (little tern). The fourth associated SPA lies within Poole Harbour (common tern and           |   |
|          |       | Sandwich tern). The new SPA covers the area that the breeding terns use for foraging during       |   |
|          |       | April to September. Whilst management measures are already in place in this foraging area         |   |
|          |       | due to the existing SPA, the classification of this new site will provide clarity to stakeholders |   |
|          |       | about the areas the terns forage within and the species that require consideration.               |   |



| Site Name   | Description  | Qualifying Features   |
|-------------|--|---|
|             | The site includes the sub-tidal areas not currently encompassed in the existing SPAs.          |   |
|             | Therefore its landward boundary is at mean low water (MLW) where it abuts any existing SPA     |   |
|             | where terns are already a feature. Elsewhere the landward boundary is the mean high water      |   |
|             | (MHW) so as to afford the birds protection within the intertidal areas; for example at         |   |
|             | Portsmouth Harbour. However, the landward boundary of the SPA extends to MHW within            |   |
|             | Pagham Harbour and hence overlaps with the existing SPA (Natural England, 2016; p.20).         |   |
|             | This is because the easternmost extremity of the SPA is determined by the modelled usage       |   |
|             | of Sandwich terns foraging from Chichester & Langstone Harbours SPA, and Sandwich terns        |   |
|             | are not a qualifying feature of Pagham Harbour SPA.  |   |
| Solent and  | The Solent and Southampton Water SPA covers approximately 5,506 ha and is located on           | Wild Birds Directive Article 4.1 Qualification: Annex I Species   |
| Southampton | the south English coast. The area covered extends from Hurst Spit to Hill Head along the       | - Mediterranean Gull Larus melanocephalus (Breeding)              |
| Water SPA   | south coast of Hampshire, and from Yarmouth to Whitecliff Bay along the north coast of the     | - Little Tern <i>Sterna albifrons</i> (Breeding)                  |
|             | Isle of Wight. The site comprises a series of estuaries and harbours with extensive mud-flats  | - Roseate Tern Sterna dougalli (Breeding)                         |
|             | and saltmarshes together with adjacent coastal habitats including saline lagoons, shingle      | - Common Tern Sterna hirundo (Breeding)                           |
|             | beaches, reedbeds, damp woodland and grazing marsh. The mud-flats support beds of              | - Sandwich Tern Sterna sandvicensis (Breeding)                    |
|             | Enteromorpha spp. and Zostera spp. and have a rich invertebrate fauna that forms the food      | Wild Birds Directive Article 4.2 Qualification: Migratory Species |
|             | resource for the estuarine birds. In summer, the site is of importance for breeding seabirds,  | not listed in Annex I   |
|             | including gulls and four species of terns. In winter, the SPA holds a large and diverse        | - Teal <i>Anas crecca</i> (Non-breeding)                          |
|             | assemblage of waterbirds, including geese, ducks and waders. Dark-bellied Brent goose          | - Dark-bellied Brent Goose Branta bernicla bernicla (Non-         |
|             | Branta b. bernicla also feed in surrounding areas of agricultural land outside the SPA/Ramsar. | breeding)   |
|             |  | - Ringed Plover Charadrius hiaticula (Non-breeding)               |
|             |  | - Black-tailed Godwit Limosa limosa islandica (Non-breeding)      |
|             |  | Waterbird Assemblage  |

Table 3.3: Ramsar Qualifying Features

| Site Name      | Description   | Qualifying Features  |
|----------------|---|--|
| Chichester and | Chichester and Langstone Harbours are large, sheltered estuarine basins comprising            | <u>Criterion 1</u>   |
| Langstone      | extensive mud and sand flats exposed at low tide. The site is of particular significance for  | - Two outstanding estuarine basins, the site includes intertidal |
| Harbours       | over-wintering wildfowl and waders and also a wide range of coastal and transitional habitats | mudflats, saltmarsh, sand and shingle spits and sand dunes       |
| Ramsar         | supporting important plant and animal communities.  | <u>Criterion 5</u>   |



| Site Name    | Description  | Qualifying Features   |
|--------------|--|---|
|              |  | - Winter assemblage of 76,480 waterfowl (5 year peak mean         |
|              |  | 1998/99 - 2002/03)  |
|              |  | <u>Criterion 6</u>  |
|              |  | <u>Breeding</u>   |
|              |  | - Little Tern Sterna albifrons albifrons                          |
|              |  | <u>Overwintering</u>  |
|              |  | - Dark-bellied Brent Goose Branta bernicla bernicla               |
|              |  | - Dunlin Calidris alpina alpina                                   |
|              |  | - Grey Plover Pluvialis squatarola                                |
|              |  | - Common Shelduck <i>Tadorna tadorna</i>                          |
|              |  | <u>On passage</u>   |
|              |  | - Ringed Plover Charadrius hiaticula                              |
|              |  | - Black-tailed Godwit Limosa limosa islandica                     |
|              |  | - Common Redshank Tringa totanus totanus                          |
| Portsmouth   | Portsmouth Harbour is a large industrialised estuary and includes one of the four largest  | <u>Criterion 3</u>  |
| Harbour      | expanses of mudflats and tidal creeks on the south coast of Britain. The mudflats support  | - Important species assemblage across a number of habitats,       |
| Ramsar       | large beds of narrowleaved and dwarf eelgrass, extensive green alga and sea lettuce. The   | species include; extensive beds of eelgrass Zostera angustifolia  |
|              | harbour has only a narrow connection to the sea via the Solent, and receives comparatively | and Zostera ulvae, mud-snail Hydrobia ulvae, Common cord-grass    |
|              | little freshwater, thus giving it an unusual hydrology. The site supports internationally  | Spartina anglica, green algae Enteromorpha spp, sea lettuce Ulva  |
|              | important numbers of wintering dark-bellied brent geese and nationally important numbers   | lactuca, sea purslane Halimione portulacoides.                    |
|              | of grey plover, dunlin and black-tailed godwit.  | <u>Criterion 6</u>  |
|              |  | <u>Overwintering</u>  |
|              |  | - Dark-bellied Brent Goose Branta bernicla bernicla               |
| Solent and   | The area covered extends from Hurst Spit to Gilkicker Point along the south coast of       | <u>Criterion 1</u>  |
| Southampton  | Hampshire and along the north coast of the Isle of Wight. The site comprises of estuaries  | - Many wetland habitats characteristic of the biogeographic       |
| Water Ramsar | and adjacent coastal habitats including intertidal flats, saline lagoons, shingle beaches, | region: saline lagoons, saltmarshes, estuaries, intertidal flats, |
|              | saltmarsh, reedbeds, damp woodland, and grazing marsh. The diversity of habitats support   | shallow coastal waters, grazing marshes, reedbeds, coastal        |
|              | internationally important numbers of wintering waterfowl, important breeding gull and tern | woodland and rocky boulder reefs.                                 |
|              | populations and an important assemblage of rare invertebrates and plant.                   | Criterion 2   |



| Site Name | Description | Qualifying Features   |
|-----------|-------------|---|
|           |             | - Important assemblage of rare plants and invertebrates: 33 British |
|           |             | Red Data Book invertebrates and at least eight British Red Data     |
|           |             | Book plants are represented on site.                                |
|           |             | Criterion 5   |
|           |             | Winter assemblage of 51,343 Waterfowl over winter (5 year peak      |
|           |             | mean 1998/99-2002/2003).  |
|           |             | Criterion 6   |
|           |             | <u>On Passage</u>   |
|           |             | - Ringed Plover Charadrius hiaticula                                |
|           |             | <u>Overwintering</u>  |
|           |             | - Dark-bellied Brent Goose Branta bernicla bernicla                 |
|           |             | - Teal Anas crecca  |
|           |             | - Black-tailed Godwit Limosa limosa islandica                       |



#### Table 3.4: Conservation objectives for SAC and SPA

#### **Conservation objectives for SAC**

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

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

#### Conservation objectives for SPA (and Ramsar)

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

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

#### 3.4 Condition Status

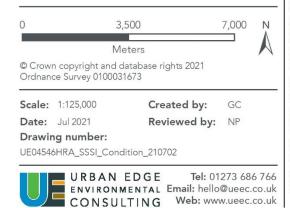
3.4.1 The conservation status of European sites is not routinely reported by Natural England, but it carries out condition monitoring of Sites of Special Scientific Interest (SSSI) at regular intervals. Although not exactly matching the boundaries of European sites, and being notified for different purposes, the condition status of a SSSI helps to give an impression of the overall ecological status of the SAC/SPA/Ramsar with which it coincides. The latest condition assessments (June 2021) of SSSI forming part of the European sites within the scope of this assessment are illustrated on Figure 3.2.

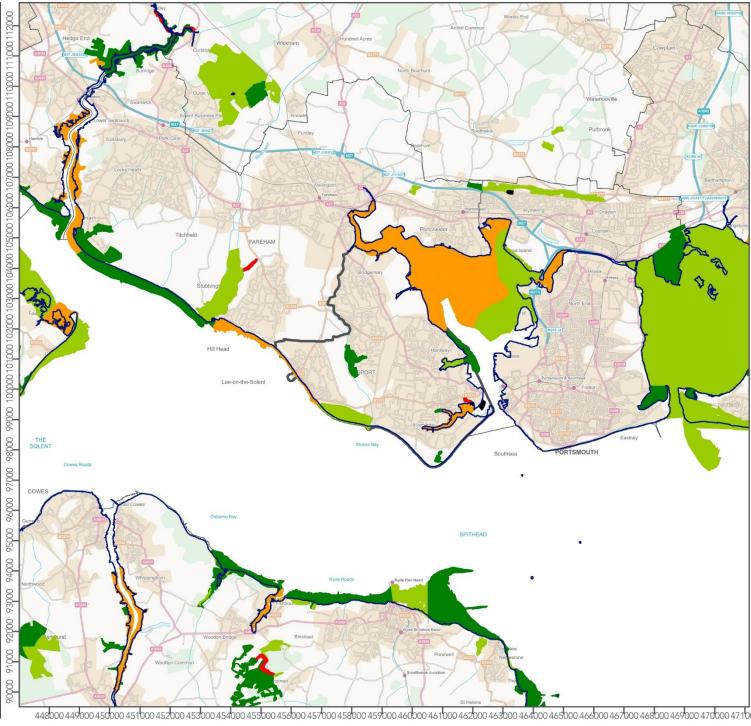


## Gosport Local Plan Habitats Regulations Assessment



Figure 3.2: SSSI condition status





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## 4 The Gosport Borough Local Plan

#### 4.1 Introduction

4.1.1 The Gosport Borough Local Plan will set the planning strategy for the Borough and address housing and employment needs for a period of 17 years from 2021 up to 2038. The plan sets out proposed strategic and development management policies, development allocations and actions to meet the environmental, social and economic challenges facing the Borough. When adopted the Local Plan will provide a strategy for the distribution, scale and form of development and supporting infrastructure, a set of proposals to deliver the strategy, policies against which to assess planning applications, and proposals for monitoring the success of the plan.

#### 4.2 Key Policy Proposals

- 4.2.1 The spatial development strategy proposed by the Regulation 18 Consultation Draft Local Plan includes:
  - Provision for 3,500 net additional dwellings (of a 'standard method' requirement of 5,576 dwellings 2021-2038) and 90,000m<sup>2</sup> of net additional employment floorspace;
  - A focus on redevelopment of previously developed land, with development restricted outside of the defined urban area;
  - Eleven Strategic Sites and three urban Regeneration Areas allocated for mixed uses at Harbour Regeneration Area, Rowner and HMS Sultan Regeneration Area, and Daedalus Regeneration Area;
  - Other allocations to meet land requirements for housing, employment, leisure, community uses, open space, allotments, and transport improvements; and
  - Continued policy protections for the Local Ecological Network, heritage assets, the Strategic Gap (between Gosport, Fareham, Lee-on-the-Solent and Stubbington) and Strategic Open Spaces at the Alver Valley, Browndown, Lee Beach and Clifflands, and Stokes Bay.
- 4.2.2 Allocations and other significant proposals put forward in the Gosport Borough Local Plan are shown on Figure 4.1.

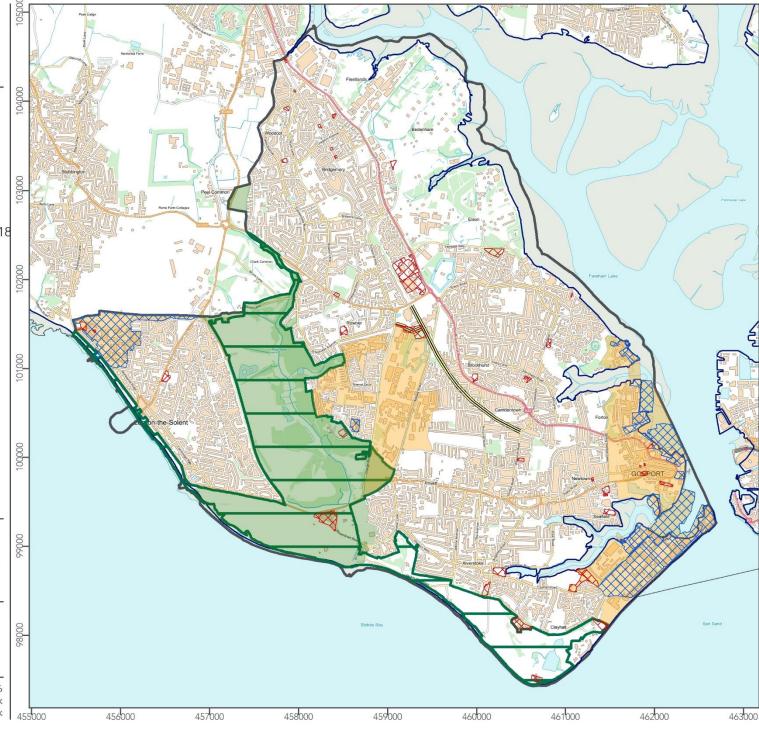


## Gosport Local Plan Habitats Regulations Assessment



Figure 4.1: Regulation 18 Consultation
Draft Local Plan Proposed Allocations





#### 4.3 Incorporated Mitigation Measures

4.3.1 The Regulation 18 Consultation Draft Local Plan includes incorporated mitigation measures which were devised in response to the HRA process and these are summarised in Table 4.1. Incorporated mitigation measures are considered when assessing the impacts of the Local Plan at the integrity test stage, i.e. they are not considered at the screening stage.

Table 4.1: Incorporated mitigation measures

#### **Incorporated mitigation measures**

#### Policy D5 The Local Ecological Network and Internationally and Nationally Important Sites

- ... 2. The integrity of internationally important sites will be subject to the highest level of protection as set out in the relevant international and national regulations, and development will need to take account of the following considerations:
- a) Development that will result in any adverse effect on the integrity of international site will not be permitted unless it can be demonstrated that:
- i) there are no alternatives to the proposal;
- ii) there are reasons of overriding public benefit/interest;
- iii) compensatory provision is secured; and
- iv) the local planning authority is satisfied that any necessary mitigation is secured such that in combination with other development there will be no adverse effects on the integrity of the designated sites.
- b) Development which has the potential to have an impact on a designated international site will be subject to a Habitats Regulation Assessment to determine the potential for likely significant effects.
- c) All new residential development will be required to avoid or mitigate likely significant 'alone' and 'in-combination' effects on internationally important habitats caused by recreational disturbance. In addition other forms of development may be required to mitigate recreational disturbance impacts. Where these measures cannot be provided development proposals will be refused, unless the applicant can demonstrate, subject to meeting the tests of the Habitats Regulations, there would not be a likely significant effect on the Solent SPAs.
- d) Proposals that have a detrimental impact on Brent goose and/or wader feeding and roosting sites that support the functionality and integrity of the internationally important designated sites will be refused unless it can be satisfactorily avoided and/or mitigated in accordance with the Solent Waders and Brent Goose Strategy.
- e) Proposals will need to demonstrate nutrient neutrality to avoid having a detrimental impact on the recognised features of the internationally important habitats. It is therefore necessary for developers to submit a nutrient budget in line with the latest guidance and deliver nutrient neutral development through:
- i) Achieving a water efficiency target of 100 litres per person per day; and
- ii) Prioritising on-site mitigation measures including the provision of green open space and SuDS, where appropriate; and
- iii) Securing off-site strategic mitigation options, such as land offsetting, the creation of interceptor wetlands and enhancements to wastewater treatment works...

#### Policy D7 Flood Risk and Coastal Erosion



#### **Incorporated mitigation measures**

... 8. Planning permission will be granted for flood risk management measures provided the scheme does not individually or cumulatively have a detrimental impact on internationally important habitats and that any necessary avoidance and mitigation measures have been secured...

#### Policy E4 Marinas and Moorings

Planning permission will be granted for new marinas and the extension of marinas and mooring areas provided that the development:

a) does not harm important features of internationally and nationally important habitats; ...

#### Policy DE1 Sustainable Construction

- 2. ... all residential development should aim to: ...
- c) Achieve a water efficiency standard of at least 100 litres per person per day; and ...

#### Policy LE4 Access to the Coast and Countryside

- 1. The Borough Council will promote public access to the coast and countryside. Planning permission will be granted for new development provided that:
- ... c) access does not adversely affect important habitats and species through increased disturbance; and ...

#### **Policy LE9 Pollution Control**

... 6. Development proposals which are noise-generating will not be permitted if the noise arising would have a significant adverse impact upon local amenity or sensitive habitats...

#### LE10 Contaminated and Unstable Land

- ... 2. Development proposals will not be permitted unless practicable and effective measures are proposed to treat, contain or control any contaminants so as not to:
- ... c) cause pollution of the water environment including groundwater, the River Alver, Portsmouth Harbour and the Solent...

#### **LE13 Water Resources**

The Borough Council together with its partners will seek to manage the use of water resources through the following measures.

- 1. Development proposals which would have an adverse effect on the quality of surface, ground or coastal water will not be permitted in accordance with the Water Framework Directive. New development should take opportunities to enhance these resources wherever possible.
- 2. Development proposals will be permitted provided that the necessary water resources are available. New residential development proposals should include measures that will reduce the consumption of water to 100 litres per person per day (including external water use).
- 3. Development proposals will be permitted provided that they facilitate the efficient use of new and existing sewerage infrastructure. In cases where these are deficient, development proposals and their occupation should be phased to coincide with the provision of necessary wastewater infrastructure so as to safeguard the environmental qualities of the area...

#### LE13 Waste and Material Resources

- ... 5. Development proposals involving reclamation and/or dredging will not be permitted except for essential maintenance dredging or coastal protection works and subject to the following considerations set out in criteria below. The proposed development will not:
- a) Have an individual or cumulative adverse impact on internationally important habitats; ...



#### **Incorporated mitigation measures**

#### Site allocation policies

The following policies have been amended to require project level HRA for proposals for residential development in excess of 200 net additional dwellings:

- SS10 Rowner and HMS Sultan
- SS11 Daedalus

Proposals shall meet the requirements of Policy D5 given the site's status for waders and brent geese and be specifically designed to respond to nearby sensitive designated features. Applies to sites:

- SS3 Gosport Town Centre in relation to brent goose / wader sites G03, G32B, G81
- SS7 Haslar Barracks in relation to brent goose / wader site G63
- A3 Aerodrome Road in relation to brent goose / wader site G18

A Construction Environmental Management Plan (CEMP) to avoid adverse impacts of construction on the Solent designated sites shall be provided. Applies to sites:

- SS1 Gosport Waterfront Marine Employment
- SS2 Gosport Waterfront Mixed Use Redevelopment
- SS3 Gosport Town Centre
- SS4 Blockhouse and Haslar Gunboat Sheds
- SS5 Fort Blockhouse
- SS6 Royal Haslar Hospital
- SS7 Haslar Barracks
- SS8 The Piggeries
- SS9 Haslar Marine Technology Park
- SS10 Rowner and HMS Sultan
- SS11 Daedalus
- A1 Fort Gilkicker
- A1.1b Fort Road
- A2.2 Heritage Way and Frater Lane
- A2.3 Gasworks
- A3 Aerodrome Road
- H5 Fareham Road (G&T site)

The design of proposals (including the scale, form, massing and layout of development) shall be specifically designed to respond to nearby sensitive features (i.e. EU sites or BG/wader sites), through for example reduced or stepped building heights, to avoid displacing BG/waders as result of reduced sight lines. Applies to sites\*:

- SS1 Gosport Waterfront Marine Employment
- SS2 Gosport Waterfront Mixed Use Redevelopment
- SS3 Gosport Town Centre
- SS4 Blockhouse and Haslar Gunboat Sheds
- SS5 Fort Blockhouse
- SS6 Royal Haslar Hospital
- SS7 Haslar Barracks
- SS8 The Piggeries
- SS9 Haslar Marine Technology Park



#### **Incorporated mitigation measures**

- SS10 Rowner and HMS Sultan
- SS11 Daedalus
- A1 Fort Gilkicker
- A1 Qinetiq, Fort Road
- A1.1b Fort Road
- A2.6c Prideaux-Brune Avenue
- A2.7a Woodside and Wych Lane
- A2.7c Montgomery Road
- A2.2 Heritage Way and Frater Lane
- A2.6f Wheeler Close
- A2.7d Grove Road
- A2.6g Whitworth Close
- A2.3 Gasworks
- A3 Aerodrome Road
- \* H5 Fareham Road is excluded from the above list because the site is intended to provide accommodation for Gypsies, Travellers and Travelling Showpeople. This is very likely to be in the form of caravans or motorhomes which would be unlikely to trigger displacement effects due to shortened sight lines.



# 5 Screening for Likely Significant Effects

#### 5.1 Introduction

5.1.1 This chapter discusses the available evidence relating to the pathways of impact to European sites scoped into this assessment (section 3.1.5). For ease of reference Table 5.1 sets out those pathways which are considered likely to result in significant effects for each of the European sites, not taking account of mitigation, and hence will be taken forward for Appropriate Assessment. The full results of the screening assessment, including the screening of the proposed policies of the Local Plan, are provided in Appendix II.

Table 5.1: Likely Significant Effects to European Sites

|                          | Solent & IOW Lagoons<br>SAC | Solent Maritime SAC | Chichester & Langstone<br>Harbours SPA | Portsmouth Harbour SPA | Solent & Dorset Coast<br>SPA | Solent & Southampton<br>Water SPA | Chichester & Langstone<br>Harbours Ramsar | Portsmouth Harbour<br>Ramsar | Solent & Southampton<br>Water Ramsar |
|--------------------------|-----------------------------|---------------------|--|------------------------|------------------------------|-----------------------------------|---|------------------------------|--------------------------------------|
| Atmospheric pollution    |                             |                     |  |                        |                              |                                   |   |                              |                                      |
| Coastal<br>squeeze       |                             |                     |  |                        |                              |                                   |   |                              |                                      |
| Recreational disturbance |                             |                     | V                                      | V                      |                              | V                                 | V   | V                            | V                                    |
| Water<br>abstraction     |                             |                     |  |                        |                              |                                   |   |                              |                                      |
| Water<br>quality         |                             | V                   | V                                      | V                      |                              | V                                 | V   | V                            | V                                    |
| Site specific impacts    | V                           |                     | V                                      | V                      | V                            | V                                 | V   | V                            | V                                    |

#### 5.2 Atmospheric Pollution

5.2.1 Atmospheric pollution is a widespread issue, with background air quality heavily influenced by large point-source emitters including transboundary sources. Local pollutant sources including road traffic emissions can affect designated sites, particularly in relation to protected habitats within SAC. The following descriptions draw on information presented through the Air Pollution



Information System (APIS)<sup>6</sup> and the Institute of Air Quality Management (IAQM) guidance<sup>7</sup>. The main pollutants affecting vegetation are:

- ightharpoonup nitrogen oxides (NO<sub>X</sub>) produced through combustion processes, with half of UK emission from road traffic; and
- ▶ ammonia (NH₃), the main source of which is agriculture (e.g. manures and fertilisers).
- 5.2.2 These gases can result in direct effects to vegetation through exposure, and indirect effects through deposition to soil and freshwater (dry deposition) or with precipitation (wet deposition).
- 5.2.3 Direct exposure of vegetation to  $NO_x$  and  $NH_3$  has phytotoxic effects, especially in areas close to sources, such as roadside verges; lichens and bryophytes (which include mosses, landworts and hornwarts) are particularly vulnerable to these sorts of toxic effects, which can result in changes to plant growth, changes in the plant's ability to assimilate  $CO_2$ , and biochemical effects.
- 5.2.4 Indirect effects through deposition include:
  - Acid deposition: acid deposition is most likely to affect vegetation indirectly through changes to soil properties. NOx and ammonium (from NH<sub>3</sub>) react with rain/cloudwater to form nitric (or sulphuric) acid. Increases in soil acidity can increase the mobility of certain toxic metals which can result in root damage, stunted growth and reduced microbial activity. These effects can lead to changes in species composition.
  - Eutrophication by nitrogen deposition: dry deposition of NOx is greatest within large conurbations and close to major roads. Whilst nitrogen is essential for plant growth, excessive amounts can become toxic, as instead of acting as a nutrient, nitrogen becomes a pollutant. Many semi-natural plants (including bryophytes) do not have the capacity to assimilate nitrogen when excess nitrogen is available and can therefore be outcompeted by plants that can (such as many grass species), through shading to inability to compete for other limiting resources. Overall, this can lead to long term structural and compositional changes in vegetation and reduced diversity.

### Critical loads and levels

5.2.5 Critical loads and levels are a tool for assessing the risk of air pollution impacts to ecosystems. Critical loads are defined as the "deposition flux of an air pollutant below which significant harmful effects on sensitive ecosystems do not occur according to present knowledge". Critical levels are defined as "the concentration of an air pollutant above which adverse effects on ecosystems may occur". Critical loads refer to the quantity of pollutants deposited from the air to the ground (for example nitrogen deposition and acid deposition), whilst critical levels refer to the gaseous concentration of a pollutant in the air (for example nitrogen oxides). Critical loads are assigned to habitat classes of the European Nature Information System (EUNIS) to enable consistency of habitat terminology and understanding across Europe. Critical loads are given as

<sup>9</sup> Ibid



<sup>&</sup>lt;sup>6</sup> Online at: http://www.apis.ac.uk/

<sup>&</sup>lt;sup>7</sup> Institute of Air Quality Management (2020): A guide to the assessment of air quality impacts on designated nature conservation sites, Version 1.1 May 2020. Accessed online at: https://iaqm.co.uk/text/guidance/air-quality-impacts-on-nature-sites-2020.pdf

 $<sup>^{8}</sup>$  Ibid

ranges (e.g. 10-20 kgN/ha/yr) (APIS, 2021). Critical levels are not habitat specific but have been set to cover broad vegetation types (e.g. forest arable, semi-natural), often with critical values set for sensitive lichens and bryophytes. Critical levels for the different pollutants have been derived from experiments and observation that show varied effects on vegetation (APIS, 2021).

### Air quality thresholds

- 5.2.6 Advice from Natural England and Highways England states that protected sites greater than 200m from the edge of a road affected by a plan or project can be screened out of the HRA process. Such proposals are likely to have no effect on sites at all and so do not need to be subject to assessment in-combination with other plans and projects. A screening conclusion of no likely significant effect on the site can be advised with regard to the risk of road traffic emissions affecting air quality in relation to protected sites >200m from a road (Natural England, 2018).
- 5.2.7 If a protected site has not been screened out using the 200m distance threshold, the next step is to consider the risk from the road traffic emissions associated with the plan or project. Depending on the information available, this could be expressed in terms of either the predicted average annual daily traffic flow ('AADT' as proxy for emissions) or the predicted emissions themselves (the process-contribution). For AADT a predicted change of 1,000 AADT is likely to be significant.
- 5.2.8 Road access to the Gosport peninsular is via the A32 or B3334/3385. Neither of the SAC within the scope of this assessment fall within 200m of these roads, however:
  - A32 at Hoeford Creek is within 5m of Solent and Dorset Coast SPA and within 20m of Portsmouth Harbour SPA/Ramsar; and
  - ▶ B3334 at Crofton Manor Equestrian Centre is within 40m of Solent and Southampton Water SPA/Ramsar.
- 5.2.9 Table 5.2 and Table 5.3 show the critical levels / loads for each of the qualifying features of these SPA/Ramsar alongside existing pollutant levels taken from the APIS Site Relevant Critical Loads Search Tool<sup>10</sup>. Where existing pollutant levels exceed critical levels / loads, cells are highlighted orange. In almost all cases there is no current exceedance of critical loads or levels. The exception is for dune habitats used by breeding terns, however, there is no dune habitat present adjacent to B3334 at Crofton Manor Equestrian Centre as shown in Figure 5.1.
- 5.2.10 The Solent and Dorset Coast SPA is designated to protect the foraging habitats of terns breeding in Poole, Chichester, Langstone and Pagham Harbours, and in the Solent. These species plungedive for fish and given the vast area of the SPA and limited scope for aerial pollution to affect their prey, it is unlikely that the traffic and pollution impacts of the Local Plan will significantly affect the SPA. APIS does not present any data for this SPA.

### Traffic modelling

5.2.11 GBC commissioned a transport modelling exercise using the Sub Regional Transport Model to inform development of the Local Plan (Systra, 2020).

<sup>&</sup>lt;sup>10</sup> APIS Site Relevant Critical Loads Search Tool, based on 3yr mean data for 2017-2019 (latest available), accessed online [29/06/21] at: <a href="http://www.apis.ac.uk/srcl">http://www.apis.ac.uk/srcl</a>



Table 5.2: Critical Loads / Levels and existing pollutant levels at Portsmouth Harbour SPA

| Qualifying feature                                    | Nutrient N            | deposition               | Acid de                             | position                 | Airbor                              | ne NH₃                   | Airborne NOx                    |                         |
|---|-----------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|---------------------------------|-------------------------|
| RB merganser<br>Black-tailed godwit<br>DB brent goose | Min CL<br>(kgN/ha/yr) | Existing levels<br>(Max) | Min CL<br>(MinCLMinN,<br>kEq/ha/yr) | Existing levels<br>(Max) | Min CL<br>(µgNH3/m3<br>annual mean) | Existing levels<br>(Max) | CL<br>(µgNOx/m3<br>annual mean) | Existing<br>levels(Max) |
| Grid ref: 457870, 104515                              | 20 (saltmarsh)        | 14.1                     | Not sensitive                       | 1                        | 3 (littoral sediment)               | 1.35                     | 30                              | 24.71                   |
| Grid ref: 458005, 105980                              | 20 (saltmarsh)        | 15.0                     | Not sensitive                       | 1.1                      | 3 (littoral sediment)               | 1.54                     | 30                              | 21.91                   |

Table 5.3: Critical Loads / Levels and existing pollutant levels at Solent and Southampton Water SPA

| Qualifying feature   | Nutrient N  | deposition               | Acid de   | position                 | Airbor                              | ne NH <sub>3</sub>       | Airbor                            | ne NOx                  |
|--|---|--------------------------|---|--------------------------|-------------------------------------|--------------------------|-----------------------------------|-------------------------|
| Grid ref: 454865, 104290   | Min CL<br>(kgN/ha/yr)   | Existing levels<br>(Max) | Min CL<br>(MinCLMinN,<br>kEq/ha/yr)   | Existing levels<br>(Max) | Min CL<br>(µgNH3/m3<br>annual mean) | Existing levels<br>(Max) | CL<br>(µgNOx/m3<br>annual mean)   | Existing<br>levels(Max) |
| Sandwich tern<br>Roseate tern<br>Common tern<br>Little tern                          | 8 (coastal stable dune, acidic) 10 (shifting coastal dune) 10 (coastal stable dune, calcareous) | 11.9                     | 0.223 (supralittoral sediment, acidic) 0.856 (supralittoral sediment, calcareous) | 0.2                      | 3 (supralittoral sediment)          | 0.96                     | 30<br>(supralittoral<br>sediment) | 18.07                   |
| Teal<br>Ringed plover<br>Mediterranean gull<br>Black-tailed godwit<br>DB brent goose | 20 (saltmarsh)  | 11.9                     | Not sensitive   | 0.2                      | 3 (littoral sediment)               | 0.96                     | 30 (littoral sediment)            | 18.07                   |



# Gosport Local Plan Habitats Regulations Assessment

HBIC\_Priority\_Habitats\_Dec2018

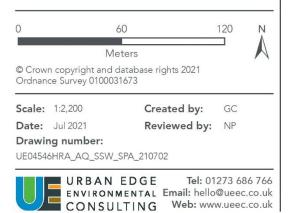
Coastal and Floodplain Grazing Marsh

Lowland Mixed Deciduous Woodland

Reedbeds

SPA 200m Buffer

Figure 5.1: Priority habitats adjacent to the B3334 at Crofton Manor Equestrian Centre





- 5.2.12 Modelling was undertaken for three scenarios:
  - ▶ Baseline Scenario No 2036 Gosport Local Plan development
  - Scenario 1 Do Minimum 1; 2036 Gosport Local Plan development with housing at a rate of 190 dwellings per year or 2,503 dwellings by 2036
  - Scenario 2 Do Minimum 2; 2036 Gosport Local Plan development with housing at a rate of 238 dwellings per year or 3,463 dwellings by 2036
- 5.2.13 Outside of Gosport development growth is assumed to continue as 'normal' and in accordance with the adopted Local Plan's (or equivalent) for the respective Borough's, and in accordance with TEMPRO v7.2 growth projections. This enables the impact of plan to be isolated as well as allowing for in combination effects to be factored in. Traffic flows were modelled for three periods, AM peak, interpeak and PM peak.
- 5.2.14 In summary the following flow changes were predicted:
  - A32 at Hoeford Creek, Scenario 1
    - o AM peak two-way flow change: not reported but at Aerodrome Rd junction: +33
    - o Interpeak two-way flow change: : +26
    - PM peak two-way flow change: not reported but at Main Rd junction: +28+39=+67
  - ▶ B3334 at Crofton Manor Equestrian Centre, Scenario 1
    - o AM peak two-way flow change: +28+29=+57
    - o Interpeak two-way flow change: +41+29=+70
    - o PM peak two-way flow change: +41+26=+67
  - A32 at Hoeford Creek, Scenario 2
    - o AM peak two-way flow change: +31
    - o Interpeak two-way flow change: +34
    - o PM peak two-way flow change: not reported but at Main Rd junction: +39
  - B3334 at Crofton Manor Equestrian Centre, Scenario 2
    - o AM peak two-way flow change: +62+42=+104
    - o Interpeak two-way flow change: +64+70=+134
    - o PM peak two-way flow change: +41+37=+78
- 5.2.15 The above traffic flow changes are not likely, in isolation, to exceed 1,000 AADT or result in a deterioration of air quality past the thresholds listed in Table 5.2 and Table 5.3.



#### In combination effects

5.2.16 The HRA for the Fareham Borough Local Plan 2037<sup>11</sup> used borough-specific dispersion modelling produced by Ricardo (2020)<sup>12</sup> to assess whether planned growth was likely to result in significant or adverse effects, both alone and in combination with development in the wider south Hampshire sub-region including Gosport. This found that the risk of significant impact on Portsmouth Harbour SPA/Ramsar and Solent and Southampton Water SPA/Ramsar could not be ruled out at the screening stage. But on closer analysis during the Appropriate Assessment it was concluded that there would be no adverse effects on site integrity because: (a) the affected feature was not sensitive to the pollutant being assesses, (b) the qualifying feature was unlikely to be present in the affected location, or (c) the affected locations were regularly inundated with tidal water which would prevent accumulation of any deposited pollutants.

#### Screening conclusion

5.2.17 It is concluded that the Regulation 18 Draft Local Plan is unlikely to significantly affect European sites within the scope of this assessment as a result of atmospheric pollution. This impact pathway is screened out and is not considered further.

### 5.3 Coastal Squeeze

- 5.3.1 Coastal habitats naturally migrate landward as sea levels rise over time and where there are no barriers preventing this. Coastal squeeze occurs when engineered structures, such as sea defences, prevent landward migration. The coastal habitat is trapped between rising sea levels and hard structures, and is eventually lost to erosion or inundation. The European designated sites along the Solent are at risk from the loss and fragmentation of their qualifying habitats due to this phenomenon.
- 5.3.2 The Gosport Borough coastline falls under the North Solent Shoreline Management Plan (SMP)<sup>13</sup>, and includes policy units 5b02, 5b01, 5a25, 5a24 and 5a23 as shown on Figure 5.2 and Figure 5.3. For the entirety of Gosport's coastline the North Solent SMP policy is 'Hold the Line' (HTL). A policy of HTL means the existing level of protection will be maintained and upgraded where it is economically viable to do so, in order to protect life and property along the extensively developed sections of the estuaries (NFDC, 2010). This policy however has potential impacts on designated sites via coastal squeeze.
- 5.3.3 Coastal management in Gosport Borough is managed by the Coastal Partners, a partnership of four local authorities set up to jointly oversee coastal flood and erosion risk across the 162km of coastline from the River Hamble to Chichester Harbour<sup>14</sup>.

<sup>&</sup>lt;sup>14</sup> Fareham Borough Council, Gosport Borough Council. Havant Borough Council and Portsmouth City Council



<sup>&</sup>lt;sup>11</sup> Urban Edge Environmental Consulting (2021): Habitats Regulations Assessment for the Fareham Borough Local Plan 2037: Screening and Appropriate Assessment Report for the Revised Publication Local Plan. May 2021.

<sup>&</sup>lt;sup>12</sup> Ricardo (2020): Air Quality Habitat Regulations Assessment for the Fareham Borough Local Plan 2036. July 2020.

<sup>&</sup>lt;sup>13</sup> North Solent SMP: Accessed online at <a href="http://www.northsolentsmp.co.uk/">http://www.northsolentsmp.co.uk/</a> [27/8/19]

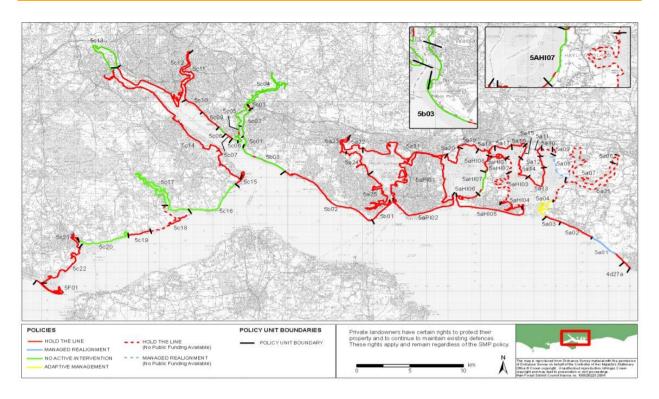


Figure 5.2: SMP Policy Units for Epoch 1 up to 2025

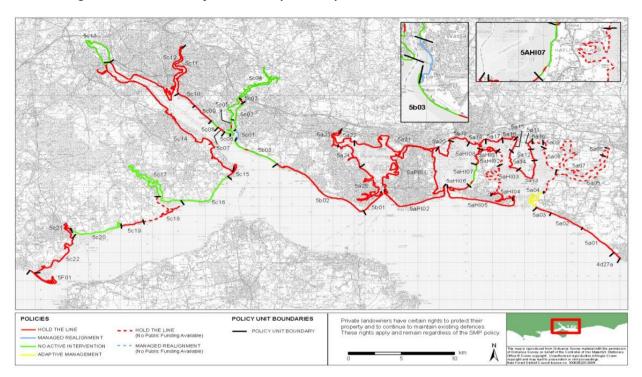


Figure 5.3: SMP Policy Units for Epoch 2, 2025 to 2055

5.3.4 Gosport's coastline is covered by the River Hamble to Portchester Coastal Strategy <sup>15</sup> coastal defence strategy produced by the Coastal Partners to implement the policies of the North Solent SMP. The Local Plan area encompasses the entire Gosport coastline and consequently

<sup>&</sup>lt;sup>15</sup> Coastal Partners (2016): River Hamble to Portchester Coastal Strategy, March 2016. Accessed online [29/06/21] at <a href="https://coastalpartners.org.uk/project/river-hamble-to-portchester-strategy/">https://coastalpartners.org.uk/project/river-hamble-to-portchester-strategy/</a>



designated habitats, including intertidal mudflat and coastal saltmarsh, running along the coastline which are subject to HTL policy during Epoch 1 or Epoch 2 (during which the plan period occurs) could be affected directly by new sea defences intended to protect existing and new development and indirectly through coastal squeeze.

### **Extent of current and future impacts**

- 5.3.5 The Site Improvement Plan for the Solent¹6, which covers the Solent and Southampton Water SPA/Ramsar, Portsmouth Harbour SPA/Ramsar, Chichester and Langstone Harbours SPA/Ramsar and Solent Maritime SAC, highlights coastal squeeze as a current threat to these sites resulting in the direct loss of habitats within the SAC; there is also an impact on birds due to the loss of habitat for feeding, roosting and breeding. In some areas rising sea levels will result in coastal grasslands being lost to more saline grasslands, thus reducing habitat availability for some breeding waders of the waterbird assemblage.
- 5.3.6 The Appropriate Assessment accompanying the North Solent SMP identified that HTL policies are likely to have significant detrimental effects on intertidal habitats and vegetated shingle backed by a seawall within the Solent and Southampton Water SPA/Ramsar and Solent Maritime SAC, causing loss through coastal squeeze. Managed Realignment (MR) policies, such as those within policy unit 5c01 for Epoch 2, were found not likely to have a significant detrimental effect on mudflat and saltmarsh habitat such as is found in that locality but to have a beneficial effect by creating new intertidal habitat. No Active Intervention (NAI) policies, such as those within policy units 5b03, 5c01, 5c02 and 5c04 for Epochs 1 and 2, were found not likely to have a significant detrimental effect on mudflat habitat and saltmarsh but also have a beneficial effect by creating new intertidal habitat and delivering new sediment to sand and shingle habitats.
- 5.3.7 The habitats that are lost can be created elsewhere; the neutral grassland habitats will take a long time to create as mitigation, but intertidal habitat can be created relatively quickly<sup>17</sup>. Intertidal habitat losses and gains were quantified for the North Solent SMP Appropriate Assessment using the findings from the Solent Dynamic Coast Project (2008). Table 5.4 and Table 5.5 summarise the findings of the assessment in relation to estimated habitat loss within each of the affected designated sites within Gosport Borough over the next 100 years.

Table 5.4: Habitat losses and gains in the Solent and Southampton Water SPA / Ramsar as a result of SMP policies (Source: NFDC, 2010, Appendix J, p.64)

| SMP       | Habitat change (ha) |         |         | Mitigation | on (ha) |       | Total  | Compensation  |
|-----------|---------------------|---------|---------|------------|---------|-------|--------|---------------|
| habitat   | Epoch 1             | Epoch 2 | Epoch 3 | Epoch 1    | Epoch   | Epoch | change | required (ha) |
| grouping  |                     |         |         |            | 2       | 3     | (ha)   |               |
| Mudflat   | 21                  | 62      | 60      | 0          | 26      | 36    | 205    | 0             |
| Saltmarsh | -34                 | -83     | -106    | 0          | 20      | 15    | -187   | 187           |

http://publications.naturalengland.org.uk/publication/4692013588938752?category=6149691318206464





<sup>&</sup>lt;sup>16</sup> Natural England (2014): Site Improvement Plan – Solent. Accessed online [29/06/21] at:

Table 5.5: Habitat losses and gains in the Portsmouth Harbour SPA / Ramsar as a result of SMP policies (Source: NFDC, 2010, Appendix J, p.71)

| SMP       | Habitat change (ha) |         |         | Mitigatio | on (ha) |       | Total  | Compensation  |
|-----------|---------------------|---------|---------|-----------|---------|-------|--------|---------------|
| habitat   | Epoch 1             | Epoch 2 | Epoch 3 | Epoch 1   | Epoch   | Epoch | change | required (ha) |
| grouping  |                     |         |         |           | 2       | 3     | (ha)   |               |
| Mudflat   | -12                 | -43     | -105    | 0         | 0       | 0     | -160   | 160           |
| Saltmarsh | -16                 | -11     | -7      | 0         | 0       | 0     | -34    | 34            |

5.3.8 There are opportunities within the North Solent SMP for intertidal habitat creation as a result of MR polices and NAI policies, as shown in Figure 5.4. These sites will provide new intertidal habitat within European designated sites that can be used to mitigate intertidal losses occurring within the same designated site. Habitat losses which could not be mitigated through the SMP policies within the European sites were passed onto the Regional Habitat Creation Programme (RHCP)<sup>18</sup> for delivery as compensation.

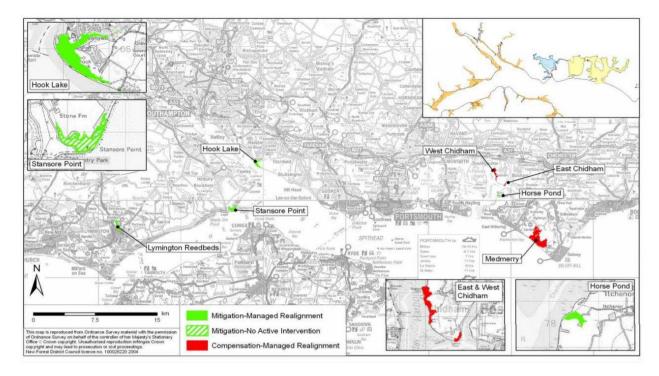


Figure 5.4: Mitigation and Compensation Opportunities for NAI and MR sites across the North Solent

5.3.9 Figures provided by the RHCP are combined for compensation of both the North Solent SMP and the Isle of Wight SMP. Table 5.6 shows the cumulative habitat balance following completion of compensation schemes at Lymington, Medmerry and Manor House Farm. The RHCP targets for Epoch 1 have nearly been met, with a remaining 20 ha of saltmarsh compensation outstanding. The RHCP has identified potential sites in the Solent and South Downs area for saltmarsh habitat creation opportunities and the Environment Agency and Coastal Partners are working to progress the best sites for habitat creation<sup>19</sup>. Further investigation is required for Epoch 2, into which the Local Plan period extends, as set out in the Solent Site Improvement Plan.

<sup>19</sup> Ibid



<sup>18</sup> https://southerncoastalgroup.org.uk/regional-habitat-creation-programme/

**Cumulative Habitat Balance (Ha) SMP Habitat Group** Epoch 2 Epoch 3 Epoch 1 (2005 - 2025)(2026 - 2055)(2056 - 2105)Intertidal Mudflats 43 115 11 Saltmarsh -20 Coastal Grazing Marsh 69 -1 -7 Freshwater Habitats 16 12 12 Saline Lagoons 0 0 0

Table 5.6: Solent and South Downs RHCP cumulative habitat balance (RHCP, 2018)

#### Effects associated with the Gosport Local Plan

- 5.3.10 The current policies in the North Solent SMP will result in a loss of intertidal habitat, although this loss will be compensated by the RHCP. Development as part of the Gosport Local Plan which is in compliance with the North Solent SMP policies is therefore considered to be neutral in terms of effects to European sites from coastal squeeze and this pathway is screened out from Appropriate Assessment.
- 5.3.11 However, any development which necessitates a change to the North Solent SMP policies, such as land reclamation, will increase impacts associated with coastal squeeze to European sites in the Solent. This includes the introduction of new defences or a coastal management strategy that involves advancing the line.

#### In combination effects

5.3.12 The SMP sets the coastal defence policy for the entire north Solent region and combined losses of intertidal habitat are compensated through the RHCP. Therefore the assessment of incombination effects is integral to the SMP.

#### 5.4 Recreational Disturbance

- 5.4.1 Population growth associated with residential development brings with it the prospect of additional visitor pressure on protected sites within the national site network. There is a strong body of evidence showing how increasing levels of development, even when some distance away, can have negative impacts on protected wildlife sites.
- One of the key impacts associated with recreation is disturbance to bird species. Impacts associated with disturbance from recreation differ between seasons, species, and individuals. Birds' responses to disturbance can be observed as behavioural or physiological, with possible effects on feeding, breeding and taking flight. Murison et al. (2007) noted that birds often react to human disturbance as a form of predation risk. Such a response can include elevated heart rate, heightened defensive behaviour, including evasive measures, and the avoidance of high risk areas (Murison et al. (2007), Liley & Sutherland (2007)). High levels of human activity in important nature conservation areas might then change the behaviour of animals to such a degree that



- conservation priorities become compromised. This may result from reduced breeding success, increased energetic expenditure, predation, or exposure of nests, eggs or young to trampling and the elements (Liley & Sutherland, 2007).
- 5.4.3 Disturbance can be caused by a wide variety of activities and, generally, both distance from the source of disturbance and the scale of the event will influence the nature of the response. Factors such as habitat, food requirements, breeding behaviour, cold weather, variations in food availability and flock size, will influence birds' abilities to respond to disturbance and hence the scale of the impact (Stillman et al, 2009). On the other hand, birds can modify their behaviour to compensate for disturbance, for example by feeding for longer time periods. Some birds can become habituated to particular disturbance events or types of disturbance, and this habituation can develop over short time periods (Stillman et al, 2009)
- 5.4.4 In coastal areas, such as The Solent, it can be helpful to divide impacts into the effects of disturbance on overwintering birds, or on breeding birds. Impacts to wintering birds are centred on interruption to foraging or roosting, resulting in reduced calorific intake and increased energetic expenditure. During the breeding season, impacts on shorebirds arise from increased predation of eggs, as well as trampling and increased thermal stress, when birds flush the nest in response to a disturbance event, leading to reduced breeding success (Stillman et al, 2009).

### **Extent of current and future impacts**

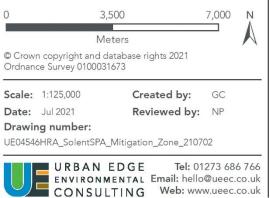
- 5.4.5 The Solent Disturbance and Mitigation Project was initiated in response to concerns over the impact of disturbance on coastal designated sites and their overwintering bird assemblage. It began in 2008 and in 2009 a Phase 1 report (Literature Review and Interviews) was issued (Stillman et al, 2009). Phase 2 was a primary research phase, which issued reports on the results of on-site visitor surveys (Fearnley et al, 2010), bird disturbance fieldwork (Liley et al, 2011), household surveys and future visitor modelling (Fearnley et al, 2011) and disturbance impact modelling (Stillman et al, 2012). Phase 3 outlined an avoidance and mitigation strategy to prevent adverse effects on overwintering bird populations around the Solent (Liley & Tyldesley, 2013).
- 5.4.6 The research showed that an estimated 52 million visits are made by households to the Solent coast each year, of which just over half are made by car. The majority of visitors make trips to the coast specifically to see the sea and enjoy the coastal scenery. Dog walking was the most frequently observed activity, with walking, cycling and jogging being other common recreational activities. Most activities involved people staying on the shore/sea wall rather than being on the intertidal areas or in the water. Human activity that took place on the intertidal areas was more likely to result in bird disturbance; on those areas dog walking was particularly common and resulted in a disproportionate amount of the observed bird disturbance.
- 5.4.7 The avoidance and mitigation strategy outlines a 5.6km zone of influence around the Solent European sites (Figure 5.5); the whole of Gosport Borough falls within this zone.

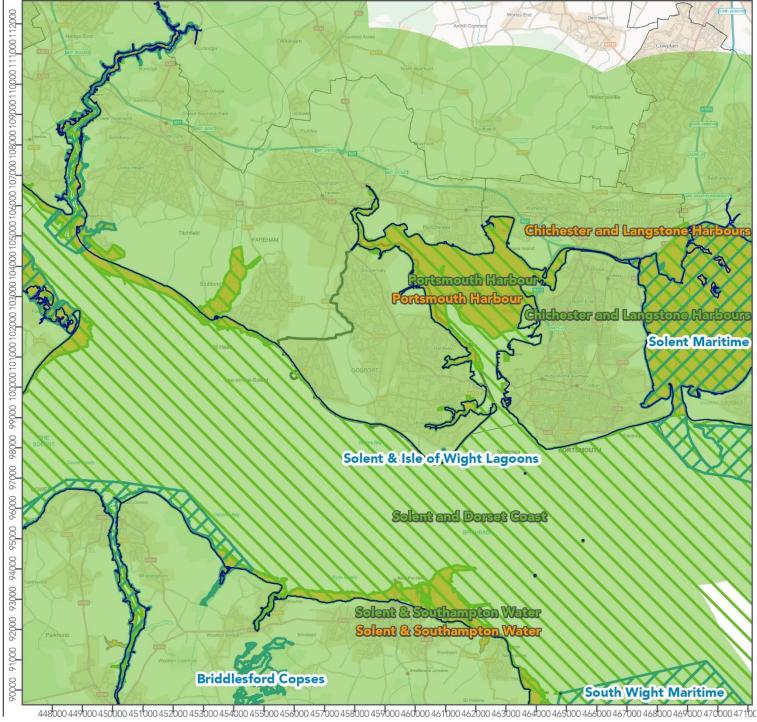


# Gosport Local Plan Habitats Regulations Assessment



Figure 5.5: Solent SPA 5.6km mitigation zone for recreation impacts





5.4.8 The Gosport Regulation 18 Draft Local Plan sets out a housing requirement of 3,500 net additional dwellings and a net supply of 3,654 dwellings over the plan period (2021-2038), and proposes allocation of the sites listed in Table 5.7 to contribute towards meeting the requirement. In the absence of avoidance and/or mitigation measures, this level of residential development is likely to increase the number of regular visitors to the Solent and Southampton Water SPA/Ramsar, Portsmouth Harbour SPA/Ramsar and Chichester and Langstone Harbours SPA/Ramsar. The resultant increase in disturbance from people and their dogs is likely to adversely affect overwintering populations of qualifying bird species, by reducing winter survival rates in Solent and Southampton Water, Portsmouth Harbour and Chichester and Langstone Harbours, and thereby undermining the integrity of these SPAs/Ramsars.

Table 5.7: Proposed Residential Allocations Falling within 5.6km Solent Mitigation Zone

| ID      | Name  |     | No. dwellings |  |  |  |
|---------|---|-----|---------------|--|--|--|
|         | Allocations in the regeneration areas               |     |               |  |  |  |
|         | Harbour Regeneration Area                           |     |               |  |  |  |
| SS2     | Gosport Waterfront                                  |     |               |  |  |  |
|         | Land at Mumby Road Lorry Park                       | 50  |               |  |  |  |
|         | Land at Gosport Marina                              | 190 | 440           |  |  |  |
|         | Former Crewsaver site (in addition to 31 permitted) | 10  | 440           |  |  |  |
|         | Land at Priddy's Hard (in addition to 29 permitted) | 120 |               |  |  |  |
|         | West of Harbour Road                                | 70  |               |  |  |  |
| SS3     | Gosport Town Centre                                 |     |               |  |  |  |
|         | Land at Gosport Bus Station                         | 240 |               |  |  |  |
|         | Former Police Station Site                          | 90  |               |  |  |  |
|         | Gosport Precinct                                    | 572 |               |  |  |  |
|         | Barclay House and Land to the East of Barclay House | 80  | 57.2          |  |  |  |
|         | 57 to 59 High Street                                | 12  |               |  |  |  |
|         | 84 to 86 High Street                                | 50  |               |  |  |  |
|         | Mix of potential car park redevelopments            | 76  |               |  |  |  |
| SS4-SS9 | Haslar Peninsula                                    |     |               |  |  |  |
|         | Blockhouse  |     |               |  |  |  |
|         | Fort Blockhouse                                     | 150 | 760           |  |  |  |
|         | The Piggeries                                       | 60  |               |  |  |  |
|         | Haslar Barracks                                     | 225 |               |  |  |  |
|         | Daedalus Regeneration Area                          |     |               |  |  |  |
| SS11    | Daedalus (Site C – Historic Core)                   |     | 300           |  |  |  |
|         | Allocations in the regeneration areas sub total     |     | 2,072         |  |  |  |
|         | Allocations outside of the regeneration areas       |     |               |  |  |  |
|         | Anglesey  |     |               |  |  |  |
| A1.1b   | Land south of Fort Road                             |     | 15            |  |  |  |
|         | Bridgemary North                                    |     |               |  |  |  |



| ID    | Name  | No. dwellings |
|-------|---|---------------|
| A2.6a | Land at Stoners Close                                   | 8             |
| A2.6b | Land at Lapthorn Close                                  | 10            |
| A2.6c | Land at Prideaux-Brune Avenue                           | 5             |
| A2.7a | Land between Woodside and Wych Lane                     | 5             |
| A2.7b | Land at Bridgemary Road                                 | 6             |
|       | Bridgemary South  |               |
| A2.6d | Land at Rowner Road Service Station                     | 20            |
| A2.7c | Land at Montgomery Road                                 | 8             |
|       | Elson   |               |
| A2.2  | Land at Heritage Way and Frater Lane                    | 55            |
|       | Forton  |               |
| A2.6e | Land at Forton Road (Former Solent Building Supplies)   | 23            |
| A2.6f | Land at Wheeler Close                                   | 6             |
|       | Hardway   |               |
| A2.7d | Land at Grove Road                                      | 28            |
|       | Leesland  |               |
| A2.6g | Land at Whitworth Close                                 | 18            |
|       | Town  |               |
| A2.3  | Land at Gasworks Site, Mariners Way                     | 60            |
|       | Allocations outside of the regeneration areas sub total | 267           |
|       | [Sites with planning permission]                        | [699]         |
|       | Windfall  | 306           |
|       | [Total supply]  | [3,344]       |

5.4.9 The Phase 3 (Liley & Tyldesley, 2013) report considered the available options for avoiding and mitigating impacts to the overwintering bird assemblage of the Solent European sites, in the context of current planning policy and regulation. It outlined a strategy of projects including 'quick wins' and longer term behavioural change initiatives for reducing the overall adverse effect such that planned new developments can be accommodated. The Solent Recreation Mitigation Partnership (SRMP) was established in 2014 to implement the recommendations of the Phase 3 report. An Interim Strategy was produced in 2014, which has now been replaced by the final strategy published in December 2017<sup>20</sup>. The 2017 strategy proposes a series of management measures to prevent bird disturbance through recreational activities associated with new housing development planned around the Solent up to 2034. These measures include:

<sup>&</sup>lt;sup>20</sup> Bird Aware Solent (December 2017): *Solent Recreation Mitigation Strategy*. Available online at: https://solent.birdaware.org/media/29372/Bird-Aware-Solent-Strategy/pdf/Solent\_Recreation\_Mitigation\_Strategy.pdf



- a team of 5-7 coastal rangers to advise people on how to avoid bird disturbance, liaise with landowners, host school visits, etc;
- communications, marketing and education initiatives and an officer to implement them;
- initiatives to encourage responsible dog walking and an officer to implement them;
- preparation of codes of conduct for a variety of coastal activities;
- site-specific projects to better manage visitors and provide secure habitats for the birds;
- providing new/enhanced greenspaces as an alternative to visiting the coast; and
- a partnership manager to coordinate and manage all the above.
- 5.4.10 The strategy requires all new dwellings built within 5.6 kilometres of the boundaries of the SPAs (the 'zone of influence') to contribute towards this package of measures. In order to ensure there is a mechanism for funding these mitigation measures 'in perpetuity', beyond 2034, a proportion of the money received each year from developer contributions is transferred to an investment fund, which, by 2034 will be sufficiently large to fund the mitigation measures 'in perpetuity'. Policy D5 of the Local Plan requires residential developments to avoid or mitigate impacts caused by recreational disturbance, while its explanatory text refers to financial contributions to the Solent Recreation Mitigation Strategy.

# Screening conclusion

5.4.11 In line with the People Over Wind ruling, this impact pathway will be taken forward for Appropriate Assessment of the disturbance effects of the Local Plan on the Solent and Southampton Water, Portsmouth Harbour and Chichester and Langstone Harbours SPAs/Ramsars in view of the sites' conservation objectives.

#### Other plans and projects acting in combination

- 5.4.12 The following plans/projects identified at the screening stage may also contribute to disturbance impacts:
  - Strategic development at Tipner and Horsea Island, Portsmouth
  - Fareham Core Strategy (adopted August 2011)
  - Fareham Development Sites and Policies (DSP) Plan (adopted June 2015)
  - Fareham Borough Welborne Plan (adopted 2015)
  - Fareham Revised Publication Local Plan 2037 (emerging)
  - The Portsmouth Plan (adopted 2012)
  - Portsmouth City Draft Local Plan 2014-2034 (emerging)
  - Partnership for South Hampshire (PfSH) Spatial Position Statement 2016-2034

#### **New Forest sites**

5.4.13 In February 2021 Footprint Ecology produced a report providing clarification and advice relating to an appropriate 'zone of influence' or 'catchment area' within which visitors from new



development are likely to have a significant impact on the New Forest SAC/SPA/Ramsar (Liley & Caals, 2021). Using the 75<sup>th</sup> percentile for visitors traveling from home (derived from the straight-line distance from the interviewee postcode to survey location) a 13.79km zone of influence was defined from the SAC/SPA/Ramsar boundary. This essentially marks out the zone from within which most visitors originate.

5.4.14 The report does however recommend that the zone of influence should be modified to exclude the following local authorities: Fareham, Gosport and the Isle of Wight. This is to take into account the particular geographic barriers of Southampton Water and the Solent. In these Boroughs, it is recommended that large developments of around 200 or more dwellings within 15km (see Figure 5.6) of the SAC/SPA/Ramsar boundary should be subject to project HRA and that mitigation may be required. This could be either through the provision of very high-quality local greenspace or a reduced per-dwelling contribution to the strategic mitigation scheme.

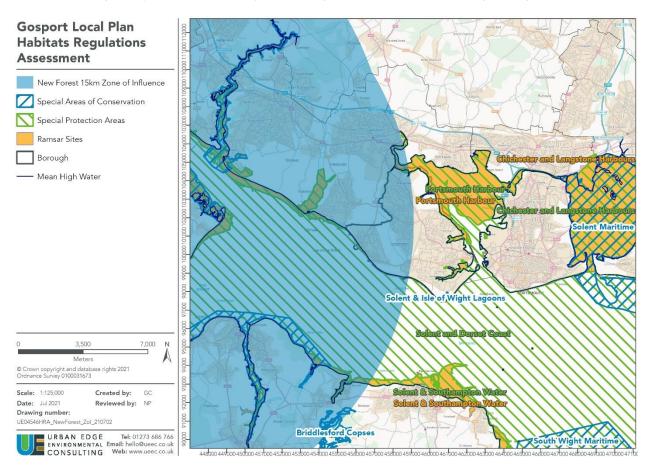


Figure 5.6: New Forest sites 15km Zone of Influence

5.4.15 Only two of the strategic sites within the Gosport Regulation 18 Consultation Draft Local Plan fall within 15km of the New Forest sites: SS10 Rowner and HMS Sultan, and SS11 Daedalus. SS10 includes a range of objectives for re-use of MoD land and regeneration and renewal of residential areas. This may include the provision of replacement homes but no specific allocation of net additional dwellings is made within policy SS10. SS11 targets regeneration, renewal and employment development in the Daedalus and Lee-on-the-Solent area, but specifically includes an allocation of 300 dwellings as part of a mixed use development on Site B.



5.4.16 For the purposes of this HRA, the Gosport Regulation 18 Consultation Draft Local Plan is not considered likely to significantly affect the New Forest SAC/SPA/Ramsar through recreation impacts, either alone or in combination with other plans and projects, and this impact pathway is screened out from further consideration. However, the policy wording for SS10 and SS11 has been adjusted to require project level HRA for proposals for residential development in excess of 200 net additional dwellings at either Daedalus or Rowner.

#### 5.5 Water Abstraction

- 5.5.1 New homes require the development of new infrastructure, including the provision of fresh water supply. Water quantity plays a critical role in the health and biodiversity of river catchments, including water levels (depth and volumetric flow) and velocity in the river, and water table levels in the floodplain. These properties in turn influence rates of siltation and erosion, dissolved oxygen, and pollutant and nutrient concentrations. Low flow rates affect food availability for riparian fauna, may limit migration and dispersal, and can alter the structure, composition and condition of vegetation communities.
- 5.5.2 Gosport Borough falls within the supply zones of Portsmouth Water only. Most Portsmouth Water abstractions are linked to river flows, either directly at the Itchen via Gaters Mill, or indirectly through groundwater abstractions affecting the Hamble, Meon, Wallington, Ems and Lavant. Portsmouth Water has a single Water Resource Zone (WRZ).

# **Extent of current and future impacts**

- 5.5.3 Portsmouth Water published its latest WRMP in November 2019 covering the period 2020/21 to 2044/45 (Portsmouth Water, 2019). Figure 5.7 shows the supply demand deficit for the Portsmouth Water WRZ throughout the planning period during a 1 in 200 drought event under annual average conditions and Figure 5.8 shows the same under critical conditions. The red line represents demand plus target headroom and the blue line represents total Water Available for Use (WAFU). In both sets of conditions, the deficit increases with time with the impact of climate change and as the volume of bulk supplies increase. The deficit is calculated to be 33.3 Ml/d in 2019/20 increasing to 83.6 Ml/d by 2044/45 under the annual average scenario, and 34.8 Ml/d in 2019/20 increasing to 85.8 Ml/d by 2044/45 under the critical period scenario.
- 5.5.4 Portsmouth Water has developed options to balance supply and demand. The options within Portsmouth Water's preferred final plan and their planned start dates are set out in Table 5.8.



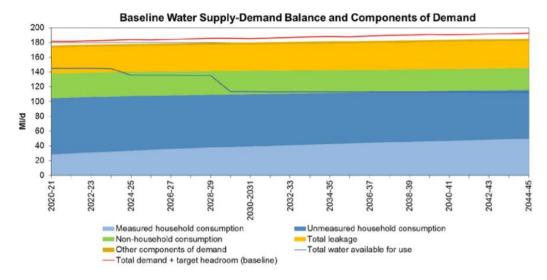


Figure 5.7: Baseline Supply Demand Graph - Design Drought Annual Average (1 in 200 Year Period) (Source: Portsmouth Water, 2019)

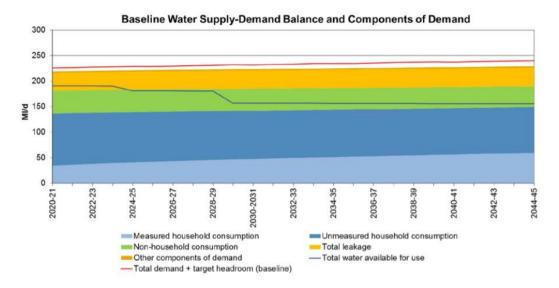


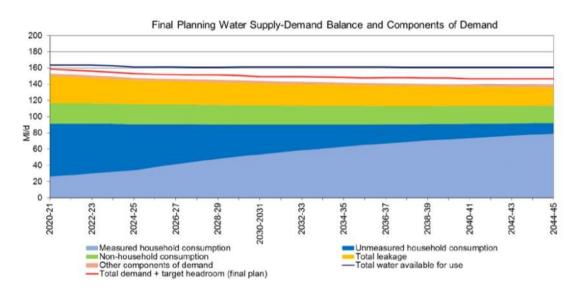
Figure 5.8: Baseline Supply Demand Graph - Design Drought Critical Period (Source: Portsmouth Water, 2019)

Table 5.8: Portsmouth Water Preferred Options to Address Supply-Demand Deficit (Source: Portsmouth Water, 2019)



| Option code | Option name   | AMP7<br>(2020/21-   | AMP8<br>(2025/26- |
|-------------|---|---------------------|-------------------|
| CO46        | Household water efficiency programme (partnering approach, home visit)  | 2024/25)<br>2020–21 | 2029/30)          |
| CO46b       | Waterwise programme   | 2020-21             |                   |
| CO26        | Subsidy to customers that purchase water efficient appliances (washing machines and dishwashers, showers and WCs) | 2020–21             |                   |
| RO21a       | Source O – Maximising DO  | 2020-21             |                   |
| RO23a       | Source H – Maximising DO  | 2020-21             |                   |
| CO34        | Water saving devices – Retrofitting existing toilets  | 2020-21             |                   |
| CO06a       | Metering on change of occupancy – existing meter pits   | 2020–21             |                   |
| DO04a       | Fixed network of permanent noise loggers<br>connected to telemetry - Tranche 1                                    | 2020-21             |                   |
| RO24a       | Source C – Maximising DO  | 2020-21             |                   |
| CO84        | Voids metering  | 2020-21             |                   |
| CO40        | Water saving devices – spray taps   | 2020-21             |                   |
| CO43        | Water saving devices – trigger nozzles for hoses  | 2020-21             |                   |
| CO05        | Smart Meter MNFR Trial  | 2020-21             |                   |
| CO78        | Voluntary restraint and leakage action  | 2020-21             |                   |
| CO79        | Mandatory restraint   | 2020-21             |                   |
| CO80        | Imposition of Drought Direction Restrictions (mandatory commercial restraint)                                     | 2020–21             |                   |
| RO68        | Source S – Drought Permit   | 2020-21             |                   |
| RO22a       | Source J – Maximising DO  | 2024-25             |                   |
| DO04b       | Fixed network of permanent noise loggers connected to telemetry - Tranche 2                                       |                     | 2025-26           |
| CO06        | Metering on Change of Occupancy - all properties  |                     | 2025-26           |
| RO13        | Havant Thicket Winter Storage Reservoir   |                     | 2029-30           |

5.5.5 Implementation of the preferred plan results in a small but increasing surplus in resource over the planning period under the annual average scenario (Figure 5.9) and a greater surplus under the critical period scenario (Figure 5.10) (Portsmouth Water, 2019).





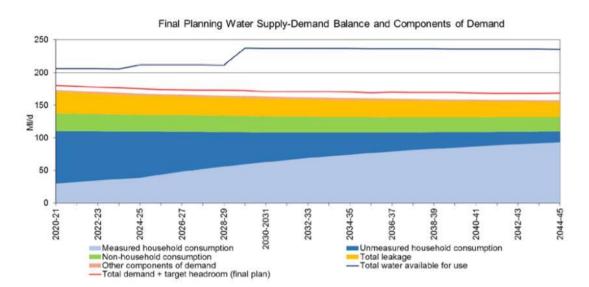


Figure 5.9: Final Planning Supply-Demand Balance Graph - Annual Average (Source: Portsmouth Water, 2019)

Figure 5.10: Final Planning Supply-Demand Balance Graph - Critical Period (Source: Portsmouth Water, 2019)

- 5.5.6 The HRA Screening of the WRMP concluded that demand reduction and leakage options will have no negative operational effects on European sites as they will reduce treated water use. Negative effects could only result through any construction works required which could not be meaningfully assessed at the strategic level since information on the location of leaks is not available without specific investigations. Therefore the options were screened in as an impact pathway is conceivable but, as a meaningful Appropriate Assessment was not possible for the WRMP HRA, the assessment is deferred to project level.
- 5.5.7 The HRA Screening identified likely significant effects to Solent Maritime SAC, Chichester and Langstone Harbours SPA / Ramsar, Portsmouth Harbour SPA / Ramsar and Solent and Southampton Water SPA / Ramsar as a result of Option R013: Havant Thicket reservoir development, Option R021a: Funtington DO Recovery, R022a: Worlds End Group Maximising DO and Option R023a: West Street DO Recovery. However, taking account of mitigation, the Appropriate Assessment concluded that there will be no significant changes to these sites associated with the options alone or in-combination. These mitigation measures include:
  - Site and feature specific mitigation measures which must be employed at the project-level, unless scheme-specific HRAs or environmental studies demonstrate that they are not required or that alternative or additional measures are more appropriate, are set out in Appendix G of the HRA (WRMP Appendix O). Such measures could include designing to avoid habitat features, seasonal / daily timing constraints on working, ecologically sensitive lighting, storage of materials away from commuting routes and foraging areas and excavations to be installed with ramps or battered ends to prevent species becoming trapped.
  - Abstraction restrictions to the Bedhampton and Havant Springs feeding Langstone Harbour (p.31 of WRMP Appendix O); and



Monitoring measures to avoid / give early warning of an emergency drawdown of the reservoir (p.33 of WRMP Appendix O).

### Effects associated with the Gosport Local Plan, alone and in combination

5.5.8 Portsmouth Water has forecast 'baseline' demand and supply across its supply network for the period 2020/21 to 2044/45 in its 2019 WRMP (Portsmouth Water, 2019). The planning period coincides with that covered by the Gosport Local Plan. This baseline demand includes 'Household demand' incorporating population growth and changes in household composition across the supply area. Therefore, on the basis that the increases in residential dwellings projected in both the Gosport Local Plan and other Local Plans in the supply area have been accounted for in the WRMP, it can be concluded that no likely significant effects to European designated sites are anticipated either alone or in-combination subject to the mitigation measures set out in the WRMP being implemented. This does not remove the need for project-level HRA for the water supply projects, which will be required to address those aspects and uncertainties that could not be fully assessed at plan-level, including in-combination effects with forthcoming plans and projects.

## 5.6 Water Quality

- 5.6.1 Water quality is integral to the functioning of many habitats. Water quality may be affected by a number of factors including nutrients, contaminants and dissolved oxygen availability. The two key nutrients of interest in the water environment are phosphates and nitrates:
  - Phosphate can be organic (critical in DNA/RNA and energy production) or inorganic (in minerals) and contributes to the eutrophication of receiving waters. Excess phosphate may result in the overgrowth of in-channel vegetation by epiphytic filamentous algae that compete directly with vascular plants for light and nutrients, possibly leading to loss of nutrient-sensitive species, and reductions in the species composition, extent and condition of riverine plant and invertebrate communities, and species populations reliant upon them. In a freshwater environment, phosphate is generally acknowledged to be the more problematic nutrient.
  - Ammonia is a form of nitrogen which aquatic plants can absorb into proteins, amino acids and other molecules. Nitrate is the stable end product of complete nitrification (which involves the conversion of ammonia into nitrite and ultimately nitrate). Both nitrate and phosphate can contribute to the eutrophication of receiving waters, but in saline coastal waters it is generally acknowledged that nitrate is more the problematic nutrient, phosphate having a lesser role. Nitrates arising from agricultural diffuse pollution and wastewater discharges have been implicated in the development of dense macroalgal mats occurring in the intertidal zone, which increases biological oxygen demand (BOD) and reduces dissolved oxygen content. This in turn reduces the diversity and abundance of intertidal epifauna and infauna communities and the productivity of sea-grass beds.
- 5.6.2 Gosport Borough is served by Southern Water's Peel Common Waste Water Treatment Works (WWTW). The PfSH Integrated Water Management Study (IWMS; Amec Foster Wheeler, 2018) collates data on projected growth in the number of households resulting from Local Plans in the



south Hampshire area, together with estimates of river flow, river quality, and WWTW effluent flow and quality. For river and effluent quality the main focus was on phosphate, ammonia, Biological Oxygen Demand (BOD, a proxy for Dissolved Oxygen in rivers) and nitrate. It should be noted that since publication of the IWMS housing requirements across the subregion have increased and work is ongoing to update the IWMS.

5.6.3 The 23 WWTWs serving south Hampshire discharge into 15 Water Framework Directive (WFD) waterbodies. Of these, the Environment Agency has assessed 13 waterbodies as having less than Good ecological status in its 2015 South East River Basin Management Plan (RBMP; Environment Agency, 2016). The main elements found to be at less than Good were phosphate, dissolved inorganic nitrogen, fish, macrophytes and phytobenthos. Table 5.9 lists the WWTW serving Gosport Borough, together with the ecological status of receiving waters.

Table 5.9: WFD classifications for river, transitional and coastal water bodies (2015 Cycle) (Source: Amex Foster Wheeler. 2018): Gosport Borough

| WWTW           | Receiving watercourse | WFD catchment | WFD<br>waterbody | Waterbody<br>status | Reason  |
|----------------|-----------------------|---------------|------------------|---------------------|---|
| Peel<br>Common | The Solent            | Solent        | Solent           | Moderate            | Angiosperms; dissolved inorganic nitrogen; mitigation measures assessment |

#### Water quality and the Solent European Marine Sites

- 5.6.4 The Solent was assessed as of Moderate ecological status in the RBMP. Natural England's supplementary advice<sup>21</sup> for Solent Maritime SAC lists water quality as an attribute integral to achieving favourable conservation status in relation to the following features, which have knock-on effects for wintering bird assemblages within the Solent and Southampton Water SPA/Ramsar, Portsmouth Harbour SPA/Ramsar, and Chichester and Langstone Harbours SPA/Ramsar:
  - Supporting processes (water quality contaminants): Intertidal and subtidal habitats: High levels of the priority hazardous substance tributyl tin and its compounds are present in the Southampton Water Water Framework Directive waterbody. There is no evidence available for aqueous contaminant levels in the Western Yar, Lymington or Newtown River estuaries. The target is to reduce aqueous contaminants to levels equating to High / Good WFD Status, avoiding deterioration from existing levels.
  - Supporting processes (water quality dissolved oxygen): Intertidal and subtidal habitats: Dissolved Oxygen (DO) levels affect the condition and health of features. Excessive nutrients and / or high turbidity can lead to a drop in DO, especially in warmer months. Low DO can have sub-lethal and lethal impacts on fish and infauna and epifauna communities. The target is to maintain DO concentration at levels equating to High Ecological Status (specifically ≥ 5.7 mg per litre (at 35 salinity) for 95 % of the year), avoiding deterioration from existing levels.

<sup>&</sup>lt;sup>21</sup> Natural England (13/3/2020): Designated Sites View: Solent Maritime SAC supplementary advice [accessed online 29/06/21]: https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK0030059&SiteName=solent&SiteNameDisplay =Solent+Maritime+SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=



- Supporting processes (water quality –nutrients): Intertidal and subtidal habitats: The site has been assessed as at risk of eutrophication, leading to opportunistic macroalgae and phytoplankton blooms which can smother the sediment, preventing aeration and causing anoxia (lack of oxygen). This can impact sensitive fish, epifauna and infauna communities. The target is to restore water quality to mean winter dissolved inorganic nitrogen levels.
- Supporting processes (water quality): Saltmarsh, dunes and vegetated shingle: Poor water quality and inadequate quantities of water can adversely affect the structure and function of these habitat types. Water quality should be restored to mean winter dissolved inorganic nitrogen levels at which biological indicators of eutrophication do not affect the integrity of the site and its features.
- Supporting processes (water quantity/quality): Desmoulin's whorl snail: can be vulnerable to the effects of poor water quality. Elevated levels of nitrates and phosphates could change the vegetation community on which the snail relies.
- 5.6.5 Similarly Natural England's supplementary advice<sup>22</sup> for Portsmouth Harbour SPA/Ramsar lists water quality as an attribute integral to achieving favourable conservation status in relation to the following features:
  - Supporting processes (water quality -nutrients): dark-bellied brent goose, red-breasted merganser, dunlin, black-tailed godwit: High concentrations of nutrients in the water column can cause phytoplankton and opportunistic macroalgae blooms, leading to reduced dissolved oxygen availability. This can impact sensitive fish, epifauna and infauna communities (Devlin et al., 2007), (Best, 2014) and hence adversely affect the availability and suitability of bird breeding, rearing, feeding and roosting habitats. The target is to restore water quality to mean winter dissolved inorganic nitrogen levels where biological indicators of eutrophication (opportunistic macroalgal and phytoplankton blooms) do not affect the integrity of the site and features (avoiding deterioration from existing levels). Specifically, opportunistic macroalgae levels should be restored so there is no adverse effect to the feature through limited algal cover (<15%) and low biomass (< 500 g m²) of macroalgal blooms in the available intertidal habitat, with affected area of available intertidal habitat affected by opportunistic macroalgae less than 15 %. There should also be limited (<5%) entrainment of algae in the underlying sediment (all accounting for seasonal variations and fluctuations in growth). Phytoplankton levels should be restored to where there is only a minor (a) decline in species richness, and (b) disturbance to the diatom-dinoflagellate succession in the spring bloom compared to reference conditions.

# Waste water treatment works capacity

5.6.6 All WWTWs are permitted to discharge a set volume of treated effluent based on the population size they serve. This is generally referred to as the Dry Weather Flow (DWF), which is the base flow going to a WWTW of raw sewage with a small amount of groundwater infiltration and with no surface water drainage inputs. The DWF is used to help determine the quality of effluent

<sup>&</sup>lt;sup>22</sup> Natural England (14/9/2018): Designated Sites View: Portsmouth Harbour SPA supplementary advice [accessed online 29/06/21]: <a href="https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9011051&SiteName=portsmouth&count-yCode=&responsiblePerson=&unitId=&SeaArea=&IFCAArea=&NumMarineSeasonality=4&SiteNameDisplay=Portsmouth%20Harbour%20SPA&HasCA=1&NumMarineSeasonality=4&SiteNameDisplay=Portsmouth%20Harbour%20SPA



required to protect the water environment and can also be used as an indicator of when a WWTW is reaching its volumetric design capacity and requires an upgrade. An initial assessment of the current volumes of treated effluent discharged by the main WWTW (Amec Foster Wheeler, 2018) indicated that five were already discharging volumes in excess of the permits and a further three had less than 10% spare capacity; these were mostly located on the Isle of Wight but also include Peel Common WWTW which serves Gosport Borough.

5.6.7 The IWMS used projected future housing numbers to calculate increases in effluent discharges based on assumed occupancy rates for the new housing, added to the current volume of treated effluent discharged from the relevant WWTW. The occupancy rates and flow estimates were based on a worst case scenario. The impact of this increase in treated sewage effluent on the receiving watercourses and coastal waters was then modelled and the results assessed against the current condition of the receiving waters. Where a potentially significant deterioration was identified, indicative permit standards were calculated to prevent the deterioration<sup>23</sup>.

#### South Hampshire assessment

- 5.6.8 This assessment of impacts on water quality, WWTW and sewer capacity considered 20 WWTW and their associated sewer networks. The IWMS reported that some were considered likely to need upgrading by 2020 in order to ensure that future housing growth in the PfSH area will not have a detrimental impact on water quality. In addition, there are currently gaps in the evidence base that require further investigation, monitoring and potentially action, to ensure future growth is compliant with the Habitats and Water Framework Directives. This includes the potential for cumulative impacts within WFD catchments receiving discharges from more than one WWTW, such as Southampton Water and Portsmouth Harbour. To address these issues there has been voluntary WWTW monitoring undertaken by Southern Water over the last year (awaiting results) and an EA permit review has been agreed in principle for the Solent area, but the need for infrastructure upgrades is still at an early stage of gathering evidence and considering options.
- 5.6.9 Four WWTW will require improvements to reduce ammonia, and eleven to reduce phosphate. Although no WWTW were identified as requiring improvements to reduce nitrate (N) loading from their discharges due to direct impacts from future house growth, it should be noted that at least four WWTW will require standstill for N once their existing permitted flow limit is reached. Permitted flow limits will also need to be reviewed for another six WWTW in 2022, to assess if standstill for N is required at these locations. In addition following the assessment of potential cumulative impacts including diffuse sources, the IWMS identifies where catchment measures to reduce diffuse pollution should be implemented in order to ensure the water body and designated area can achieve their objectives based on the current condition of the area irrespective of housing growth; these include Southampton Water and Portsmouth Harbour.

<sup>&</sup>lt;sup>23</sup> N.B. An exceedance of a flow permit is not in itself an issue as the sewerage undertaker could apply to the Environment Agency for a new flow permit. This may be permitted where it is matched by an equivalent improvement in the quality of the water being discharged, thus protecting the receiving waters (i.e. overall there would be load standstill to the receiving waters).



### Gosport Borough assessment

- 5.6.10 New developments in Gosport will drain to the Peel Common WWTW. Although overall no significant impact or deterioration was predicted by the IWMS due to future housing growth, the Peel Common WWTW may require improvements by 2025 to increase capacity in the WWTW, which will be subject to review in 2022. Sewer capacity upgrades are also likely to be required at this WWTW. The catchment has nitrate problems and catchment level nitrate measures are required now (see section 5.6.13 below).
- 5.6.11 Overall, increased housing resulting from the Plan is likely to increase pressure on Peel Common WWTW, which drains into the Solent. There is significant uncertainty as to whether new housing development in the PfSH region can be accommodated without having a detrimental effect on the water environment.

Figure 5.11: Summary of growth pressures on WWTW serving Gosport Borough (Source: Amec Foster Wheeler, 2018)

| wwtw           | Measured<br>flow 2013-<br>15 (m3/day) | Consented<br>flow<br>(m3/day) | DWF<br>exceedance<br>predicted                  | Mitigation<br>for N | Sewer<br>capacity<br>required | Freshwater<br>mitigation<br>required |
|----------------|---------------------------------------|-------------------------------|---|---------------------|-------------------------------|--------------------------------------|
| Peel<br>Common | 55,180                                | 59,683                        | Reaches<br>capacity in 2025<br>(currently <10%) | Review in<br>2022   | Yes                           | n/a                                  |

#### Other plans and projects acting in combination

- 5.6.12 The following plans/projects identified at the screening stage may also contribute to disturbance impacts:
  - > Strategic development at Tipner and Horsea Island, Portsmouth
  - Fareham Core Strategy (adopted August 2011)
  - Fareham Development Sites and Policies (DSP) Plan (adopted June 2015)
  - Fareham Borough Welborne Plan (adopted 2015)
  - Fareham Revised Publication Local Plan 2037 (emerging)
  - The Portsmouth Plan (adopted 2012)
  - Portsmouth City Draft Local Plan 2014-2034 (emerging)
  - Partnership for South Hampshire (PfSH) Spatial Position Statement 2016-2034

### **Nutrient neutrality**

5.6.13 Condition assessments undertaken by Natural England in 2018 and 2019 identified some interest features of the Solent designated sites to be in unfavourable condition. For the Solent Maritime SAC, qualifying features including estuaries, subtidal sandbanks, and intertidal mudflats and sandflats were found to be in unfavourable condition based on a number of attributes failing, including nutrient water quality. The site condition assessment did not include saltmarsh, however preliminary analysis shows a reduction in extent of saltmarsh across the Solent between 2008 and



- 2016 and elevated nutrients can contribute towards the susceptibility of saltmarsh to erosion through effects on plant root growth and the cohesion of mud around the roots.
- 5.6.14 The latest SSSI condition assessments for Portsmouth Harbour (September 2018) show that the majority (71.2%) of the area is in Unfavourable No Change condition, while a further 25.7% is in Unfavourable Recovering condition. The primary reason for this is elevated nutrient levels and macroalgal blooms as described above.
- 5.6.15 In light of the ongoing uncertainty in relation to the ability of the PfSH region to accommodate future housing growth without having a further detrimental effect upon the water environment, Natural England's current advice is that all new development resulting in any net increase in dwellings or overnight accommodation uses should achieve nutrient neutrality. By ensuring that new development does not add to existing nutrient burdens this provides certainty that the project / plan is deliverable in line with the Habitats Regulations. This position takes into account recent case law including the CJEU judgements on People over Wind and the case known as the Dutch case<sup>24</sup>.

### Screening conclusion

- 5.6.16 The Gosport Regulation 18 Consultation Draft Local Plan includes policy D5: The Local Ecological Network and Internationally and Nationally Important Sites. Policy D5 requires development proposals to "demonstrate nutrient neutrality to avoid having a detrimental impact on the recognised features of the internationally important habitats" by preparing a nutrient budget.
- 5.6.17 In line with the People Over Wind ruling, this impact pathway will be take forward for Appropriate Assessment of the water quality effects of the Local Plan on the Solent and Southampton Water, Portsmouth Harbour and Chichester and Langstone Harbours SPAs/Ramsars in view of the sites' conservation objectives. The Council is currently preparing a nutrient budget for the Local Plan so that the likely total nitrogen surplus is known and to enable mitigation planning for the Appropriate Assessment.

# 5.7 Site-specific Impacts

5.7.1 Site-specific impacts are those which emanate from the development of a given site and operate at a local scale on nearby European sites, potentially resulting in the actual or functional loss of habitats which have a role in supporting the integrity of the European sites. Impacts can be further separated into impacts during the construction or operational phase, and are defined in the following sections:

### **Construction impacts**

- Habitat loss due to the location/footprint of development;
- Construction noise;

<sup>&</sup>lt;sup>24</sup> Joined Cases C-293/17 and C-294/17, CJEU (2018): Coöperatie Mobilisation for the Environment UA and Others v College van gedeputeerde staten van Limburg and Others.



- Construction activity; and
- Aquatic pollution during remediation, demolition or construction.

# **Operation impacts**

- Disturbance due to increased activity (including the impacts of recreation which are not addressed by the SRMS); and
- Displacement due to shortened sight lines.

#### Habitat loss during construction

- 5.7.2 This pathway is defined as impacts from development which, due to its location and size (i.e. footprint), changes the extent or distribution of a qualifying habitat or the habitats of qualifying species within a European site, thereby reducing the population or restricting the distribution of qualifying species.
- 5.7.3 It also includes development which would result in the loss of habitats which support the ecological functions of a European site, such as those classified as being Core areas, Primary or Secondary support areas and Low Use sites for waders or dark-bellied Brent goose in the *Solent Waders and Brent Goose Strategy* (Whitfield, 2020). There are twelve Core areas within Gosport Borough, located along Solent foreshore and in the town centre, as well as seven Primary support areas; see Figure 5.12.

#### Construction noise

- 5.7.4 This pathway is defined as impacts from development whose construction processes emit a level of noise which could change the distribution of qualifying species within a European site or important supporting area, displacing the species from otherwise suitable habitats, and thereby reducing individual survival rates and risking a population reduction. This could be due to the proximity of the development site to the European site / supporting area, or the absence of existing topographic features, structures or vegetation which may serve to sufficiently attenuate the noise, or a combination of both.
- 5.7.5 Very loud (defined as greater than 70dB) and percussive noises have the potential to disturb birds, increasing time spent alert and in flight, and reducing the time available to feed. Peak levels of sound are most likely to occur from the impact of pneumatic drilling and concrete breaking during site preparation and piling during construction. These activities can have an impact on bird species at a distance of up to 300m. This figure has been used as a worst-case scenario and is based on published research and studies by the Environment Agency for the Humber Estuary Tidal Defences scheme, the Environmental Statement for which states that: "Sudden noise in the region of 80dB appears to elicit a flight response in waders to 250m from the source, with levels below this to approximately 70dB causing flight or anxiety behaviour in some species." (Environmental Statement for the Humber Estuary Tidal Defences: Urgent works, Paull to Kilnsea and Whitton to Pyewipe, cited in Biodiversity by Design, 2008, p.79).



# **Gosport Local Plan Habitats Regulations Assessment**

Brent Goose and Wader Sites 2020

Core Area

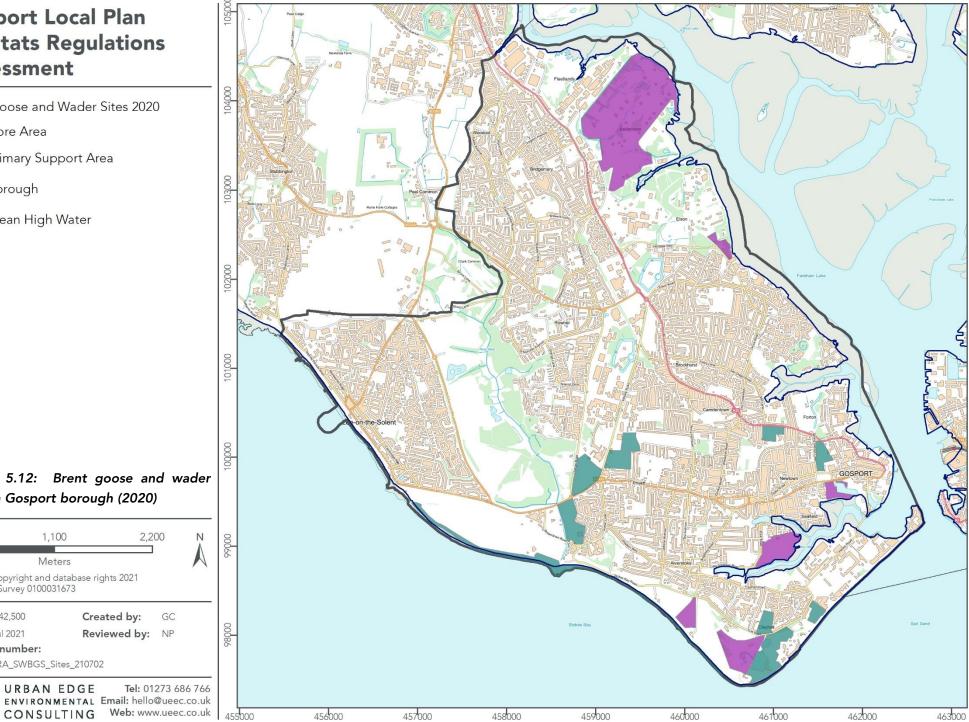
Primary Support Area

Borough

- Mean High Water

Figure 5.12: Brent goose and wader sites in Gosport borough (2020)





### Construction activity

- 5.7.6 This pathway is defined as impacts from development whose construction processes involve a heightened level of activity which could change the distribution of qualifying species within a European site or important supporting area, displacing the species from otherwise suitable habitats, and thereby reducing individual survival rates and risking a population reduction. This could be due to the proximity of the allocation site to the European site / supporting area, or the absence of existing topographic features, structures or vegetation which may serve to sufficiently screen the activity, or a combination of both.
- 5.7.7 Stillman et al (2012; Table 6.1, p.61) identify median distances for Brent goose and some waders within which the birds commonly respond to human activity, thereby causing changes in behaviour or displacement from otherwise suitable habitats. This response distance, which is around 80-100m for most species analysed in the Solent area, provides some context for sites which are particularly close to a European site or Core, Primary or Secondary Support areas for Brent goose.

## Aquatic pollution during construction

- 5.7.8 This pathway is defined as impacts from development of a site which is thought to contain contaminants whose mobilisation during remediation, demolition or construction could result in pollution of a qualifying habitat or habitat of a qualifying species, thereby limiting the function of the habitat or altering the supporting processes on which it relies.
- 5.7.9 This could occur by causing the pollutants to be released into an aquatic environment that is hydrologically connected with the habitat. Pollution impacts could also occur as a result of a pollution incident during construction on a site which is hydrologically connected with a qualifying habitat or habitat of a qualifying species (regardless of whether the allocation site is thought to be contaminated).

#### Disturbance due to increased operational activity

5.7.10 This pathway is defined as impacts from development (of any type) which results in heightened activity or increased operational noise within the development site, thereby causing changes in the distribution of qualifying species within a European site or important supporting area, displacing the species from otherwise suitable habitats, and thereby reducing individual survival rates and risking a population reduction. This could be due to the proximity of the allocation site to the European site / supporting area and/or the absence of existing topographic features, structures or vegetation which may serve to sufficiently screen the activity or attenuate the noise. The response distance of around 80-100m referred to above provides some context for sites which are particularly close to a European site or Core, Primary or Secondary Support areas for Brent goose.



## Displacement during operation due to shortened sight-lines

- 5.7.11 This pathway is defined as impacts from development (of any type) which changes the distribution of a qualifying species within a European site or important supporting area by reducing sight lines available to birds using the habitats within the site.
- 5.7.12 Several bird species can be displaced as a result of their specific line-of-sight requirements while foraging or roosting, whereby obstruction to sight lines (necessary for early warning of perceived predation risk) will render areas of habitat unsuitable for use by birds. For example, terns and gulls prefer open nest sites and unrestricted views while roosting and feeding. Waders, including ringed plover, black-tailed and bar-tailed godwits, redshank, curlew, turnstone, dunlin and sanderling, require views of greater than 200m when roosting or feeding. Brent goose requires views of at least 500m (Natural England, 2019<sup>25</sup>) in order to feel sufficiently free of predation risk to feed or roost.

# Other plans and projects acting in combination

- 5.7.13 The following plans/projects identified at the screening stage may also contribute to site-specific impacts:
  - Strategic development at Tipner and Horsea Island, Portsmouth
  - Fareham Core Strategy (adopted August 2011)
  - Fareham Development Sites and Policies (DSP) Plan (adopted June 2015)
  - Fareham Borough Welborne Plan (adopted 2015)
  - Fareham Revised Publication Local Plan 2037 (emerging)
  - The Portsmouth Plan (adopted 2012)
  - Portsmouth City Draft Local Plan 2014-2034 (emerging)
  - Partnership for South Hampshire (PfSH) Spatial Position Statement 2016-2034
  - North Solent Shoreline Management Plan (2010)

#### Distance-based screening criteria

5.7.14 Drawing on the previous sections it is possible to devise a series of distance-based screening criteria which are sufficiently precautionary, proportionate and evidence based to determine the likelihood of significant effects from site-specific impacts. These are set out in Table 5.10 and have been applied to the sites proposed for development in the Regulation 18 Draft Local Plan.

 $<sup>\</sup>label{lem:https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9011061\&SiteName=solent&countyCode=\&responsiblePerson=\&SeaArea=\&IFCAArea=\&HasCA=1\&NumMarineSeasonality=9\&SiteNameDisplay=Solent%20and%20Southampton%20Water%20SPA$ 



<sup>&</sup>lt;sup>25</sup> Natural England (13 September 2019): Solent and Southampton Water SPA: Supplementary advice on conservation objectives. Accessed online [29/06/2021] at:

Table 5.10: Distance-based screening criteria

| Impact                 | Distance                        | EU or Core / Primary / Secondary BG / wader site |
|------------------------|---------------------------------|--|
| Habitat loss           | 0m (within or overlapping site) | Both   |
| Construction pollution | 50m or hydrological pathway     | EU site  |
| Construction activity  | 100m                            | Both   |
| Construction noise     | 300m                            | Both   |
| Operational activity   | 100m                            | Both   |
| Shortened sight-lines  | Waders: 200m                    | Both   |
|                        | Brent goose: 500m               |  |

5.7.15 Table 5.11 sets out those site allocations for which European sites or Core / Primary support areas for brent goose and waders fall within the screening distances set out in Table 5.10. In addition, areas of land safeguarded for transport improvements (Policy A6) are also assessed against these screening criteria. Whilst some European sites or brent goose and wader sites may fall within these screening distances from one or more allocations, this does not necessarily mean that they will experience significant effects; for example, there may be intervening structures or vegetation which sever the potential impact pathway between the allocation and the European site / brent goose and wader site. However, proposals listed in Table 5.11 as potentially having an effect will be taken forward for further analysis in the Appropriate Assessment stage.

# 5.8 Screening Conclusions

5.8.1 In conclusion, in the absence of mitigation the Gosport Borough Local Plan is likely to result in a range of significant effects on the European sites of interest, both for strategic and site-specific impacts. The plan will be taken forward to the Appropriate Assessment stage to examine the nature of these effects in further detail. Those impact pathways taken forward for Appropriate Assessment are summarised in Table 5.1.



Table 5.11: Site Allocations falling within Screening Distances of European Sites and Brent Goose / Wader Sites

| Site ID<br>(Allocation) | Habitat Loss       | Construction pollution         | Construction<br>Activity | Construction<br>Noise | Operational<br>Activity | Shortened Sight<br>Lines – Waders | Shortened Sight<br>Lines – BG |
|-------------------------|--------------------|--------------------------------|--------------------------|-----------------------|-------------------------|-----------------------------------|-------------------------------|
| -                       | 0m                 | Hydrological<br>pathway or 50m | 100m                     | 300m                  | 100m                    | 200m                              | 500m                          |
| SS1 Waterfront          | EU site            | EU site                        | EU site / BGW site       | EU site / BGW site    | EU site / BGW site      | EU site / BGW site                | EU site / BGW site            |
| SS2 Waterfront          | EU site            | EU site                        | EU site / BGW site       | EU site / BGW site    | EU site / BGW site      | EU site / BGW site                | EU site / BGW site            |
| SS3 Town Centre         | EU site / BGW site | EU site                        | EU site / BGW site       | EU site / BGW site    | EU site / BGW site      | EU site / BGW site                | EU site / BGW site            |
| SS4 Gunboat             | EU site            | EU site                        | EU site                  | EU site / BGW site    | EU site                 | EU site                           | EU site / BGW site            |
| SS5 Fort                | EU site            | EU site                        | EU site                  | EU site               | EU site                 | EU site                           | EU site                       |
| SS6 Hospital            |                    | EU site                        | EU site / BGW site       | EU site / BGW site    | EU site / BGW site      | EU site / BGW site                | EU site / BGW site            |
| SS7 Barracks            | EU site / BGW site | EU site                        | EU site / BGW site       | EU site / BGW site    | EU site / BGW site      | EU site / BGW site                | EU site / BGW site            |
| SS8 Piggeries           | EU site            | EU site                        | EU site                  | EU site / BGW site    | EU site                 | EU site / BGW site                | EU site / BGW site            |
| SS9 Tech Park           | EU site            | EU site                        | EU site                  | EU site / BGW site    | EU site                 | EU site / BGW site                | EU site / BGW site            |
| SS10 Rowner             |                    |                                | BGW site                 | BGW site              | BGW site                | BGW site                          | BGW site                      |
| SS11 Daedalus           |                    |                                | EU site                  | EU site               | EU site                 | EU site                           | EU site                       |
| A1 Fort Gilkicker       |                    | EU site                        | EU site / BGW site       | EU site / BGW site    | EU site / BGW site      | EU site / BGW site                | EU site / BGW site            |
| A1 QinetiQ              |                    |                                | BGW site                 | BGW site              | BGW site                | BGW site                          | EU site / BGW site            |
| A1.1b Fort              |                    |                                | BGW site                 | BGW site              | BGW site                | BGW site                          | EU site / BGW site            |
| A2.6a Stoners           |                    |                                |                          |                       |                         |                                   |                               |
| A2.6b Lapthorn          |                    |                                |                          |                       |                         |                                   |                               |
| A2.6c Prideaux          |                    |                                |                          |                       |                         |                                   | BGW site                      |
| A2.7a Woodside          |                    |                                |                          |                       |                         |                                   | EU site                       |
| A2.7b Brdgmy Rd         |                    |                                |                          |                       |                         |                                   |                               |



| Site ID<br>(Allocation) | Habitat Loss | Construction pollution      | Construction<br>Activity | Construction<br>Noise | Operational<br>Activity | Shortened Sight<br>Lines – Waders | Shortened Sight<br>Lines – BG |
|-------------------------|--------------|-----------------------------|--------------------------|-----------------------|-------------------------|-----------------------------------|-------------------------------|
| -                       | 0m           | Hydrological pathway or 50m | 100m                     | 300m                  | 100m                    | 200m                              | 500m                          |
| A2.6d Services          |              |                             |                          |                       |                         |                                   |                               |
| A2.7c Montgom           |              |                             |                          |                       |                         |                                   | BGW site                      |
| A2.2 Heritge Way        |              |                             |                          | EU site / BGW site    |                         | EU site / BGW site                | EU site / BGW site            |
| A2.6e Forton            |              |                             |                          |                       |                         |                                   |                               |
| A2.6f Wheeler           |              |                             |                          |                       |                         |                                   | EU site                       |
| A2.7d Grove             |              |                             |                          |                       |                         |                                   | EU site                       |
| A2.6g Whitworth         |              |                             |                          |                       |                         |                                   | BGW site                      |
| A2.3 Gasworks           |              | EU site                     | EU site                  | EU site / BGW site    | EU site                 | EU site / BGW site                | EU site / BGW site            |
| A3 AerodromeRd          | BGW site     | BGW site                    | BGW site                 | BGW site              | BGW site                | BGW site                          | BGW site                      |
| A6 Transport            |              |                             |                          |                       |                         |                                   |                               |
| H5 G&T Site             |              | EU site                     | EU site                  | EU site               | EU site                 | *                                 | *                             |

<sup>\*</sup> H5 Fareham Road is excluded from the above cells because the site is intended to provide accommodation for Gypsies, Travellers and Travelling Showpeople. This is very likely to be in the form of caravans or motorhomes which would be unlikely to trigger displacement effects due to shortened sight lines.



# 6 Summary

#### 6.1 Introduction

6.1.1 This document sets out a Habitats Regulations Screening Assessment for the Gosport Borough Local Plan 2038. The report accompanies the Regulation 18 Consultation Draft Local Plan and forms part of the evidence base upon which it is based.

# 6.2 Scope of the Assessment

- 6.2.1 Acknowledging that the Local Plan is not directly connected with or necessary to management of the sites for nature conservation, the HRA considers the following internationally designated sites for likely significant or adverse effects on integrity:
  - Solent & Isle of Wight Lagoons SAC
  - Chichester & Langstone Harbours SPA
  - Solent & Dorset Coast SPA
  - Chichester & Langstone Harbours Ramsar
  - Solent & Southampton Water Ramsar
- Solent Maritime SAC
- Portsmouth Harbour SPA
- Solent & Southampton Water SPA
- Portsmouth Harbour Ramsar

### 6.3 Summary of Findings

- 6.3.1 The following impact pathways are considered for likely significantly effects on the European sites:
  - Atmospheric pollution
  - Coastal squeeze
  - Recreational disturbance
  - Water abstraction
  - Water quality
  - Site specific impacts
- 6.3.2 No likely significant effects were identified in relation to atmospheric pollution, coastal squeeze or water abstraction for any of the SAC/SPA/Ramsar.
- 6.3.3 Likely significant effects were identified in relation to recreational disturbance impacts on Chichester and Langstone Harbours SPA/Ramsar, Portsmouth Harbour SPA/Ramsar, and Solent and Southampton Water SPA/Ramsar.



- 6.3.4 Likely significant effects were identified in relation to water quality impacts on Solent Maritime SAC, Chichester and Langstone Harbours SPA/Ramsar, Portsmouth Harbour SPA/Ramsar, and Solent and Southampton Water SPA/Ramsar.
- 6.3.5 Likely significant effects were identified in relation to site specific impacts on Portsmouth Harbour SPA/Ramsar, Solent and Dorset Coast SPA, Solent and Isle of Wight Lagoons SAC, and Solent and Southampton Water SPA/Ramsar.

# 6.4 Conclusions

6.4.1 The Gosport Borough Local Plan will now be taken forward for Appropriate Assessment in view of the sites' conservation objectives, taking account of mitigation, to determine whether there will be adverse effects on site integrity.



### References and Bibliography

APIS (2021): Air Pollution Information Systems <a href="http://www.apis.ac.uk/">http://www.apis.ac.uk/</a>

Amec Foster Wheeler (2018): *Integrated Water Management Study*. For Partnership for Urban South Hampshire, March 2018.

Biodiversity by Design (2008, for Crest Nicholson and SEEDA): Centenary Quay Woolston: Statement to Inform an Appropriate Assessment: Main Text And Assessment.

Bobbink, R., Boxman, .D, Fremstad, E., Hei, I.G., Houdijk, A. & Roelofs, J. (1993): *Nitrogen eutrophication and critical load for nitrogen based upon changes in flora and fauna in (semi)-natural terrestrial ecosystems*. In: Critical loads for nitrogen. Proceedings of a UN-ECE workshop at Lökeberg, Sweden.

British Standards Institution (2013): BS 42020:2013: Biodiversity – Code of practice for planning and development.

Chartered Institute of Ecology and Environmental Management (CIEEM; 2018): Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. CIEEM, Winchester.

Department for Environment, Food and Rural Affairs (DEFRA; 2021): *Habitats Regulations Assessments:* protecting a European site. Published 24 February 2021, and accessed online at: <a href="https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site">https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site</a>

European Commission (2000): Communication from the Commission on the Precautionary Principle.

European Commission (2018): Managing Natura 2000 Sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC.

European Council (1992): Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora.

European Council (2009): Council Directive 2009/147/EC on the conservation of wild birds.

Fearnley, H., Clarke, R. T. & Liley, D. (2010): The Solent Disturbance & Mitigation Project. Phase II - On-site visitor survey results from the Solent region. ©Solent Forum / Footprint Ecology.

Fearnley, H., Clarke, R.T. & Liley, D. (2011): The Solent Disturbance and Mitigation Project. Phase II – results of the Solent household survey. ©Solent Forum / Footprint Ecology.

Lake, S., Liley, D. & Saunders, P. (2020): Recreation use in the New Forest SAC/SPA/Ramsar: Impacts of recreation and potential mitigation approaches. Unpublished report by Footprint Ecology.

Langston, R., Liley, D., Murison, G., & Clarke, R.T. (2007): What effects do walkers and dogs have on the distribution and productivity of breeding European Nightjar Caprimulgus europaeus? Ibis 149(s1):27 - 36



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

Liley, D. & Sutherland, W.J. (2007): Predicting the population consequences of human disturbance for Ringed Plovers *Charadrius hiaticula*: a game theory approach. *Ibis*, 149, pp.82-94.

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

Liley, D. & Tyldesley, D. (2013): Solent Disturbance and Mitigation Project: Phase III. Towards an Avoidance and Mitigation Strategy. Unpublished report. Footprint Ecology/David Tyldesley & Associates. Liley, D., Clarke., R.T., Panter, & Saunders, P. (2019). Recreation use of the New Forest SAC/SPA/Ramsar: Overview of visitor results and implications of housing change on visitor numbers. Unpublished report for Footprint Ecology

Liley, D. & Caals, Z. (2021). Discussion and analysis relating to the New Forest SAC/SPA/Ramsar and a zone of influence for recreation. Unpublished report by Footprint Ecology.

Mallord, J.W., Dolman, P.M., Brown, A.F. & Sutherland, W.J. (2007a): Linking recreational disturbance to population size in a ground-nesting passerine. *Journal of Applied Ecology* **44**: 185–195.

Mallord JW, Dolman PM, Brown AF and Sutherland WJ (2007b): Quantifying density dependence in a bird population using human disturbance. *Oecologia*, **153**, pp.49-56.

MHCLG (2019): Planning Practice Guidance: Appropriate Assessment – Guidance on the use of Habitats Regulations Assessment. Published 22 July 2019, and accessed online at: <a href="https://www.gov.uk/guidance/appropriate-assessment">https://www.gov.uk/guidance/appropriate-assessment</a>

Ministry of Housing, Communities and Local Government (2021): National Planning Policy Framework

Murison G (2002): The Impact of Human Disturbance on the Breeding Success of Nightjar Caprimulgus europaeus on Heathlands in South Dorset, England. English Nature Research Reports No. 483.

Murison, G., Bullock, J.M., Underhill-Day, J., Langston, R., Brown, A.F. & Sutherland, W.J. (2007): Habitat type determines the effects of disturbance on the breeding productivity of the Dartford Warbler *Sylvia undata*. *Ibis* 149 (Suppl. 1): pp.16 - 26.

Natural England (2018): Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations. Version: June 2018. Accessed online at: <a href="http://publications.naturalengland.org.uk/publication/4720542048845824">http://publications.naturalengland.org.uk/publication/4720542048845824</a>

Natural England (2020): Advice on achieving Nutrient Neutrality for new development in the Solent Region. Version 3 – March 2020.

Office of the Deputy Prime Minister (ODPM, 2005): Government Circular: Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System.

Portsmouth Water (2019): Final Water Resource Management Plan 2019, November 2019.



Ricardo (2018): Partnership for Urban South Hampshire: Air Quality Impact Study.

Ricardo (2020): Air Quality Habitats Regulations Assessment for the Fareham Borough Local Plan 2036

Rodwell J.S. (ed.) (1995): British Plant Communities.

Southern Water (2019a): Water Resources Management Plan 2020-70: Technical Overview, Securing a resilient future for water in the South East, Draft for Consultation 5 March to 28 May 2018.

Southern Water (2019b): Water Resources Management Plan 2019: Technical Overview, December 2019.

Stephen Jenkinson (2016): Mitigation options for influencing the behaviour of walkers with dogs in the Solent area. Overview of principles and options for the Solent Recreation Mitigation Partnership. Accessed online [11/03/2020] at <a href="https://solent.birdaware.org/media/27454/Mitigation-options-for-encouraging-responsible-dog-">https://solent.birdaware.org/media/27454/Mitigation-options-for-encouraging-responsible-dog-</a>

walking/pdf/Mitigation options for influencing the behaviour of walkers with dogs.pdf

Stillman, R.A., Cox, J., Liley, D., Ravenscroft, N., Sharp, J. & Wells, M. (2009): Solent Disturbance and Mitigation Project: Phase I Report. (Report to the Solent Forum).

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

Stroud, D.A., Bainbridge, I.P., Maddock, A., Anthony, S., Baker, H., Buxton, N., Chambers, D., Enlander, I., Hearn, R.D., Jennings, K.R, Mavor, R., Whitehead, S. & Wilson, J.D. - on behalf of the UK SPA & Ramsar Scientific Working Group (eds.) (2016): *The status of UK SPAs in the 2000s: the Third Network Review.* pp1,108. JNCC, Peterborough.

Systra (2020): Gosport Borough Local Plan – SRTM Modelling.

Tyldesley, D. & Chapman, C. (2013): *The Habitats Regulations Assessment Handbook*. April 2021 edition. DTA Publications Ltd.

United Nations Educational, Scientific and Cultural Organisation (UNESCO) (1971): Convention on Wetlands of International Importance especially as Waterfowl Habitat. (Ramsar (Iran), 2 February 1971, UN Treaty Series No. 14583).

Whitfield, D. (2019): Solent Waders and Brent Goose Strategy 2019 Interim Project Report: Year One. Hampshire and Isle of Wight Wildlife Trust. Curdridge.



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# **Appendix I: SPA Qualifying Species Counts**

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## 1 Special Area of Conservation Site Accounts and Feature Descriptions

1.1.1 This section sets out the site accounts and qualifying feature descriptions for each of the Special Areas of Conservation (SAC) considered within the HRA to supplement Table 3.1 of the main HRA Report. The information included in this appendix is taken from the Natural England Conservation Advice Package for each SAC, as indicated by the information source provided within Table 1.

**Table 1: SAC Site Accounts and Feature Descriptions** 

#### **SAC Name**

#### **Site Accounts and Feature Descriptions**

#### Solent Maritime SAC

#### Site Account:

The Solent Maritime SAC is a complex site encompassing a major estuarine system on the south coast of England. The Solent and its inlets are unique in Britain and Europe for their unusual tidal regime, including double tides and long periods of tidal stand at high and low tide. As a result, the Solent Maritime SAC is a unique suite of functionally linked estuaries and dynamic marine and estuarine habitats.

The site has the largest number of small estuaries in the tightest cluster anywhere in Great Britain, with examples of coastal plain estuaries (Yar, Medina, King's Quay Shore and Hamble) and bar-built estuaries (Newtown Harbour, Beaulieu, Langstone Harbour, Chichester Harbour). It is located in one of the only major sheltered channels in Europe, lying between a substantial island (the Isle of Wight) and the mainland.

Sediment habitats within the site include extensive areas of intertidal mudflats and sandflats, often supporting eelgrass (*Zostera* species), subtidal sandbanks, saltmarsh and natural shoreline transitions such as drift line vegetation. The Solent Maritime SAC is of particular interest as it is the only site to support all four species of cordgrass (*Spartina*) found in the UK, including the rare native small cordgrass (*Spartina* maritima).

The Solent Maritime SAC also includes a number of coastal lagoons, sand dunes at East Head and at the time of designation supported a population of the rare Desmoulin's whorl snail (*Vertigo moulinsiana*).

#### <u>Annual vegetation of drift lines</u>

The Solent Maritime SAC supports a significant area of vegetated drift lines (also known as strandline habitat or vegetated shingle). This is



#### **Site Accounts and Feature Descriptions**

a rare habitat as its total extent in the UK is estimated to be less than 100 hectares (Joint Nature Conservation Committee (JNCC), 2011).

Annual vegetation of drift lines habitat in the Solent can be found on shingle beaches, shingle spits, shingle islands and chenier banks (formed by the deposition of broken shells on saltmarsh) (English Nature, 2001). It plays an important role in the transition between intertidal and terrestrial habitats (English Nature (EN), 2005). The best examples of shingle beach vegetation can be found at Beaulieu, along the south coast of Hayling Island and at Thorness Bay on the Isle of Wight. Shingle spit drift line vegetation frequently shows transitions to saltmarsh in the lee of the spit as occurs at Hurst and Calshot spits. Vegetated shingle islands are present at the mouth of the Beaulieu River (Gull Island) and in the eastern harbours (Pilsey Island in Chichester Harbour and the RSPB islands in Langstone Harbour). Chenier banks with drift line vegetation can be found at Hythe Marshes in Southampton Water and at Lymington and Keyhaven Marshes (English Nature, 2001), (King et al., 2014).

Two important drift line communities are present in the Solent Maritime SAC. The first is dominated by spear-leaved orache (*Atriplex prostrata*) or grass-leaved orache (*Atriplex littoralis*) on the seaward side of the shingle. The second is a community dominated by sea sandwort (*Honkenya peploides*) and sea rocket (*Cakile maritima*) with associated perennial plants (English Nature (EN), 2005), (English Nature, 2001).

#### Atlantic salt meadows (Glauco-Puccinellietalia maritimae)

Saltmarsh is an important habitat within the Solent ecosystem. It includes Atlantic salt meadows which comprise the following saltmarsh zones: low marsh, low-mid marsh, mid-upper marsh and upper marsh and transitions. The Solent Maritime SAC contains the second largest aggregation of Atlantic salt meadows in south and south western England, representing 33% of the marsh in this region, and almost 3% of England's total saltmarsh resource (English Nature (EN), 2005), (English Nature, 2001).

Typical Atlantic salt meadow habitat is declining in extent, although still widespread in the Solent despite a long history of colonisation by common cordgrass (*Spartina anglica*) (McLeod et al., 2008). The Atlantic salt meadows of the Solent are notable as being representative of the ungrazed type and subsequently support a range of communities dominated by sea purslane (*Halimione portulacoides*), common sea lavender (*Limonium vulgare*) and sea thrift (*Armeria maritima*), as well as common saltmarsh grass (*Puccinellia maritima*) (English Nature (EN), 2005).

The Atlantic salt meadows in the Solent show rare and unusual transitions to freshwater reedbeds and woodlands as well as coastal grassland (English Nature (EN), 2005). Particularly good examples of these transitions are found in Chichester Harbour, the Hamble Estuary, the Beaulieu Estuary, Yar Estuary, Newtown Harbour, Medina Estuary and at Kings Quay Shore (English Nature, 2001).

Atlantic salt meadow habitat in the Solent provides an important habitat for invertebrate species as well as valuable roosting and feeding areas for internationally important populations of birds (English Nature, 2001).



#### **Site Accounts and Feature Descriptions**

#### Coastal lagoons

The Solent Maritime SAC includes two coastal lagoons on the Isle of Wight, namely Newtown Quay Lagoon and Yar Bridge Lagoon (English Nature (EN), 2005), (Bamber et al., 2014). Coastal lagoons are a priority habitat of European importance (McLeod et al., 2008).

Both lagoons in the Solent Maritime SAC are sluiced lagoons, with water flow controlled via culverts and pipes or sluices (Bamber et al., 2014). They support a number of 'lagoon specialist species', which are able to tolerate the stressful environment and are almost entirely restricted to lagoons. Notable species present in these lagoons include the nationally rare lagoon sand shrimp (Gammarus insensibilis) and the starlet sea anemone (Nematostella vectensis). Other lagoon specialists present in these lagoons include the spire snail (Ventrosia ventrosa), isopod crustaceans (Idotea chelipes) and amphipod crustaceans (Monocorophium insidiosum) (Bamber et al., 2014), (Bamber and Robbins, 2010).

Coastal lagoon species have very critical habitat tolerances and are highly vulnerable to changes in hydrological regime, salinity, and sediment disturbance (Joint Nature Conservation Committee (JNCC), 2013).

#### Desmoulin's whorl snail (Vertigo moulinsiana)

When the Solent Maritime SAC was designated in 2005 the site supported a small population of the rare Desmoulin's whorl snail (*Vertigo moulinsiana*) in the freshwater fen and brackish reedbeds at the top of Fishbourne Channel in Chichester Harbour (English Nature (EN), 2005). This is the only recorded site for Desmoulin's whorl snail within the Solent Maritime SAC and the species was last recorded here in 2005 (Willing, 2006), (Willing, 2010). No individuals were found during surveys in 2009 and 2010 (Willing, 2010).

The population in Fishbourne Channel is likely to have been a small relict population that was originally more widespread prior to development of housing and infrastructure in the area. There are no connections to other populations (Willing, 2015 Pers Comm).

#### **Estuaries**

The Solent Maritime SAC encompasses a major estuarine system on the south coast of England with examples of several different types of estuary. It is the only SAC within the UK to contain more than one physiographic estuary type, comprising four bar-built estuaries (Newtown Harbour, Beaulieu Estuary, Langstone Harbour and Chichester Harbour) and four coastal plain estuaries (Yar, Medina, Kings Quay Shore and the Hamble) (English Nature (EN), 2005). As such, the Solent Maritime SAC is considered one of the best areas in the UK for the estuaries feature (Joint Nature Conservation Committee (JNCC), 2011).

The Solent estuaries are unique in Britain and Europe for their hydrographic regime of double tides and for the complexity of the marine



#### **Site Accounts and Feature Descriptions**

and estuarine habitats present within the area (English Nature (EN), 2005). Habitats present within the Solent estuaries include intertidal mudflats and sandflats, seagrass beds, shallow subtidal sandbanks and saltmarsh (English Nature, 2001). Rare and unusual transitions to terrestrial and freshwater habitats such as reedbed, fen, woodland, coastal grassland, sand dunes and shingle vegetation are also present (English Nature, 2001), (English Nature (EN), 2005). The estuarine habitats in the Solent are very sheltered and much of the area bordering the site is developed for urban and industrial use (English Nature, 2001).

Historically, the subtidal and intertidal sediments of the Solent estuaries supported natural beds of native oyster (*Ostrea edulis*) (Key and Davidson, 1981). This species has declined in the Solent in recent years and is now rare in the UK (Southern Inshore Fisheries and Conservation Authority (SIFCA), 2014), (Natural England (NE), 2014), (Jackson and Wilding, 2009). The estuaries of the Solent provide shallow coastal water habitats which act as nursery areas for small fish including herring, sprat, sand goby, bass and flounder (English Nature, 2001). These shallow coastal waters are also important foraging areas for seabirds including common tern (*Sterna hirundo*), Sandwich tern (*Sterna sandvicensis*) and little tern (*Sterna albifrons*) (Wilson et al., 2012), (Lawson and Parsons, 2012). Harbour seals (*Phoca vitulina*) and migratory fish, such as Atlantic salmon (*Salmo salar*), sea trout (*Salmo trutta*) and eels (*Anguilla* species), also use the estuaries (English Nature, 2001).

#### Intertidal coarse sediment

Intertidal coarse sediment has a limited extent in the Solent Maritime SAC with only 18 hectares present (Natural England, 2010), (Centre for Marine and Coastal Studies Ltd. (CMACS), 2012), (Joyce et al., 2009), (Cope and Wilkinson, 2014). Barren littoral shingle (A2.111) is the most common biotope present within this habitat type (Centre for Marine and Coastal Studies Ltd. (CMACS), 2012), (ERT Ltd Marine Environmental Consultants, 2005). Intertidal coarse sediments are found in the most exposed regions of the Solent including areas of open coast as well as at harbour and estuary mouths (ERT Ltd Marine Environmental Consultants, 2005). This habitat type generally has low species diversity due to the high mobility of the sediments. However, animals do live here and they are specially adapted to survive in the spaces between the shingle and gravel. This habitat is often dominated by shrimp-like amphipod crustaceans (Joint Nature Conservation Committee (JNCC), 2014).

#### Intertidal mixed sediments

Intertidal mixed sediments within the Solent Maritime SAC comprise 377 hectares (ERT Ltd Marine Environmental Consultants, 2005), (Ball et al., 2000), (Natural England, 2010), (Unknown, 2010), (Joyce et al., 2009), (Joyce et al., 2009), (Cope and Wilkinson, 2014). Muddy sediments mixed with assorted pebbles and cobbles occur at a number of locations throughout the site, including in Langstone Harbour, Chichester Harbour, Southampton Water, along the north coast of the Isle of Wight, the west Hampshire coast and the Hamble Estuary



#### **Site Accounts and Feature Descriptions**

(Centre for Marine and Coastal Studies Ltd. (CMACS), 2012).

This habitat supports a mixture of mud dwelling worms and bivalves as well as encrusting organisms such as barnacles, periwinkle snails (littorinids), sponges and seaweed communities, the latter attached to the larger and more stable rocks (Centre for Marine and Coastal Studies Ltd. (CMACS), 2012). Aggregations of blue mussel (*Mytilus edulis*) and the slipper limpet (*Crepidula fornicata*), often themselves supporting encrusting communities, may also be found attached to cobbles and pebbles (English Nature, 2001), (Centre for Marine and Coastal Studies Ltd. (CMACS), 2012). The slipper limpet, although extremely widespread in the Solent, is a non-native species and has altered the nature of a range of sediments by producing a dense layer of dead and living shells.

The range of communities supported by intertidal mixed sediments provides important feeding habitat for fish at high tide as well as feeding and roosting areas for birds at low tide (English Nature, 2001).

#### Intertidal mud

Intertidal mud is a particularly important habitat within the Solent Maritime SAC and the extent of this sub-feature within the site is over 3,000 hectares (Ball et al., 2000), (Natural England, 2010), (Natural England, 2010), (English Nature, 2003), (Unknown, 2010), (Joyce et al., 2009), (Joyce et al., 2009). Intertidal mud is a priority habitat of conservation importance in its own right as well as providing vital feeding habitat for the internationally important populations of birds that winter in the Solent (Joint Nature Conservation Committee (JNCC), 2015), (English Nature, 2001).

Intertidal mudflats cover extensive areas of the Solent and are found seaward of saltmarsh and within saltmarsh creeks in all of the estuaries of the Solent. Intertidal mud is most extensive throughout Chichester and Langstone Harbours, the Hamble Estuary, Southampton Water, the Beaulieu Estuary, Lymington Estuary, Newtown Harbour and the Medina Estuary (Centre for Marine and Coastal Studies Ltd. (CMACS), 2012).

Intertidal mudflats support highly abundant communities of worms, such as lugworm (Arenicola marina), and crustaceans such as sand hoppers (Corophium volutator). The mud snail (Peringia ulvae) and the green algae sea lettuce (Ulva species) are also abundant within this sub-feature. These marine animals and plants are important food species for a diverse range and large number of fish and benthic predators (English Nature, 2001).

#### Intertidal sand and muddy sand

The extent of intertidal sand and muddy sand in the Solent Maritime SAC is over 900 hectares (Ball et al., 2000), (Natural England, 2010), (ERT Ltd Marine Environmental Consultants, 2005), (Unknown, 2010), (Joyce et al., 2009), (Joyce et al., 2009), (Cope and Wilkinson, 2014). This habitat type can be found around Thorney Island in Chichester Harbour, in Langstone Harbour, at Calshot spit, Lepe Beach, Thorness



#### **Site Accounts and Feature Descriptions**

Bay and Newtown Harbour (Centre for Marine and Coastal Studies Ltd. (CMACS), 2012).

Significant areas of sandflats support high numbers of worms such as lugworm (Arenicola marina), bivalve molluscs such as the common cockle (Cerastoderma edule) and crustaceans such as amphipod species, making these areas important for over-wintering waders. In addition to their infaunal communities, intertidal sand and muddy sandflats support important communities of the sub-feature intertidal seagrass beds (A2.61) (English Nature, 2001), (Marsden and Chesworth, 2015). Both the infaunal and seagrass bed communities of sandflats provide a valuable food resource for a range of birds and fish. Waterfowl also use sandflats for roosting and resting at low to mid tide (English Nature, 2001).

#### Intertidal seagrass beds

There are over 200 hectares of intertidal seagrass beds in the Solent Maritime SAC (Marsden and Chesworth, 2014), (Marsden and Chesworth, 2015), (Hamshire & Isle of Wight Wildlife Trust, 2013), (Isle of Wight County Council, 2004). The largest beds are found in Langstone and Chichester Harbours and along the north coast of the Isle of Wight (Marsden and Chesworth, 2015), (Centre for Marine and Coastal Studies Ltd. (CMACS), 2012), (ERT Ltd Marine Environmental Consultants, 2005).

Three species of seagrass have been recorded in intertidal areas of the Solent Maritime SAC: dwarf eelgrass (*Zostera noltii*), common eelgrass (*Zostera marina*) and beaked tasselweed (*Ruppia maritima*) (Marsden and Chesworth, 2015), (Hampshire & Isle of Wight Wildlife Trust, 2014). Seagrass beds are nationally rare and a priority habitat of conservation importance in their own right as well as providing an important feeding resource for overwintering waterfowl, a spawning, nursery and refuge areas for fish (Joint Nature Conservation Committee (JNCC), 2015).

#### Salicornia and other annuals colonising mud and sand

Prior to designation in 2005, the Solent Maritime SAC supported approximately 90 hectares of pioneer saltmarsh habitat, comprising glasswort (*Salicornia* species) and annual sea-blite (*Suaeda maritima*) (Burd, 1989).

Pioneer saltmarsh vegetation colonises intertidal mudflat and sandflats in areas protected from strong wave action (English Nature (EN), 2005). The distribution of pioneer saltmarsh vegetation within the Solent Maritime SAC is concentrated in two main characteristic areas or zones. The first is of greater extent and is along the lower reaches of the saltmarsh (seaward of the Atlantic salt meadow saltmarsh zone) where it is frequently inundated by the tide. The second is in small depressions or saltpans in the upper and middle (Atlantic salt meadow) saltmarsh or in narrow strips running along the margins of creeks within the saltmarsh (English Nature (EN), 2005).

Sizeable areas of glasswort and annual sea-blite communities are present in Lymington and Keyhaven Marshes, the Beaulieu Estuary and the eastern areas of Chichester Harbour and Newtown Harbour. Pioneer saltmarsh vegetation also occurs in Hythe to Calshot Marshes, the



#### **Site Accounts and Feature Descriptions**

River Hamble, Langstone Harbour, River Yar, Medina Estuary and King's Quay Shore on the Isle of Wight (English Nature, 2001). Pioneer saltmarsh provides an important feeding area and a food source for many species of waterfowl (English Nature, 2001).

#### Spartina swards (Spartinion maritimae)

The Solent Maritime SAC is the only site in the UK where smooth cordgrass (*Spartina alterniflora*) is present. It is also one of only two sites where native small cordgrass (*Spartina maritima*) and Townsend's cordgrass (*Spartina townsendii*) are found. There are also extensive areas of common cordgrass (*Spartina anglica*) and, thus, all four Spartina species occur here in close proximity (English Nature (EN), 2005). The Solent Maritime SAC has additional historical and scientific interest as the site where smooth cordgrass was first recorded in the UK (in 1829) and where Townsend's cordgrass and, later, common cordgrass first occurred (Joint Nature Conservation Committee (JNCC), 2014). Small cordgrass has a restricted distribution within the Solent Maritime SAC with the most extensive stand at Newtown Harbour on the Isle of Wight. Individual plants of small cordgrass have also been recorded at Northney Marsh on Hayling Island (Ager et al., 1999). Smooth cordgrass occurs only at Bury Marsh, Marchwood and Townsend's cordgrass is present at Hythe Marsh in Southampton Water (Gray et al., 1999), (Garbutt et al., 2015). Common cordgrass is wide spread across the Solent (English Nature, 2001, Environment Agency, 2014).

Cordgrass species are an important precursor to saltmarsh development where sediments are accreting as they colonise a wide range of substrates in areas sheltered from strong wave action (English Nature, 2001).

#### Perennial vegetation of stony banks

The Solent Maritime SAC supports a significant area of perennial vegetation of stony banks (Joint Nature Conservation Committee (JNCC), 2011) and, collectively with the Annual Vegetation of Drift Lines feature, is commonly referred to as vegetated shingle. Perennial vegetation develops on more stable (typically landward) shingle or stony substrates than the annual vegetation of drift lines habitat. The largest areas of perennial shingle vegetation in the Solent Maritime SAC occur at Calshot Spit and in Chichester Harbour (English Nature (EN), 2005), (King et al., 2014).

There are several distinct perennial shingle community types present within the Solent Maritime SAC but most common is the curled dock (*Rumex crispus*) and yellow-horned poppy (*Glaucium flavum*) community or an associated transition or variation (King et al., 2014). A specialised community also occurs within the site which is characterised by hare's-foot clover (*Trifolium arvense*) occurring with lichens and mosses (English Nature (EN), 2005).

As well as having a significant extent of perennial shingle habitat, the Solent Maritime SAC also supports a number of plant species that are uncommon or rare in England. These include the endemic little robin (*Geranium purpureum ssp forsteri*), sea knotgrass (*Polygonum* 



#### **Site Accounts and Feature Descriptions**

maritimum), marsh mallow (Althaea officinalis) and sea heath (Frankenia laevis) (King et al., 2014).

#### Sandbanks which are slightly covered by sea water all the time

Shallow sediment communities occur around the Solent Maritime SAC and include subtidal seagrass beds (*Zostera marina*), which is a UK habitat of principal importance (English Nature (EN), 2005), (English Nature, 2001), (Joint Nature Conservation Committee (JNCC), 2015).

These subtidal sediments typically occur at depths of less than 20 metres below chart datum (Joint Nature Conservation Committee (JNCC), 2013). Subtidal mud and sand is generally found in the estuaries including the Hamble, Medina, Yar and Beaulieu, whilst subtidal sand and gravel is more predominant along the open coast, particularly along the north coast of the Isle of Wight (English Nature, 2001). Extensive subtidal seagrass beds are found along the north coast of the Isle of Wight and in Stanswood Bay near Lepe (English Nature, 2001), (Goodchild and Brutto, 2015), (Marsden and Chesworth, 2015).

The subtidal sediments of the Solent are characterised by burrowing worms, crustaceans, bivalve molluscs and echinoderms such as brittle stars and sea urchins. The subtidal sediments in the Solent also include substantial populations of the non-native slipper limpet (*Crepidula fornicata*). Mobile fauna present on the surface of the sediments includes shrimps, crabs and fish (English Nature, 2001), (Goodchild and Brutto, 2015). The shallow subtidal sediments of the Solent are important nursery areas for fish and feeding areas for seabirds, including common tern (*Sterna hirundo*), Sandwich tern (*Sterna sandvicensis*) and little tern (*Sterna albifrons*) (English Nature (EN), 2005), (Wilson et al., 2012), (Lawson and Parsons, 2012).

#### Subtidal coarse sediment

Subtidal coarse sediments, comprising gravel and shingle, are limited in extent in the Solent Maritime SAC with only about 60 hectares present (European Marine Observation and Data Network (EMODnet), 2012), (Emu Limited, 2007), (Cope and Wilkinson, 2014). This habitat type is found primarily along the open coast of the north-west Isle of Wight and in tide swept channels such as the estuary mouths of Langstone and Chichester Harbours (Emu Limited, 2007).

In the shallow waters of the Solent, the presence of gravel and cobble provides a substrate for the attachment of various algal species, sponges, bryozoans, hydroids and polychaetes. Characteristic species found in the Solent include the slipper limpet (*Crepidula fornicata*), the keel worm (*Pomatoceros triqueter*), the baked bean seasquirt (*Dendrodoa grossularia*), sponges such as mermaid's glove (*Haliclona oculata*), the acorn barnacle (*Balanus crenatus*), bryozoans and hydroids (Emu Limited, 2007).

The gravelly sandbanks and ridges in the Solent are naturally important for the influence they make on the local hydrodynamics and in certain areas they can act as natural coastal defences (Cope et al., 2008), (Emu Limited, 2007).



#### **Site Accounts and Feature Descriptions**

#### Subtidal mixed sediments

Subtidal mixed sediments are the most common subtidal sediment habitat type in the Solent Maritime SAC, comprising 2,619 hectares (European Marine Observation and Data Network (EMODnet), 2012), (Emu Limited, 2007), (Marine Ecological Surveys Limited (MESL), 2015), (Cope and Wilkinson, 2014). Mixed sediments are widespread in the subtidal channels of the harbours and estuaries as well as along the open coast of west Hampshire outside the Beaulieu Estuary and along north coast of the Isle of Wight (Emu Limited, 2007).

Many of the subtidal mixed sediments in the Solent are dominated by the invasive non-native slipper limpet (*Crepidula fornicata*). This species is so abundant that in some areas it is changing finer sediments into mixed sediment due to the number of shells from dead slipper limpets (Emu Limited, 2007), (Goodchild and Brutto, 2015). Other characteristic species present in this habitat include bristleworm (*Aphelochaeta marioni*), bivalves (such as *Nucula* species), peacock worms (*Sabella pavonina*), sand mason worms (*Lanice conchilega*), sponges, ascidians, anemones and red algae. At some locations, for example along the north coast of the Isle of Wight and inside Chichester Harbour, native oyster (*Ostrea edulis*) can also be found in the mixed sediments (Emu Limited, 2007), (Marine Ecological Surveys Limited (MESL), 2015).

#### Subtidal sand

Subtidal sand is the second most common subtidal sediment habitat type in the Solent Maritime SAC comprising 890 hectares (European Marine Observation and Data Network (EMODnet), 2012), (Emu Limited, 2007), (Marine Ecological Surveys Limited (MESL), 2015), (Cope and Wilkinson, 2014). Subtidal sand and can be found at the mouth of Langstone Harbour, Chichester Harbour and the Medina Estuary as well as off the north coast of the Isle of Wight, at Thorness Bay, the Gurnard Ledges just past Egypt Point and in Osborne Bay (Emu Limited, 2007), (English Nature, 2001). Subtidal sands have accumulated as distinct sandbanks on either side of the approaches to Chichester and Langstone Harbours off Hayling Island and at East Pole Sands outside Chichester Harbour (Emu Limited, 2007).

The subtidal sand is inhabited by worms such as catworm (Nephtys cirrosa) and bristleworm (Scoloplos armiger), amphipod crustaceans and bivalve molluscs such as the white furrow shell (Abra alba). Mobile species found include queen scallops (Aequipecten opercularis), common whelk (Buccinum undatum), as well as crustaceans including the long clawed Porcelain crab (Pisdia longicornis), the hermit crab (Pagurus bernhardus) and the spider crab (Macropodia species) (Emu Limited, 2007).

#### Subtidal seagrass beds

There are approximately over 117 hectares of subtidal seagrass beds in the Solent Maritime SAC (Marsden and Chesworth, 2014), (Marsden and Chesworth, 2015), (Hamshire & Isle of Wight Wildlife Trust, 2013), (Emu Limited, 2007). Seagrass beds are nationally rare and



#### **Site Accounts and Feature Descriptions**

a priority habitat of conservation importance in their own right as well as providing important spawning, nursery and refuge areas for fish (Joint Nature Conservation Committee (JNCC), 2015).

The largest subtidal seagrass beds in the Solent Maritime SAC are found in Stanswood Bay near Lepe and on the north coast of the Isle of Wight in Osborne Bay, Wootton Bay, Bouldnor / Thorness Bay and at Yarmouth (Marsden and Chesworth, 2015). The subtidal seagrass beds are comprised of common eelgrass (*Zostera marina*).

Common eelgrass can colonise a variety of sediments but is usually found on clean sand and muddy sands, sometimes mixed with flint gravel, in sheltered shallow waters (Joint Nature Conservation Committee (JNCC), 2015). The beds are often associated with polychaete worms, the sand mason worm (*Lanice conchilega*), bivalves such as the common cockle (*Cerastoderma edule*), anemones, crabs, snails and seaweeds such as kelp (*Laminaria saccharina*) and sea lace (*Chorda filum*). All of these species are present at most locations in the Solent Maritime SAC where subtidal seagrass has been recorded (Emu Limited, 2007).

#### Shifting dunes along the shoreline with Ammophila arenaria ("White dunes")

The Solent Maritime SAC includes sand dune habitats at East Head and Pilsey Island in Chichester Harbour and at Norton Spit to the west of the Yar Estuary on the Isle of Wight (English Nature (EN), 2005), (King et al., 2014), (Radley, 1994).

The sand dunes are dominated by marram grass (*Ammophila arenaria*) (English Nature (EN), 2005), (Natural England (NE), 2015), (King et al., 2014). Sand couch grass (*Elytrigia juncea*) and sea holly (*Eryngium maritimum*) are also present interspersed with variable amounts of mobile, bare sand (Natural England (NE), 2015), (King et al., 2014). The mobile sand dune habitats typically transition to strandline shingle vegetation to the seaward side and to fixed dune or dune slack habitat on the landward side (Natural England (NE), 2015), (King et al., 2014).

Info Source: Natural England Conservation Advice Package for Solent Maritime SAC (Marine site detail (naturalengland.org.uk)) (Accessed 23/06/2021)

#### Solent and Isle of Wight Lagoons SAC

#### Site Account:

The Solent and Isle of Wight Lagoons SAC encompasses a series of coastal lagoons, including percolation, isolated and sluiced lagoons. The site includes eight lagoons in the marshes in the Keyhaven to Lymington area, one lagoon at Farlington Marshes in Langstone Harbour, four lagoons located behind the sea-wall at Bembridge Harbour and one lagoon at Gilkicker, near Gosport. Each lagoon has its own unique conditions with salinities varying from brackish to hypersaline and substrates ranging from soft mud to muddy sand with a high proportion of shingle. These sheltered conditions support a diverse fauna including large populations of three notable species: the



#### **Site Accounts and Feature Descriptions**

nationally rare foxtail stonewort (*Lamprothamnium papulosum*), the nationally rare lagoon sand shrimp (*Gammarus insensibilis*) and the nationally scarce starlet sea anemone (*Nematostella vectensis*).

#### Coastal lagoons

The Solent and Isle of Wight Lagoons SAC includes fourteen coastal lagoons, eight in the marshes in the Keyhaven to Lymington area, one in Langstone Harbour and one at Gilkicker all in Hampshire and four at Bembridge on the Isle of Wight (English Nature (EN), 2005), (Bamber et al., 2014). Coastal lagoons are a priority habitat of European importance (McLeod et al., 2008).

The lagoons in the marshes within Keyhaven to Lymington area are part of a network of ditches and ponds within the saltmarsh behind a sea-wall running along the northern shore-line of the western Solent. The lagoons receive sea water by groundwater percolation, and freshwater by rainfall and by marshland streams. The sea wall sluices function solely to allow egress of water from the lagoons.

Shut Lake on Farlington Marshes is an isolated lagoon in marsh pasture that, although separated from the sea by a sea-wall, receives some sea water during spring tides. However the salinity at Shut Lake remains too low to support a saline lagoon of any significant conservation merit.

Gilkicker Lagoon is a sluiced lagoon formed of two interconnected basins with marked seasonal salinity fluctuation and supports a high species diversity.

The lagoons at Bembridge Harbour have formed in a depression behind the sea-wall and sea water enters by percolation and by manmade culverts. Species diversity in these lagoons is high and fauna includes very high densities of the nationally scarce starlet sea anemone (Nematostella vectensis).

The lagoons within Solent and Isle of Wight lagoons SAC support a number of 'lagoon specialist species', which are able to tolerate the stressful environment and are almost entirely restricted to lagoons. Notable species present in these lagoons include the nationally rare lagoon sand shrimp (*Gammarus insensibilis*) and the starlet sea anemone (*N. vectensis*). Other lagoon specialists present in these lagoons include the spire snail (*Ventrosia ventrosa*), isopod crustaceans (*Idotea chelipes*) and amphipod crustaceans (*Monocorophium insidiosum*) (Bamber et al., 2014), (Bamber and Robbins, 2010).

Coastal lagoon species have very critical habitat tolerances and are highly vulnerable to changes in hydrological regime, salinity, and sediment disturbance (Joint Nature Conservation Committee (JNCC), 2013).

Info Source: Natural England Conservation Advice Package for Solent Maritime SAC (Marine site detail (naturalengland.org.uk)) (Accessed 23/06/2021)



# 2 Special Protection Area and Ramsar Site Accounts and Qualifying Species Counts

2.1.1 This section sets out the site accounts and qualifying species counts for each of the Special Protection Areas (SPA) and Ramsar sites considered within the HRA to supplement Table 3.2 and Table 3.3 of the main HRA Report. SPA species count data included in this appendix is taken from the Citation document for each SPA, available on the Natural England European sites website<sup>1</sup>. The Citation document represents the legal basis for the designation of a site. Where the information in the Citation document is incomplete or unavailable, figures are sourced from the relevant JNCC Nature 2000 data form as indicated by the information source provided within Table 2. Ramsar species count data are taken from the Ramsar Information Sheets published on the JNCC website.

Table 2: SPA and Ramsar SAC Site Accounts and Feature Descriptions

### **SPA/Ramsar Name** Site Accounts and Feature Descriptions

# Chichester & Langstone Harbours

#### Site Account

Chichester and Langstone Harbours SPA 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. These habitats support internationally and nationally important numbers of overwintering and breeding bird species.

At low tide the mudflats are exposed, the water is drained by channels and creeks which meet to form narrow exits into the Solent. The sediments support rich populations of intertidal invertebrates, which provide an important food source for overwintering birds. Several small freshwater streams flow into the harbours; however, these contribute relatively little freshwater input compared to the tidal flows.

There are more than 300 ha of seagrass beds (Zostera noltii and Zostera marina) in the SPA which are an important food source for dark-

<sup>&</sup>lt;sup>1</sup> http://publications.naturalengland.org.uk/category/6528471664689152



#### **Site Accounts and Feature Descriptions**

bellied Brent geese (Marsden and Chesworth, 2014). Overwintering birds also feed and roost in the saltmarsh areas, which are dominated by cordgrass (Spartina) swards, as well as on coastal grazing marsh.

The shingle ridges and islands within the site provide important nesting habitat for three species of tern during the summer breeding season. Adult terns use the shallow coastal waters in the harbours and the wider Solent to forage for small fish to feed themselves and their chicks.

Areas outside the SPA contain important supporting habitats for the birds, including coastal grazing marsh, amenity grassland and agricultural land. Details of these can be found online, in particular via the Solent Wader and Brent Goose Strategy (Whitfield, 2020).

Chichester Harbour Conservancy manages the majority of Chichester Harbour whilst the Langstone Harbour Board manages Langstone Harbour. However, there are also numerous private ownerships of the intertidal area.

Info Source: Natural England Conservation Advice Package for Chichester and Langstone Harbours SPA (Marine site detail (naturalengland.org.uk)) (Accessed 23/06/2021)

#### Wild Birds Directive Article 4.1 Qualification: Annex I Species

- Common tern Sterna hirundo, 33 pairs representing 0.3% of the GB breeding population (5 year mean 1992-1996);
- Little Tern Sterna albifrons, 100 pairs representing 4.2% of the GB breeding population (5 year mean 1992-1996); and
- Sandwich Tern Sterna sandvicensis, 31 pairs representing 0.2% of the GB breeding population (5 year mean 1993-1997).

#### Wild Birds Directive Article 4.2 Qualification: Migratory Species not listed in Annex I

- Bar-tailed godwit *Limosa lapponica*, 1,692 individuals representing 3.2% of the GB population (5 year peak mean 1991/92-1995/96);
- Dark-bellied brent goose *Branta bernicla bernicla*, 17,119 individuals representing 5.7% of the Western Siberia/Western Europe population (5 year peak mean 1991/92-1995/96);
- Dunlin Calidris alpina alpina, 44,294 individuals representing 3.2% of the Northern Siberia/Europe/Western Africa population (5 year peak mean 1991/92-1995/96);
- Eurasian curlew *Numenius arquata*, 1,861 individuals representing 1.6% of the population in Great Britain (5 year peak mean 1991/92-1995/96);
- Grey plover *Pluvialis squatarola*, 3,825 individuals representing 2.3% of the Eastern Atlantic wintering population (5 year peak mean 1991/92-1995/96);
- Pintail Anas acuta, 330 individuals representing 1.2% of the population in Great Britain (5 year peak mean 1991/92-1995/96);



#### **Site Accounts and Feature Descriptions**

- Red-breasted merganser (*Mergus serrator*), 297 individuals representing 3% of the population in Great Britain (5 year peak mean 1991/92-1995/96)
- Redshank *Tringa totanus*, 1,788 individuals representing 1% of the Eastern Atlantic wintering population (5 year peak mean 1991/92-1995/96);
- Ringed plover *Charadrius hiaticula*, 846 individuals representing 3% of the population in Great Britain (5 year peak mean 1991/92-1995/96);
- Sanderling Calidris alba, 236 individuals representing 0.2% of the Eastern Atlantic/Western & Southern Africa wintering population (5 year peak mean 1991/92-1995/96);
- Shelduck *Tadorna tadorna*, 2,410 individuals representing 3.3% of the population in Great Britain (5 year peak mean 1991/92-1995/96);
- Shoveler Anas clypeata, 100 individuals representing 1% of the population in Great Britain (5 year peak mean 1991/92-1995/96);
- Teal *Anas crecca*, 1,824 individuals representing 0.5% of the North-western Europe population (5 year peak mean 1991/92-1995/96);
- Turnstone Arenaria interpres, 430 individuals representing 0.7% of the population in Great Britain (5 year peak mean 1991/92-1995/96); and
- Wigeon *Anas penelope*, 2,055 individuals representing 0.7% of the population in Great Britain (5 year peak mean 1991/92-1995-96).

#### Waterbird Assemblage

An internationally important assemblage of birds, over winter the area regularly supports 93,230 waterfowl (5 year peak mean 1991/92-1995/96).

Info Source: JNCC Natura 2000 Standard Data Form Chichester & Langstone Harbours SPA (https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9011011.pdf) (Accessed 11/03/20)

#### Ramsar Criteria

- Criterion 1: The site comprises of 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.
- Criterion 5: The site supports an internationally important assemblage of species; 76,480 waterfowl over winter (5 year peak mean 1998/99-2002/2003).



#### **Site Accounts and Feature Descriptions**

- Criterion 6: The site supports species or populations occurring at international levels of importance comprising the following species.

#### Breeding (identified subsequent to designation)

- Little Tern Sterna albifrons 130 apparently occupied nests, representing an average of 1.1% of the breeding population (Seabird 2000 Census)

#### On passage

- Ringed Plover *Charadrius hiaticula*, 853 individuals representing up to 1.1% of the wintering Europe/Northern Africa population (5 year peak mean 1998/9 2002/3)
- Black-tailed Godwit *Limosa limosa islandica* 906 individuals, representing an average of 2.5% of the Iceland/W. Europe population (5 year peak mean 1998/9 2002/3)
- Common Redshank *Tringa totanus totanus* 2,577 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)

#### Overwintering

- Dark-bellied Brent Goose *Branta bernicla bernicla* 12,987 individuals, representing an average of 6% of the population (5 year peak mean 1998/9-2002/3)
- Common Shelduck *Tadorna tadorna* 1,468 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1998/9-2002/3)
- Grey Plover *Pluvialis squatarola* 3,043 individuals, representing an average of 1.2% of the E Atlantic/W. Africa population (5 year peak mean 1998/9-2002/3)
- Dunlin *Calidris alpina 33,436* individuals, representing an average of 2.5% of the W Siberia/W Europe population (5 year peak mean 1998/9-2002/3)

Info Source: JNCC Ramsar Information Sheet

(https://jncc.gov.uk/jncc-assets/RIS/UK11013.pdf) (Accessed 23/06/2021)

#### Portsmouth Harbour

#### Site Account

Portsmouth Harbour is a large, industrialised estuary. Together with the adjacent Chichester and Langstone Harbours, it forms one of the most important sheltered intertidal areas on the south coast of England.

The harbour has been classified as a Special Protection Area (SPA) due to internationally and nationally important numbers of birds and



#### **Site Accounts and Feature Descriptions**

specifically protects the following features: dark-bellied Brent goose; red-breasted merganser; dunlin; and black-tailed godwit.

Portsmouth Harbour SPA is composed of extensive intertidal mudflats and sandflats with seagrass beds, areas of saltmarsh, shallow coastal waters, coastal lagoons and coastal grazing marsh.

At low tide the extensive mudflats are exposed, the water drained by channels and creeks uniting to form a narrow exit into the Solent. There is comparatively little freshwater input to Portsmouth Harbour. The largest input is the River Wallington, which flows into Fareham Creek in the north-west of Portsmouth Harbour. The estuarine sediments support rich populations of intertidal invertebrates, which provide an important food source for overwintering birds.

There are approximately 77 ha of seagrass beds in Portsmouth Harbour, which are found mainly in the north-west of the harbour. These beds include both *Zostera marina* (found on the low shore) and *Zostera noltii* (on the upper to mid shore). The seagrass beds are amongst the most extensive in Britain and are an important food source for dark-bellied Brent goose. The saltmarsh areas are mainly comprised of cordgrass (*Spartina*) swards and provide feeding and roosting areas for overwintering birds.

Areas outside the SPA contain important supporting habitats for the birds that use the site, including coastal grazing marsh and agricultural land. Details of these can be found online, in particular via the Solent Wader and Brent Goose Strategy (Whitfield, 2020).

Info Source: Natural England Conservation Advice Package for Portsmouth Harbour SPA (Marine site detail (naturalengland.org.uk)) (Accessed 23/06/2021)

#### Wild Birds Directive Article 4.2 Qualification: Migratory Species not listed in Annex I

- Dark-bellied brent goose *Branta bernicla bernicla*, 2,290 individuals representing 2.5% of the British wintering population (5 year peak mean 1986/87 to 1990/91);
- Red-breasted merganser *Mergus serrator*, 100 individuals representing 1% of the British wintering population (5 year peak mean 1986/87 to 1990/91);
- Black-tailed godwit *Limosa limosa islandica*, 70 individuals representing over 1% of the British wintering population (5 year peak mean 1986/87 to 1990/91); and
- Dunlin *Calidris alpina*, 8,010 individuals representing over 1% of the British wintering population (5 year peak mean 1986/87 to 1990/91).

Info Source: Natural England Citation Portsmouth Harbour SPA (Uploaded 20/09/2014)



#### **Site Accounts and Feature Descriptions**

(http://publications.naturalengland.org.uk/publication/4857883850178560?category=6528471664689152)

#### Ramsar Criteria

- Criterion 3: The site supports a species assemblage of importance to maintaining biogeographic biodiversity. The intertidal mudflat areas possess extensive beds of eelgrass Zostera angustifolia and Zostera noltei which support the grazing Dark-bellied Brent Goose populations. The mud-snail Hydrobia ulvae is found at extremely high densities, which helps to support the wading bird interest of the site. Common cord-grass Spartina anglica dominates large areas of the saltmarsh and there are also extensive areas of green algae Enteromorpha spp. and sea lettuce Ulva lactuca. More locally the saltmarsh is dominated by sea purslane Halimione portulacoides which gradates to more varied communities at the higher shore levels. The site also includes a number of saline lagoons hosting nationally important species.
- Criterion 6: The site supports the following overwintering species / populations occurring at international levels of importance:

#### Overwintering

- Dark-bellied Brent Goose *Branta bernicla 2*,105 individuals, representing an average of 2.1% of the GB population (5 year peak mean 1998/9-2002/3)

Info Source: JNCC Ramsar Information Sheet

(https://jncc.gov.uk/jncc-assets/RIS/UK11055.pdf) (Accessed 23/06/2021)

#### Solent & Dorset Coast

#### Site Account

The Solent and Dorset Coast SPA covers 88,980.55 ha and stretches from Worbarrow Bay in Dorset to Littlehampton in West Sussex incorporating most of the Hampshire and Isle of Wight coastline and adjacent offshore areas. The SPA overlaps and shares boundaries with many other designated sites within the Solent, Southampton Water, Portsmouth Harbour, Christchurch Harbour, Poole Bay and West Sussex. These areas support important breeding colonies of terns at existing SPAs which include Poole Harbour SPA, Solent & Southampton Water SPA, Chichester & Langstone Harbours SPA and Pagham Harbour SPA. (Natural England (NE), 2015).

The Solent and Dorset Coast SPA protects the surrounding waters of these sites as they are used by the terns for foraging and maintenance activities, such as bathing and preening. The SPA supports over 12% of UK's tern breeding population, specifically, 4.92% of the common tern (*Sterna hirundo*), 4.01% of sandwich tern (*Sterna sandvicensis*), and 3.31% of little tern (*Sternula albifrons*) populations (Natural England (NE), 2015).



#### **Site Accounts and Feature Descriptions**

Info Source: Natural England Conservation Advice Package for Solent and Dorset Coast SPA (Marine site detail (naturalengland.org.uk)) (Accessed 23/06/2021)

#### Wild Birds Directive Article 4.1 Qualification: Annex I Species

- Sandwich Tern Sterna sandvicensis (breeding), 441 pairs (2008-2014), representing 4.01% of the GB breeding population;
- Common Tern Sterna hirundo (breeding), 492 pairs (2009-2014), representing 4.77% of the GB breeding population; and
- Little Tern Sterna albifrons (breeding), 63 pairs (2009-2014), representing 3.31% of the GB breeding population.

Info Source: Natural England Citation Solent and Dorset Coast SPA (Uploaded 08/03/2021) (http://publications.naturalengland.org.uk/publication/5294923917033472.)

# Solent & Southampton Water

#### Site Account

The Solent and Southampton Water is located in one of the only major sheltered channels in Europe, lying between a substantial island (the Isle of Wight) and the mainland, on the south coast of England. It stretches from Hurst Spit to Hill Head across Hampshire, and on the north coast of the Isle of Wight from Yarmouth to Whitecliff Bay (Joint Nature Conservation Committee (JNCC), 2017).

This area is a complex major estuarine system consisting of coastal plain estuaries including the Yar, Medina, King's Quay Shore, and the Hamble. Bar-built estuaries including Newtown Harbour and Beaulieu also occupy the Special Protection Area (SPA). The Solent and its inlets are unique in Britain and Europe for their unusual tidal regime, including double tides and long periods of tidal stand at high and low tide (English Nature (EN), 2005).

The Solent and Southampton Water is composed of extensive intertidal mudflats and sandbanks, inter- and subtidal rock, areas of saltmarsh, coastal lagoons, coastal reed beds, shingle banks, and grazing marsh.

Estuarine sediments within the site support rich populations of invertebrates that provide an important food source for wintering birds. The Solent as a whole exceeds 90,000 waders annually and the mudflats, coastal lagoons, shingle and saltmarsh provide vital feeding and roosting grounds for these. The shingle banks also provide important breeding grounds for terns. The Solent also supports 10-13% of world's population of dark-bellied Brent geese, and 30% of the UK population (Stillman et al., 2009). Besides using the mudflats and grazing marshes to feed, they also rely on farmland with cereals and pasture, and amenity grasslands outside the SPA boundary (Whitfield, 2020).



#### **Site Accounts and Feature Descriptions**

Info Source: Natural England Conservation Advice Package for Solent and Southampton Water SPA (Marine site detail (naturalengland.org.uk)) (Accessed 23/06/2021)

#### Wild Birds Directive Article 4.1 Qualification: Annex I Species:

- Mediterranean gull *Larus melanocephalus*, 2 pairs representing at 8.2-13.9% of the breeding population in Great Britain (5 year peak mean 1994-1998);
- Sandwich tern *Sterna sandvicensis*, 231 pairs representing at least 1.7% of the breeding population in Great Britain (5 year peak mean 1993-1997) ;
- Common tern Sterna hirundo, 267 pairs representing at least 2.2% of the breeding population in Great Britain (5 year peak mean 1993-1997);
- Little tern *Sterna albifrons*, 49 pairs representing at least 2.0% of the breeding population in Great Britain (5 year peak mean 1993-1997); and
- Roseate tern *Sterna dougallii*, 2 pairs representing at least 3.1% of the breeding population in Great Britain (5 year peak mean 1993-1997).

#### Wild Birds Directive Article 4.2 Qualification: Migratory Species not listed in Annex I:

- Dark-bellied brent goose *Branta bernicla bernicla*, 7,506 individuals representing at least 2.5% of the wintering Western Siberia/Western Europe population (5 year peak mean 1992/3-1996/7);
- Eurasian teal *Anas crecca*, 4,400 individuals representing at least 1.1% of the wintering Northwestern Europe population (5 year peak mean 1992/3-1996/7);
- Ringed plover *Charadrius hiaticula*, 552 individuals representing at least 1.1% of the wintering Europe/Northern Africa wintering population (5 year peak mean 1992/3-1996/7); and
- Black-tailed godwit *Limosa limosa islandica*, 1,125 individuals representing at least 1.6% of the wintering Iceland breeding population (5 year peak mean 1992/3-1996/7).

#### Internationally Important Assemblage

- Over winter, the area regularly supports 51,361 individual waterfowl (5 year peak mean 1992/93-1996/97).



#### **Site Accounts and Feature Descriptions**

Info Source: Natural England Citation Solent & Southampton Water SPA (Uploaded 20/09/2014) (http://publications.naturalengland.org.uk/publication/6567218288525312?category=6528471664689152)

#### Ramsar Criteria

- Criterion 1: The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs.
- Criterion 2: The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site.
- Criterion 5: The site supports an internationally important assemblage of species; 51,343 waterfowl over winter (5 year peak mean 1998/99-2002/2003).
- Criterion 6: The site supports species or populations occurring at international levels of importance comprising the following species.

#### <u>Breeding</u>

- Roseate Tern *Sterna dougallii* 1 apparently occupied nests, representing an average of 1.9% of the GB population (Seabird 2000 Census)
- Little Tern Sterna albifrons 22 apparently occupied nests, representing an average of 1.1% of the GB population (Seabird 2000 Census)
- Sandwich Tern *Sterna sandivicensis* 268 apparently occupied nests, representing an average of 2.5% of the GB population (Seabird 2000 Census)
- Common Tern Sterna hirundo 192 apparently occupied nests, representing an average of 1.8% of the GB population (Seabird 2000 Census)
- Mediterranean Gull Larus melanocephalus, 11 apparently occupied nests, representing an average of 10.1% of the GB population (Seabird 2000 Census)
- Black-headed Gull *Larus ridibundus*, 6,911 apparently occupied nests, representing an average of 5.4% of the GB population (Seabird 2000 Census)



#### **Site Accounts and Feature Descriptions**

#### On passage

- Ringed Plover *Charadrius hiaticula* 397 individuals, representing an average of 1.2% of the GB population (5 year peak mean 1998/9-2002/3)

#### Overwintering

- Dark-bellied Brent Goose *Branta bernicla 6*,456 individuals, representing an average of 3% of the population (5 year peak mean 1998/9-2002/3)
- Teal Anas crecca 5,514 individuals, representing an average of 1.3% of the north western European population (5 year peak mean 1998/9-2002/3)
- Black-tailed Godwit *Limosa limosa islandica* 1,240 individuals, representing an average of 3.5% of the population (5 year peak mean 1998/9-2002/3)

Info Source: JNCC Ramsar Information Sheet

(https://jncc.gov.uk/jncc-assets/RIS/UK11063.pdf) (Accessed 23/06/2021)



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# **Appendix II: Screening Assessment**



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|       | Gosport Borough Local P<br>Regulation 18 Draft Local Plan Site Alloc |  | Solent & Isle of Wight Lagoons | Solent Maritime | Chichester & Langstone Harbours | Portsmout | Solent & Dorset Coast | Solent & Southampton Water | Chichester & Langstone Harbours | Portsmouth Harbour | Solent & Southampton Water |
|-------|--|--|--------------------------------|-----------------|---------------------------------|-----------|-----------------------|----------------------------|---------------------------------|--------------------|----------------------------|
| ID    | Site Name  | Likely Significant Effects                                     | 3,                             | 10              |                                 | J1        |                       |                            |                                 | vaiiisa            |                            |
| A2.7b | Land south of Fort Road  | Site-specific impacts  | Е                              | Е               | J                               | J         | Е                     | J                          | J                               | J                  | J                          |
| A2.6a | Land at Stoners Close  |  | Е                              | Е               | Е                               | Е         | Е                     | Е                          | Е                               | Е                  | Е                          |
| A2.6b | Land at Lapthorn Close   |  | Е                              | Е               | Е                               | Е         | Е                     | Е                          | Е                               | Е                  | Е                          |
| A2.6c | Land at Prideaux-Brune Avenue  | Site-specific impacts  | Е                              | Е               | J                               | J         | Е                     | J                          | J                               | J                  | J                          |
| A2.7d | Land between Woodside and Wych Lane                                  | Site-specific impacts  | Е                              | Е               | Е                               | J         | Е                     | ш                          | Е                               | J                  | Е                          |
| A2.7e | Land at Bridgemary Road  |  | Е                              | Е               | Е                               | Е         | Е                     | ш                          | Е                               | Е                  | Е                          |
| A2.6d | Land at Rowner Road Service Station                                  |  | Е                              | Е               | Е                               | Е         | Е                     | Е                          | Е                               | Е                  | Е                          |
| A2.7f | Land at Montgomery Road  | Site-specific impacts  | Е                              | Е               | J                               | J         | Е                     | J                          | J                               | J                  | J                          |
| A2.2  | Land at Heritage Way and Frater Lane                                 | Site-specific impacts  | Е                              | Е               | J                               | J         | Е                     | J                          | J                               | J                  | J                          |
| A2.6e | Land at Forton Road (Former Solent Building Supplies)                |  | Е                              | Е               | Е                               | Е         | Е                     | ш                          | Е                               | Е                  | Е                          |
| A2.6f | Land at Wheeler Close  | Site-specific impacts  | Е                              | Е               | Е                               | J         | Е                     | ш                          | Е                               | J                  | Е                          |
| A2.7g | Land at Grove Road   | Site-specific impacts  | Е                              | Е               | Е                               | J         | Е                     | ш                          | Е                               | J                  | Е                          |
| A2.6g | Land at Whitworth Close  | Site-specific impacts  | Е                              | Е               | J                               | J         | Е                     | J                          | J                               | J                  | J                          |
| A2.3  | Land at Gasworks Site, Mariners Way                                  | Site-specific impacts  | Е                              | Е               | J                               | J         | J                     | J                          | J                               | J                  | J                          |
| ID    | Strategic Policies   | Likely Significant Effects                                     |                                |                 |                                 |           |                       |                            |                                 |                    |                            |
| D1    | Adaptation and Mitigation to Climate Change                          |  | Α                              | Α               | Α                               | Α         | Α                     | Α                          | Α                               | Α                  | Α                          |
| D2    | Development Strategy   | Recreational disturbance; Water quality; Site-specific impacts | J                              | J               | J                               | J         | J                     | J                          | J                               | J                  | J                          |

|     | Gosport Borough Local P<br>Regulation 18 Draft Local Plan Site Alloc            |  | Solent & Isle of Wight Lagoons |   | Chichester & Langstone Harbours | Portsmouth Harbour | Solent & Dorset Coast | Solent &<br>Southampton Water |   | Portsmouth Harbour | Solent & Southampton Water |
|-----|---|--|--------------------------------|---|---------------------------------|--------------------|-----------------------|-------------------------------|---|--------------------|----------------------------|
| D3  | Urban Regeneration Areas  | Recreational disturbance; Water quality; Site-specific impacts | J                              | J | J                               | J                  | J                     | J                             | J | J                  |                            |
| D4  | Green Infrastructure Network  | impacts  | D                              | D | D                               | D                  | D                     | D                             | D | D                  | D                          |
| D5  | The Local Ecological Network and Internationally and Nationally Important Sites |  | D                              | D | D                               | D                  | D                     | D                             | D | D                  | D                          |
| D6  | Gosport Strategic Open Spaces   |  | D                              | D | D                               | D                  | D                     | D                             | D | D                  | D                          |
| D7  | Flood Risk and Coastal Erosion  |  | В                              | В | В                               | В                  | В                     | В                             | В | В                  | В                          |
| D8  | Healthy Communities   |  | В                              | В | В                               | В                  | В                     | В                             | В | В                  | В                          |
| D9  | Design  |  | В                              | В | В                               | В                  | В                     | В                             | В | В                  | В                          |
| D10 | Heritage Assets   |  | В                              | В | В                               | В                  | В                     | В                             | В | В                  | В                          |
| D11 | Securing Infrastructure   |  | В                              | В | В                               | В                  | В                     | В                             | В | В                  | В                          |
| D12 | Accessibility to New Development  |  | В                              | В | В                               | В                  | В                     | В                             | В | В                  | В                          |
| ID  | Strategic Development Sites   | Likely Significant Effects                                     |                                |   |                                 |                    |                       |                               |   |                    |                            |
| SS1 | Gosport Waterfront – Marine Employment  | Site-specific impacts  | J                              | Е | Е                               | J                  | J                     | J                             | Е | J                  | J                          |
| SS2 | Gosport Waterfront – Mixed Use Redevelopment                                    | Recreational disturbance; Water quality; Site-specific impacts | J                              | J | J                               | J                  | J                     | J                             | J | J                  | J                          |
| SS3 | Gosport Town Centre   | Recreational disturbance; Water quality; Site-specific impacts | J                              | J | J                               | J                  | J                     | J                             | J | J                  | J                          |
| SS4 | Blockhouse and Haslar Gunboat Sheds   | Recreational disturbance; Water quality; Site-specific impacts | J                              | J | J                               | J                  | J                     | J                             | J | J                  | J                          |
| SS5 | Fort Blockhouse   | Recreational disturbance; Water quality; Site-specific impacts | J                              | J | J                               | J                  | J                     | J                             | J | J                  | J                          |
| SS6 | Royal Haslar Hospital   | Recreational disturbance; Water quality; Site-specific impacts | J                              | J | J                               | J                  | J                     | J                             | J | J                  | J                          |
| SS7 | Haslar Barracks   | Recreational disturbance; Water quality; Site-specific impacts | J                              | J | J                               | J                  | J                     | J                             | J | J                  | J                          |

|      | Gosport Borough Local Plan                     |  | Solent & Isle of<br>Wight Lagoons |     | Chichester &<br>Langstone Harbours | Portsmouth Harbour | Solent & Dorset<br>Coast | Solent &<br>Southampton Water | Chichester &<br>Langstone Harbours | Portsmouth Harbour | Solent & Southampton Water |
|------|--|--|-----------------------------------|-----|------------------------------------|--------------------|--------------------------|-------------------------------|------------------------------------|--------------------|----------------------------|
|      | Regulation 18 Draft Local Plan Site Allocation |  | SA                                | AC. |                                    | SI                 | PA                       |                               | F                                  | Ramsa              | ar                         |
| SS8  | i Tine Pidderies                               | creational disturbance; Water quality; Site-specific pacts | J                                 | J   | J                                  | J                  | J                        | J                             | J                                  | J                  | J                          |
| SS9  | Haslar Marine Technology Park Site             | e-specific impacts   | J                                 | Е   | Е                                  | J                  | J                        | J                             | Е                                  | J                  | J                          |
| SS10 | Rowner And HMS Sultan Site                     | e-specific impacts   | J                                 | ш   | Е                                  | J                  | J                        | J                             | Е                                  | J                  | J                          |
| SS1  | I II Jaedalus                                  | creational disturbance; Water quality; Site-specific pacts | J                                 | J   | J                                  | J                  | ٦                        | J                             | _                                  | J                  | J                          |
| ID   | Other Allocation Sites Lik                     | cely Significant Effects                                   |                                   |     |                                    |                    |                          |                               |                                    |                    |                            |
| A1   | Enabling Allocations                           | creational disturbance; Water quality; Site-specific pacts | ш                                 | ٦   | J                                  | J                  | J                        | J                             | J                                  | ٦                  | J                          |
| A2   | I HOUSING I.                                   | creational disturbance; Water quality; Site-specific pacts | ٦                                 | ٦   | J                                  | J                  | J                        | J                             | J                                  | ٦                  | J                          |
| А3   | Employment                                     | e-specific impacts   | Ш                                 | Е   | J                                  | J                  | Е                        | J                             | J                                  | J                  | J                          |
| A4   | Leisure, Community Uses and Open Spaces        |  | Е                                 | Е   | Е                                  | Ε                  | Е                        | Е                             | Е                                  | Е                  | Е                          |
| A5   | Allotments                                     |  | Е                                 | Е   | Е                                  | Е                  | П                        | Е                             | Ш                                  | Е                  | Е                          |
| A6   | Safeguarded Land for Transport Improvements    |  | Е                                 | Е   | Е                                  | Е                  | Е                        | Е                             | Е                                  | Е                  | Е                          |
| ID   | Housing Lik                                    | cely Significant Effects                                   |                                   |     |                                    |                    |                          |                               |                                    |                    |                            |
| H1   | Sustainable Residential Neighbourhoods         |  | В                                 | В   | В                                  | В                  | В                        | В                             | В                                  | В                  | В                          |
| H2   | Affordable Housing                             |  | В                                 | В   | В                                  | В                  | В                        | В                             | В                                  | В                  | В                          |
| НЗ   | Housing for Older and Vulnerable People        |  | В                                 | В   | В                                  | В                  | В                        | В                             | В                                  | В                  | В                          |
| H4   | Park Homes and Residential Caravans            |  | В                                 | В   | В                                  | В                  | В                        | В                             | В                                  | В                  | В                          |
| Н5   | Gypsies, Travellers, Travelling Showpeople     | e-specific impacts   | Е                                 | Е   | Е                                  | J                  | J                        | Е                             | Е                                  | J                  | Е                          |
| ID   | Employment Lik                                 | cely Significant Effects                                   |                                   |     |                                    |                    |                          |                               |                                    |                    |                            |
| E1   | Employment Land                                |  | В                                 | В   | В                                  | В                  | В                        | В                             | В                                  | В                  | В                          |

|            | Gosport Borough Loc<br>Regulation 18 Draft Local Plan Site A |                            | Solent & Isle of Wight Lagoons | Solent Maritime | Chichester &<br>Langstone Harbours | Portsmouth Harbour | Solent & Dorset Coast | Solent & Southampton Water | Chichester & Langstone Harbours | Portsmouth Harbour | Solent & Southampton Water |
|------------|--|----------------------------|--------------------------------|-----------------|------------------------------------|--------------------|-----------------------|----------------------------|---------------------------------|--------------------|----------------------------|
| E2         | Skills   |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| E3         | Tourism  |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| E4         | Marinas and Moorings   |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| <b>E</b> 5 | Information and Communication Technology                     |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| ID         | Design   | Likely Significant Effects |                                |                 |                                    |                    |                       |                            |                                 |                    |                            |
| DE1        | Sustainable Construction                                     |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| DE2        | Residential Design   |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| DE3        | Areas of Special Character                                   |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| DE4        | Layout of Sites and Parking                                  |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| ID         | Centres  | Likely Significant Effects |                                |                 |                                    |                    |                       |                            |                                 |                    |                            |
| <b>C1</b>  | Centres  |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| C2         | Town Centre Uses Outside of Centres                          |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| С3         | Local Shops  |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| C4         | Commercial Frontages Outside of Centres                      |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| <b>C</b> 5 | Hot Food Take Aways  |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| C6         | Community, Cultural and Built Leisure Facilities             |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |
| ID         | Local Environment  | Likely Significant Effects |                                |                 |                                    |                    |                       |                            |                                 |                    |                            |
| LE1        | Open Space   |                            | В                              | В               | В                                  | В                  | В                     | В                          | В                               | В                  | В                          |

|      | Gosport Borough Local Plan  | Solent & Isle of<br>Wight Lagoons |    | Chichester &<br>Langstone Harbours |   |    | Solent &<br>Southampton Water |   |       | Solent &<br>Southampton Water |
|------|---|-----------------------------------|----|------------------------------------|---|----|-------------------------------|---|-------|-------------------------------|
|      | Regulation 18 Draft Local Plan Site Allocations and Policies            |                                   | AC |                                    |   | PA |                               |   | Ramsa |                               |
| LE2  | Cemetery Provision  | В                                 | В  | В                                  | В | В  | В                             | В | В     | В                             |
| LE3  | Allotments  | В                                 | В  | В                                  | В | В  | В                             | В | В     | В                             |
| LE4  | Access to the Coast and Countryside                                     | В                                 | В  | В                                  | В | В  | В                             | В | В     | В                             |
| LE5  | Locally Designated Nature Conservation Sites                            | В                                 | В  | В                                  | В | В  | В                             | В | В     | В                             |
| LE6  | Protecting Species and Other Features of Nature Conservation Importance | В                                 | В  | В                                  | В | В  | В                             | В | В     | В                             |
| LE7  | Protecting and Enhancing Tree, Woodland and Hedge Coverage              | В                                 | В  | В                                  | В | В  | В                             | В | В     | В                             |
| LE8  | Securing Measurable Biodiversity Net Gain                               | В                                 | В  | В                                  | В | В  | В                             | В | В     | В                             |
| LE9  | Pollution Control   | В                                 | В  | В                                  | В | В  | В                             | В | В     | В                             |
| LE10 | Contaminated and Unstable Land  | В                                 | В  | В                                  | В | В  | В                             | В | В     | В                             |
| LE11 | Hazardous Substances  | В                                 | В  | В                                  | В | В  | В                             | В | В     | В                             |
| LE12 | Safeguarding Zones  | В                                 | В  | В                                  | В | В  | В                             | В | В     | В                             |
| LE13 | Water Resources   | В                                 | В  | В                                  | В | В  | В                             | В | В     | В                             |
| LE14 | Waste and Material Resources  | В                                 | В  | В                                  | В | В  | В                             | В | В     | В                             |
|      |   |                                   |    |                                    |   |    |                               |   |       |                               |

|     | Gosport Borough Local Plan Regulation 18 Draft Local Plan Site Allocations and Policies  | Solent & Isle of Wight Lagoons | Chichester & Langstone Harbours | Portsmouth H Solent & Dors Coast Solent & | Southa<br>Chiche<br>Langst<br>Portsm | Solent & Southampton Water |
|-----|--|--------------------------------|---------------------------------|---|--------------------------------------|----------------------------|
|     |  | SAC                            |                                 | SPA                                       | Ramsar                               | r                          |
| A   | Assessment Key  General statement of policy / aspiration   |                                |                                 |   |                                      |                            |
| В   | Policy listing general criteria for testing the acceptability / sustainability of proposals                                      |                                |                                 |   |                                      |                            |
| С   | Proposal referred to but not proposed by the plan  |                                |                                 |   |                                      |                            |
| D   | Environmental protection / site safeguarding policy  |                                |                                 |   |                                      |                            |
| Е   | Policy/proposal steers change in such a way as to protect European sites from adverse effects                                    |                                |                                 |   |                                      |                            |
| F   | Policy that cannot lead to development or other change   |                                |                                 |   |                                      |                            |
| G   | Policy/proposal that could not have any conceivable effect on a European site  |                                |                                 |   |                                      |                            |
| Н   | Policy/proposal the (actual/theoretical) effects of which cannot undermine the conservation objectives (either alone or in       | combinatio                     | n with o                        | ther aspects of t                         | his or any other                     | r plan                     |
| - 1 | Policy/proposal with a likely significant effect on a European site alone  |                                |                                 |   |                                      |                            |
| J   | Policy/proposal with an effect on a site but not likely to be significant alone; check for likely significant effects in combina | ion                            |                                 |   |                                      |                            |
| K   | Policy/proposal not likely to have a significant effect either alone or in combination (after the in combination test)           |                                |                                 |   |                                      |                            |
| L   | Policy/proposal likely to have a significant effect in combination (after the in combination test)                               |                                |                                 |   |                                      |                            |
| М   | Bespoke area, site or case specific policies or proposals intended to avoid or reduce harmful effects on a European site         |                                |                                 |   |                                      |                            |

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- Any works undertaken as a consequence of the recommendations provided within this report should be subjected to the necessary health & safety checks and full risk assessments.



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NATURAL PROGRESSION

