



ECOLOGYSOLUTIONS

Part of the ES Group

LAND AT HORNDEAN ROAD,
EMSWORTH

**Information to enable a
Habitats Regulations
Assessment
of the impacts on Solent
European Site
Pursuant to
Regulation 63 of
The Conservation of
Habitats and Species
Regulations 2017**

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1. INTRODUCTION

1.1. Background

1.1.1. Ecology Solutions was commissioned by Metis Homes to undertake ecological assessment work pursuant to the production of documentation in support of a planning application to be submitted in respect of land at Horndean Road, Emsworth (hereafter referred to as the Application Site).

1.1.2. As part of this instruction, Ecology Solutions were specifically instructed to assess implications of the development proposals on nearby designated sites of European/international importance. Those sites which have been considered in respect of this planning application include for the following:

- Chichester & Langstone Harbours SPA
- Solent Maritime SAC
- Solent and Dorset Coast pSPA
- Portsmouth Harbour SPA; and
- Solent & Southampton Water SPA.

1.1.3. These sites are collectively termed the Solent European Sites for the purpose of this assessment.

1.1.4. The relationship between the Application Site and these designated sites is illustrated on Plan ECO1.

1.1.5. The findings of this assessment work are set out within this 'Information to Enable a Habitats Regulations Assessment' document, such that the competent authority (in this instance Havant Borough Council) have all the necessary information before it to carry out its duties in considering the application in line with relevant planning policy and legislation, including specifically The Conservation of Habitats and Species Regulations 2017 (hereinafter referred to as the Habitats Regulations) as Amended.

1.1.6. Planning permission is being sought for the provision of 16 residential developments, access and informal public open space.

1.1.7. It is noted that the avoidance and mitigation package proposed in respect of the European designated sites follows the strategic approaches which have been endorsed and adopted by Havant Borough Council as the competent authority.

1.2. Purpose of this Report

1.2.1. This report specifically assesses the potential significant effects of the scheme on European designated sites within the local area (both alone and in combination with other plans/projects). Within this document specific regard is had to the test under Regulation 63 of the Habitats Regulations. Regulation 63 is described and considered further in Section 2 of this document.

- 1.2.2. The proximity of the site to relevant European Sites is described in detail at Section 3 of this report and is also shown on Plan ECO1.
- 1.2.3. As part of this assessment, professional judgement has been applied in some instances in order to interpret information. Ecology Solutions is a member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and the Institute of Environmental Management and Assessment (IEMA) and its professional ecologists are qualified to make such judgements where appropriate.
- 1.2.4. This document assesses the likely significant effects of the approved scheme on the integrity of nearby European sites as a whole, both alone and in combination with other plans/projects.
- 1.2.5. The purpose of this report is to provide the competent authority with the information required to consider the proposed development, in line with the test set out in Regulation 63 of the Habitats Regulations. It is the opinion of Ecology Solutions, in the light of all relevant available information and of the package of avoidance and mitigation measures proposed that the approved scheme would not adversely affect the integrity of any international/European designated sites, either when considered alone or in combination with other plans and projects.

1.3. Application Site Characteristics

- 1.3.1. The Application Site is located to the north of the town of Emsworth and is approximately 1ha in size. The Site is bordered to the north and east by existing residential development (New Brighton) and to the south by an existing school with associated areas of amenity grassland (predominantly sports pitches) which include Emsworth Recreation Ground. The western boundary of the site is formed by a small, wooded stream, with agricultural land beyond.
- 1.3.2. Existing residential development associated with the village is present at the northern boundary of the Site. Additional residential development, as well as a farmstead, forms much of the Site's southern boundary, with Kiln Lane forming the Site's south-west boundary. To the east and west the Site is framed by agricultural land and open countryside.
- 1.3.3. The Application Site itself comprises an area of grassland, with boundary vegetation in the form of tree belts, hedgerows and scrub. A dilapidated agricultural building is present in the east of the site.

2. LEGISLATIVE, GUIDANCE AND PLANNING POLICY BACKGROUND

- 2.1. This Section of the document outlines further details regarding legislation and planning policy of particular relevance to the approved scheme.

2.2. Legislation and Relevant Case law

- 2.2.1. The proximity of the Site to a European designated site (Thames Basin Heaths SPA) means that the EC Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna (commonly referred to as the Habitats Directive) and the EC Directive on Wild Birds (Birds Directive) are of relevance. The Directive is transposed in UK legislation through the Habitats Regulations (2017).

- 2.2.2. The relevant Directive and UK legislation are discussed below.

Habitats and Birds Directives

- 2.2.3. Under the EC Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, (the Habitats Directive) (Council Directive 92/43/EEC), member states are required to take special measures to maintain the distribution and abundance of certain priority habitats and species (listed in Annexes I and II of the Directive).

- 2.2.4. In particular each member state is required to designate the most suitable sites as Special Areas of Conservation (SACs). All such SACs will form part of the Natura 2000 network under Article 3(1) of the Habitats Directive.

- 2.2.5. Article 2 (3) sets out that member states have a duty, in exercising their obligations under the Habitats Directive to:

".. take account of economic, social and cultural requirements and local characteristics."

- 2.2.6. Under the EC Directive on Wild Birds (the Birds Directive) (Council Directive 2009/147/EEC, previously 79/409/EEC), member states are required to take special measures to conserve the habitats of certain rare species of birds (listed in Annex I of the Directive) and regularly occurring migratory birds.

- 2.2.7. In particular each member state is required to classify the most suitable areas of such habitats as Special Protection Areas (SPAs). This is designed to protect wild birds, and to provide sufficient diversity of habitats for all species so as to maintain populations at an ecologically sound level. All Bird Directive SPAs will also be part of the Natura 2000 network under Article 3(1) of the Habitats Directive.

- 2.2.8. Thus, there is an obligation under the Habitats Directive and the Birds Directive for member states to designate sites before turning to measures for their protection

- 2.2.9. The protection afforded to SACs and SPAs is delivered through Article 6 of the Habitats Directive. Article 6(2) requires member states to take appropriate steps to avoid the deterioration of natural habitats and disturbance of species for which the sites have been designated, in so far as the disturbance could be significant in relation to the objectives of the Directive. Article 6(3) and Article 6(4) require that a plan or project not directly connected with the management of the site, but likely to have a significant effect upon it, either individually or in combination with other plans or projects, must be subject to an Appropriate Assessment of its implications on the site, in view of the site's conservation objectives.
- 2.2.10. Having undertaken an Appropriate Assessment, the competent authority may agree to a plan or project where it can be concluded that it will not adversely affect the integrity of the site. In light of a negative assessment on the implications for the integrity of the site, Article 6(4) provides that the plan or project may still proceed where it can be demonstrated that there are no alternatives and there are imperative reasons of over-riding public interest as to why it must proceed. In the event that a plan or project is to proceed on the basis of imperative reasons of over-riding public interest, by direction of Article 6(4), compensatory measures must be put in place to ensure the overall coherence of the Natura 2000 network is protected.

The Conservation of Habitats and Species Regulations 2017

- 2.2.11. The Conservation of Species and Habitats Regulations 2017, commonly referred to as the Habitats Regulations, transpose the requirements of the Habitats Directive and the Birds Directive into UK legislation. The Habitats Regulations aim to protect a network of sites in the UK that have rare or important habitats and species in order to safeguard biodiversity. The Habitats Regulations 2017 consolidate all of the previous amendments made to the Habitats Regulations 2010.
- 2.2.12. Under the Habitats Regulations, competent authorities have a duty to ensure that all the activities they regulate have no adverse effect on the integrity of any of the Natura 2000 sites (e.g. SPAs and SACs). Regulation 63 of the Habitats Regulations requires that:

"63(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for a plan or project, which:-

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects) and

(b) is not directly connected with or necessary for the management of the site,

must make an Appropriate Assessment of the implications of the plan or project for that site in view of that site's conservation objectives.

63(3) the competent authority must for the purposes of the assessment consult the appropriate nature conservation body and have regard to any

representations made by that body within such reasonable time as the authority specifies.

63(5) In the light of the conclusions of the assessment, and subject to Regulation 64, the authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).

63(6) In considering whether a plan or project will adversely affect the integrity of the site, the authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which it proposes that the consent, permission or other authorisation should be given."

- 2.2.13. Regulation 63 of the Habitats Regulations therefore sets out a two-stage process. The first test is to determine whether the plan/project is likely to have a significant effect on the European site. The second test (if applicable) is to determine whether the plan/project will affect the integrity of the European site.

- 2.2.14. Some key concepts of the Habitats Directive and Habitats Regulations have been clarified through case law. The most pertinent cases in relation to the development proposals are the *Waddenzee* Judgement, the *Sweetman* Case, the *Dilly Lane* Case and the *People over Wind* Judgement. These are discussed below.

Waddenzee Judgement

- 2.2.15. In the *Waddenzee* case the European Court of Justice decided that an Appropriate Assessment is required for a plan or project where there is a probability or a risk that it will have a significant effect on the SPA. The Judgement states (at paragraph 3(a)) that:

"...any plan or project not directly connected with or necessary to the management of the site is to be subject to an Appropriate Assessment of its implications for the site in view of the site's conservation objectives if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or projects."

- 2.2.16. Hence, the need for an Appropriate Assessment should be determined on a precautionary basis.

- 2.2.17. The Judgement gives clarity that the test of 'likely significant effect' should also be undertaken in view of the European site's Conservation Objectives. It is stated at paragraph 3(b) that:

"where a plan or project not directly connected with or necessary to the management of a site is likely to undermine the site's conservation objectives, it must be considered likely to have a significant effect on that site."

- 2.2.18. Paragraph 4 of the Judgement emphasises the requirement for the Appropriate Assessment to rely on objective scientific information:

"...an Appropriate Assessment...implies that, prior to its approval, all the aspects of the plan or project which can, by themselves or in combination with other plans or projects, affect the site's conservation objectives must be identified in the light of the best scientific knowledge in the field. The competent national authorities, taking account of the Appropriate Assessment of the implications...for the site concerned in the light of the site's conservation objectives, are to authorise such an activity only if they have made certain that it will not adversely affect the integrity of that site. That is the case where no reasonable scientific doubt remains as to the absence of such effects."

Sweetman Case

- 2.2.19. Further guidance in relation to the consideration of impacts in light of the Habitats Regulations is provided in the Sweetman case. The case as set out by the Advocate General considered in detail the test for likely significant effect in paragraphs 50 and 51:

"50. The test which that expert assessment must determine is whether the plan or project in question has 'an adverse effect on the integrity of the site', since that is the basis on which the competent national authorities must reach their decision. The threshold at this (the second) stage is noticeably higher than that laid down at the first stage. That is because the question (to use more simple terminology) is not 'should we bother to check' (the question at the first stage) but rather 'what will happen to the site if this plan or project goes ahead; and is that consistent with "maintaining or restoring the favourable conservation status" of the habitat or species concerned'...

51. It is plain, however, that the threshold laid down at this stage of Article 6(3) may not be set too high, since the assessment must be undertaken having rigorous regard to the precautionary principle. That principle applies where there is uncertainty as to the existence or extent of risks. The competent national authorities may grant authorisation to a plan or project only if they are convinced that it will not adversely affect the integrity of the site concerned. If doubt remains as to the absence of adverse effects, they must refuse authorisation."

- 2.2.20. The Court of Justice of the European Union (CJEU) agreed with the Advocate General's conclusions, and held:

"40. Authorisation for a plan or project, as referred to in Article 6(3) of the Habitats Directive, may therefore be given only on condition that the competent authorities – once all aspects of the plan or project have been identified which can, by themselves or in combination with other plans or projects, affect the conservation objectives of the site concerned, and in the light of the best scientific knowledge in the field – are certain that the plan or project will not have lasting adverse effects on the integrity of that site. That is so where no reasonable scientific doubt remains as to the absence of such effects."

- 2.2.21. Hence a plan or project may be authorised only if no reasonable scientific doubt remains as to the absence of effects. Reasonable scientific doubt will exist if the evidence is not sufficiently conclusive, or if there are gaps in the information.

Dilly Lane Case

- 2.2.22. The Secretary of State's decision to allow an appeal in relation to applications for a total of 170 new homes on a greenfield site off Dilly Lane, Hartley Wintney was challenged in High Court by Hart District Council. The legal challenge was made on the grounds that the Secretary of State had erred in departing from her Inspector's conclusions as to the effects on the Thames Basin Heaths SPA.
- 2.2.23. A key issue for the case was whether mitigation measures should be disregarded when assessing whether the project would have a significant effect on the SPA. Mr Justice Sullivan (now Lord Justice Sullivan) ruled in favour of the Secretary of State after concluding that there was no absolute legal rule that mitigation measures should be disregarded during the first stage – 'the likely significant test':

"55. The competent authority is not considering the likely effect of some hypothetical project in the abstract. The exercise is a practical one which requires the competent authority to consider the likely effect of the particular project for which permission is being sought. If certain features (to use a neutral term) have been incorporated into that project, there is no sensible reason why those features should be ignored at the initial, screening, stage merely because they have been incorporated into the project in order to avoid, or mitigate, any likely effect on the SPA."

Exminster Judgment

- 2.2.24. Also of note is the Judgement handed down by Lord Justice Sales on 5 March 2015 in *Dianne Smyth v The Secretary of State for Communities and Local Government* [2015] EWCA Civ 174. That case concerned an Appeal by Mrs Smyth against the decision of Mrs Justice Patterson sitting in the High Court [2013] EWHC 3844 who dismissed an application made by Mrs Smyth to quash the appeal decision to grant planning permission to Bellway for the development of 65 residential dwellings on land at Sentry's Farm, Exminster, Devon. In that case the development site was located close to the Exe Estuary SPA ("the SPA"), which is also notified as a Site of Special Scientific Interest (SSSI). The SPA incorporates the Dawlish Warren SAC ("the SAC").
- 2.2.25. Amongst other matters, this case considered the weight that should be attributed to an experts professional judgment.
- 2.2.26. Lord Justice Sales makes clear that an experts experience can be classed as objective information, as set out in paragraphs 46 and 47 of the Judgment. These paragraphs state:

46. *Mr Jones submitted that Mr Goodwin's evidence amounted merely to assertion, unsupported by any objective evidence. I do not agree. Three points should be made. First, I consider that on a fair reading of Mr Goodwin's Proof of Evidence it can be seen that he has drawn on specific information relevant to the SPA and the SAC, as well as the development site and proposed mitigation measures, in a manner which supports in an entirely conventional and acceptable way his expressions of opinion as an ecological expert. By way of example, at paras. 10.4 and 10.5 of his Proof, he pointed out that, contrary to the suggestion made by GIE's representative at the inquiry, it was not appropriate to use the analogy of mitigation measures developed for heathland sites (a 400m exclusion zone), where ground nesting birds might be subject to predation by cats, since for the SPA "the designating bird features are wintering or passage species and access to large parts of the site is not possible in any event" (because it is marshland or cut off by water). He referred to the Interim Report and the Disturbance Study, as appropriate. Mr Goodwin demonstrated a good understanding of the particular ecological and mitigation features relevant to the SPA and the SAC. Contrary to Mr Jones's contention, Mr Goodwin's evidence was very far from being unsupported, free-standing assertion.*

47. *Secondly, in my view it is acceptable and to be expected that an expert will draw on his own background knowledge, experience and expertise in the field to inform the opinions which constitute his evidence to a relevant decision-maker (here, the Inspector). That is, indeed, in large part the point of looking to expert witnesses to provide assistance on technical matters. In this case, Mr Goodwin's own practical experience, the practical experience of ecologists generally and the knowledge shared between them all informed the expertise which he was able to bring to bear in giving his views regarding the effects of the development and the practical impact and viability of the mitigation options which he reviewed in his Proof of Evidence.*

- 2.2.27. Paragraph 84 of the Judgment further clarifies that expert evidence can be considered as objective, stating:

...Mr Goodwin's evidence set out careful reasoning by him, with reference back as appropriate to underlying facts, to explain his opinion and expressions of view. It was expert evidence in conventional form and of good quality. Mr Goodwin was entitled to draw on his own experience and expertise as well, informing his opinion: see paras. [46]-[48] above.

- 2.2.28. The Exminster case further considered the appropriate procedures for assessing in-combination impacts which may arise through combined development within the Zone of Influence of a European Site.

Jay Judgment

- 2.2.29. The Jay Judgment is of specific relevance to the emerging proposals at the site. It considers the appropriate approach to adopt when

undertaking an in-combination assessment where several plans or projects, with no significant impacts alone, could together reach a threshold deemed to be significant. This judgment specifically considers matters of air quality, as is relevant for the site at Pelsall.

- 2.2.30. The Judgment was handed down by Mr Justice Jay in the case between Wealden District Council and the Secretary of State for Communities and Local Government, Lewis District Council and the South Downs National Park Authority [Wealden v SSCLG (2017) EWHC 351 (Admin)] was concerned with matters relating to air quality impacts on European Sites (in that case the Ashdown Forest SPA/SAC).
- 2.2.31. A critical issue explored within the Judgment was whether it is correct to test a plan or project against threshold values (in that case relating to the deposition of Nitrogen from increased road traffic) in isolation, with no recourse to undertake a true in combination test.
- 2.2.32. This matter was specifically considered by Mr Justice Jay at paragraph 108 of his Judgment. Here he concludes that the only rational approach would be for plans or projects which would cumulatively exceed a threshold value (such as nitrogen deposition) to be considered in-combination. The premise of this paragraph is Mr Justice Jay's view that it would be illogical not to consider the residual impacts of a plan or project alongside residual impacts of other relevant schemes (i.e. in combination).
- 2.2.33. As such it is clear that, where matters of threshold arise (such as air quality) impacts should be considered cumulatively.

People over Wind Case

- 2.2.34. The CJEU in *People over Wind v Coillte Teoranta* has revoked the position adopted under the *Dilly Lane* Decision that it was right and proper for mitigation or avoidance measures, which formed a feature of a plan/project, to be viewed as integral to the plan/project and not excluded when considering the likely significance test at Regulation 63(1).
- 2.2.35. The decision by the CJEU ruled that:
- "Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an Appropriate Assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site."*
- 2.2.36. In accordance with this ruling, avoidance or mitigation measures cannot be considered at the first stage of the test (the 'Likely Significant Effect' stage) and can only be considered at the Appropriate Assessment stage.

- 2.2.37. This ruling conflicts with and overrules a long line of domestic case law (notably the *Dilly Lane Decision (oao) Herts District Council v. Secretary of State for Communities and Local Government and Others* [2008] EWHC 1204 (Admin)), as summarised above, which previously held that it is appropriate to consider such measures at the 'Likely Significant Effect' stage.
- 2.2.38. In considering the above, it is logical to distinguish between measures which are specifically "*intended to avoid or reduce the harmful effects*" (i.e. mitigation measures for the purposes of a HRA) and measures which would come forward in any event (i.e. intrinsic elements of scheme design). Notwithstanding that these latter measures may, by default, avoid or reduce harmful effects on a European site(s), if they are integral elements of a development proposal, it remains appropriate to consider them at the first stage of the test.

Holohan Judgment

- 2.2.39. In the case of *Holohan v. An Bord Pleanála* the CJEU considered the correct assessment procedure to be adopted when considering potential impacts on a European Site.
- 2.2.40. In considering this case, the CJEU ruled, amongst other matters, that an Appropriate Assessment must 'catalogue the entirety of habitat types and species for which a site is protected' as well as any habitats and species for which the site has not been listed, should impacts on these features be liable to impact the sites Conservation Objectives.

The Dutch Nitrogen Cases

- 2.2.41. On 7 November 2018 the Judgment of the CJEU was handed down pursuant to a reference for a Preliminary Ruling relating to the application of Article 6 of Directive 92/43/EEC (the Habitats Directive) in joined cases C-293/17 and C-294/17.
- 2.2.42. The cases concerned authorisation schemes for agricultural activities which cause nitrogen deposition on Natura 2000 (European) sites in the Netherlands.
- 2.2.43. Key parts of the ruling (insofar as they are relevant to this assessment) are discussed below.
- 2.2.44. In line with preceding case law (*Waddenzee* and *Sweetman*, discussed above) the need for scientific rigour and firm conclusions as to the absence of effects are a pre-requisite for authorisation of a plan/project. Ruling 3 in the case states:

"Article 6(3) of Directive 92/43 must be interpreted as not precluding national programmatic legislation which allows the competent authorities to authorise projects on the basis of an 'Appropriate Assessment' within the meaning of that provision, carried out in advance and in which a specific overall amount of

nitrogen deposition has been deemed compatible with that legislation's objectives of protection. That is so, however, only in so far as a thorough and in-depth examination of the scientific soundness of that assessment makes it possible to ensure that there is no reasonable scientific doubt as to the absence of adverse effects of each plan or project on the integrity of the site concerned, which it is for the national court to ascertain."

[emphasis added]

2.2.45. Ruling 4 in the case states:

"Article 6(3) of Directive 92/43 must be interpreted as not precluding national programmatic legislation, such as that at issue in the main proceedings, exempting certain projects which do not exceed a certain threshold value or a certain limit value in terms of nitrogen deposition from the requirement for individual approval, if the national court is satisfied that the 'Appropriate Assessment' within the meaning of that provision, carried out in advance, meets the criterion that there is no reasonable scientific doubt as to the lack of adverse effects of those plans or projects on the integrity of the sites concerned."

[emphasis added]

2.2.46. Ruling 5 in the case states:

"Article 6(3) of Directive 92/43 must be interpreted as precluding national programmatic legislation, such as that at issue in the main proceedings, which allows a certain category of projects, in the present case the application of fertilisers on the surface of land or below its surface and the grazing of cattle, to be implemented without being subject to a permit requirement and, accordingly, to an individualised Appropriate Assessment of its implications for the sites concerned, unless the objective circumstances make it possible to rule out with certainty any possibility that those projects, individually or in combination with other projects, may significantly affect those sites, which it is for the referring court to ascertain."

[emphasis added]

2.2.47. Ruling 6 in the case confirms that any measures which are relied upon to mitigate or avoid adverse effects on the integrity of the European site in question, must be certain at the time of assessment. It is stated:

"Article 6(3) of Directive 92/43 must be interpreted as meaning that an 'Appropriate Assessment' within the meaning of that provision may not take into account the existence of 'conservation measures' within the meaning of paragraph 1 of that article, 'preventive measures' within the meaning of paragraph 2 of that article, measures specifically adopted for a programme such as that at issue in the main proceedings or 'autonomous' measures,

in so far as those measures are not part of that programme, if the expected benefits of those measures are not certain at the time of that assessment.

[emphasis added]

2.3. Guidance and other Relevant Documents

- 2.3.1. Guidance on the interpretation of key terms and concepts contained within the European and UK legislation of relevance to European designated sites is provided through several documents issued by the European Commission and national organisations such as the Joint Nature Conservation Committee (JNCC) and Natural England. This guidance is discussed below.

Managing Natura 2000 Sites (European Communities, 2000)

- 2.3.2. The document entitled '*Managing Natura 2000 Sites the Provisions of Article 6 of the Habitats Directive 92/43/CEE*', published by the European Commission in 2000, provides guidelines to member states on the interpretation of certain key concepts used in Article 6 of the Habitats Directive.
- 2.3.3. It should be noted that the section relating to Article 6(4) has subsequently been replaced through the publication of a further guidance document by the European Commission in 2007 entitled '*Guidance document on Article 6(4) of the Habitats Directive*', which is considered below under the relevant heading.
- 2.3.4. This document states at section 2.3.3 that conservation measures must correspond to the ecological requirements of the habitats and species present for which the site is designated and that these requirements "*involve all the ecological needs necessary to ensure their favourable conservation status*".
- 2.3.5. At section 3.5 the guidance states, in relation to deterioration and disturbance of habitats or species:
- "Deterioration or disturbance is assessed against the conservation status of species and habitats concerned. At a site level, the maintenance of the favourable conservation status has to be evaluated against the initial conditions provided in the Natura 2000 standard data forms when the site was proposed for selection or designation, according to the contribution of the site to the ecological coherence of the network. This notion should be interpreted in a dynamic way according to the evolution of the conservation status of the habitat or the species."*
- 2.3.6. Section 4.4.1 sets out that in determining what may constitute a likely 'significant' effect one should take into account the Conservation Objectives for the designated site and other relevant baseline

information. In the second paragraph of this section of the document it is stated:

"In this regard, the conservation objectives of a site as well as prior or baseline information about it can be very important in more precisely identifying conservation sensitivities."

- 2.3.7. Section 4.5.3 of the document sets out the duty of member states to provide certain specific information in support of the inclusion of a site within the Natura 2000 network. This information is to be provided in a format specified by the European Commission (the Natura 2000 Standard Data Form).

- 2.3.8. A link is drawn between the Standard Data Form and the formation of the site's conservation objectives within the text box at the end of section 4.5.3 of the guidance where it is stated:

"The information provided according to the standard data form established by the Commission forms the basis for a member state's establishment of the site's conservation objectives."

- 2.3.9. With regard to an assessment of the effects of a plan/project on the integrity of a designated site, the 'integrity of the site' is defined at Section 4.6.3 as:

"... the coherence of the site's ecological structure and function, across the whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified."

- 2.3.10. The guidance is clear, within the text box at the foot of page 39, that an assessment as to the implications of the plan/project on the integrity of the designated site should be limited to an assessment against the site's conservation objectives:

"The integrity of the site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives."

- 2.3.11. Section 5 of Managing Natura 2000 Sites deals with Article 6(4) of the Habitats Directive. Note that this section has been expanded upon and replaced by further guidance issued by the European Commission entitled "Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC" (2007). This document is dealt with below.

Assessment of Plans and Projects Significantly Affecting Natura 2000 sites - Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission, 2001)

- 2.3.12. This document, published by the European Commission in 2001, gives guidance on carrying out and reviewing those assessments required under Article 6(3) and (4) of the Habitats Directive. It is provided as supplementary guidance and does not over-ride or replace any of that set out within 'Managing Natura 2000' (European Commission, 2000)

which as stated at page 6 of the document, "is the starting point for the interpretation of the key terms and phrases contained in the Habitats Directive". The guidance provided is not mandatory and it is clearly set out that its use is "optional and flexible" and that it is for "member states to determine the procedural requirements deriving from the directive".

- 2.3.13. The guidance sets out the key stages in following the tests contained within the Habitats Directive. Pertinent to an assessment under Regulation 61, stages one and two are relevant. Stage one is the screening stage assessing the likelihood of a plan/project resulting in a significant effect upon the European site. The second comprises the Appropriate Assessment.

- 2.3.14. Section 3.2.4 is concerned with Appropriate Assessment and specifically, the assessment against the Conservation Objectives of the European site. Box 9 provides a list of five example conservation objectives for differing broad habitat types. One such example, that for a coastal site, taken from Box 9 is provided below:

"to maintain the status of the European features of this coastal site in favourable condition, allowing for natural change. Features include coastal shingle vegetation and lagoons (within a candidate special area of conservation (SAC), which is also an SPA)."

Internal Guidance to decisions on 'Site Integrity': A framework for provision of advice to competent authorities (English Nature, 2004)

- 2.3.15. Natural England (NE) (English Nature at the time) has produced an internal guidance document on the provision of advice to competent authorities regarding the concept of 'site integrity' in undertaking an Appropriate Assessment.

- 2.3.16. This guidance sets out a definition for integrity. It states that integrity is considered at the site level and gives the following definition (taken from PPG9):

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

- 2.3.17. Integrity is further defined within section 3 where it is stated that:

"In a dynamic context 'integrity' can be considered as a site having a sense of resilience and ability to evolve in ways that are favourable to conservation."

- 2.3.18. The need to maintain or restore the designated site to favourable conservation status is dealt with in the final paragraph of section 3. NE quotes guidance issued jointly by the Environment Agency (EA), English Nature (EN) and Countryside Council for Wales (CCW).

- 2.3.19.

- 2.3.20. The guidance provides a checklist within section 4.1, for assessing the likelihood of an adverse effect on integrity occurring as a result of the proposed plan/project. It is stated that if the answer to all of the questions posed within the checklist is "yes" then it is reasonable to conclude that there will be no adverse effect upon integrity. In the event that one or more of the answers is no, then the guidance suggests a series of further site-specific factors, listed at 4.2 to 4.7.

Common Standards Monitoring (JNCC, 2004)

- 2.3.21. Common Standards Monitoring (CSM) is a means by which condition objectives for habitats, species, or other features of designated sites (e.g. SSSIs and SPAs) are set based on key attributes of the features.
- 2.3.22. JNCC and the Country Conservation Agencies (e.g. NE) developed guidance on the setting and assessing of condition objectives, as required under the Birds and Habitats Directives and set out a framework for this in 1999. This framework is provided in the form of CSM guidance which comprises a suite of documents including an 'Introduction to the Guidance Manual on Common Standards Monitoring' and several species/habitat specific documents. The guidance manual covers various relevant concepts and terms. It also provides a background to the setting of conservation objectives and sets out the desired approach to setting targets, monitoring, management and reporting on conservation measures in designated sites.
- 2.3.23. The guidance manual and CSM guidance for individual site attributes (e.g. its bird or reptile interest) set out specific criteria regarding the identification of interest features, targets and methods of assessment. There is in-built flexibility and allowances for 'judgements to be made' when assessing, for example, favourable condition.
- 2.3.24. It is understood that NE applies the CSM approach to European designated sites through an assessment of the SSSI unit condition. This is undertaken on a cycle of approximately six years. The assessment does not relate to the conservation objectives of the European site but provides a tool for tailoring future management of the SSSI such that favourable condition of the interest features can be maintained or restored as appropriate.

Guidance Document on Article 6(4) of the 'Habitats Directive' (European Commission, 2007)

- 2.3.25. This document, published by the European Commission in 2007, is intended to provide clarification on key terms/concepts as referred to within 'Managing Natura 2000 Sites' and replaces the section on Article 6(4) within that earlier document.
- 2.3.26. The document covers, in particular, the concepts of 'Alternative Solutions', 'Imperative Reasons of Overriding Public Interest', 'Compensation Measures', 'Overall Coherence' and the 'Opinion of the Commission'.

- 2.3.27. With regard to ensuring the quality of an Appropriate Assessment, and to define exactly what needs to be compensated, it is stated at section 1.3 that:

"Assessment procedures of plans or projects likely to affect Natura 2000 sites should guarantee full consideration of all elements contributing to the site integrity and to the overall coherence of the network, both in the definition of the baseline conditions and in the stages leading to identification of potential impacts, mitigation measures and residual impacts. These determine what has to be compensated, both in quality and quantity."

- 2.3.28. The need to use information contained within the Natura 2000 Standard Data Form, in tandem with the site's Conservation Objectives when undertaking an Appropriate Assessment is specifically referred to (under the second hyphenated point at section 1.3 on page 5).
- 2.3.29. Section 1.3.2 gives guidance on the application of Article 6(4) in respect of reasons of overriding public importance and Section 1.4.1 gives guidance on the application of Article 6(4) in respect of compensatory measures.

Natura 2000 Standard Data Forms

- 2.3.30. A standard reporting format has been developed for Natura 2000 sites (SPAs and SACs) to ensure that the relevant site selection information is reported and stored in a consistent manner which can be easily made available.
- 2.3.31. A standard reporting form for SPAs and SACs was developed by the European Commission and published in 1996. The form is used for all sites designated or proposed to be designated as SPAs and SACs under the relevant Directives, with the information to be stored on a central database.
- 2.3.32. Article 4 of the Habitats Directive provides the legal basis for providing the data. Article 4 states that information shall include a map of the designated site, its name, location, extent and the data resulting from application of the criteria specified in Annex III and that this shall be provided in a format established by the Commission. Under Article 4 (paragraph 3) of the Birds Directive Member States are required to provide the Commission with all relevant information to enable it to take any appropriate steps in order to protect relevant species in areas where the Directive applies.
- 2.3.33. Whilst it is the relevant country agency (i.e. NE) that is responsible for designating a site, it is the JNCC who are responsible for collating the lists of European and international designated sites, together with relevant supporting information. The Natura 2000 Data Forms for SPAs and SACs are therefore made available by JNCC.
- 2.3.34. Within the explanatory notes for Natura Standard Data Forms the following "main objectives" of the Natura data form/database are given:

1. *"to provide the necessary information to enable the Commission, in partnership with the Member States, to co-ordinate measures to create a coherent Natura 2000 network and to evaluate its effectiveness for the conservation of Annex I habitats and for the habitats of species listed in Annex II of Council Directive 92/43/EEC as well as the habitats of Annex I bird species and other migratory bird species covered by Council Directive 79/409/EEC."*
2. *"to provide information which will assist the Commission in other decision making capacities to ensure that the Natura 2000 network is fully considered in other policy areas and sectors of the Commission's activities in particular regional, agricultural, energy, transport and tourism policies."*
3. *"to assist the Commission and the relevant committees in choosing actions for funding under LIFE and other financial instruments where data relevant to the conservation of sites, such as ownership and management practice, are likely to facilitate the decision making process."*
4. *"to provide a useful forum for the exchange and sharing of information on habitats and species of Community interest to the benefit of all member states."*

Conservation Objectives

- 2.3.35. The formal European Site Conservation Objectives for SPAs and SACs are produced by NE. For clarity, a copy of the European Site Conservation Objectives for the relevant SACs are attached to this IAA report and is summarised below (see section 4).

2.4. Planning Policy

National Planning Policy Framework (NPPF) and ODPM/DEFRA Circular (ODPM/DEFRA, 2005)

ODPM / DEFRA Circular

- 2.4.1. Paragraphs 170 and 176 of the National Planning Policy Framework (2018) are of direct relevance. Paragraph 170 makes reference to protecting and enhancing sites of biodiversity value “in a manner commensurate with their statutory status or identified quality in the development plan”. Paragraph 176 asserts that potential SPAs, possible SACs, listed or proposed Ramsar sites and sites providing compensatory measures for adverse effects should be afforded the same level of protection as classified SPAs and designated SACs (referred to in the NPPF as ‘habitats sites’).
- 2.4.2. Guidance on the determination of whether an effect on a European designated site is likely to be significant, together with the scope of Appropriate Assessments and ascertaining the effect on the integrity was previously provided within Circular 06/2005 “Biodiversity and geographical conservation – statutory obligations and their impact within the planning system” (DEFRA).
- 2.4.3. The Circular originally accompanied Planning Policy Statement 9 (PPS9) and is referenced in the NPPF (footnote 56).
- 2.4.4. Current planning practice guidance available on the Gov.UK website¹ notes that updated guidance in relation to the law affecting European sites is being prepared by DEFRA and will, in due course, replace the advice set out in the Circular. On the basis that the Circular makes reference to a flow diagram based on similar information provided in European guidance, it is expected that any further guidance published in relation to the provisions in the NPPF could also include similar information to the Circular.
- 2.4.5. With respect to the significance test, the Circular states at paragraph 13 that:
- “The decision as to whether an Appropriate Assessment is necessary should be made on a precautionary basis”.*
- 2.4.6. The Waddenzee Judgement is specifically referred to at paragraph 13 of the Circular. With regards to the need to undertake an Appropriate Assessment; this is only required where it is not possible to conclude, on the basis of objective information, that the plan / project will not have a significant effect on the European site, either individually or in combination with other plans / projects.

¹ Ministry of Housing, Communities and Local Government. *Guidance - Natural Environment*. Available at: www.gov.uk/guidance/natural-environment (published 21 January 2016)

- 2.4.7. Paragraph 14 clarifies that in considering the likely significance of an effect, the decision taker should assess whether the effect would be significant in terms of the site's Conservation Objectives.
- 2.4.8. Paragraph 15 clarifies the importance of assessing the likely significant effect on each of the interest features for which the site is designated.
- 2.4.9. Guidance on the scope of an Appropriate Assessment was provided at paragraph 17:

"If the decision-taker concludes that a proposed development (not directly connected with or necessary to the management of a site) is likely to significantly affect a European site, they must make an Appropriate Assessment of the implications of the proposal for the site in view of the site's conservation objectives. These relate to each of the interest features for which the site was classified...The scope and content of an Appropriate Assessment will depend on the nature, location, duration and scale of the proposed project and the interest features of the relevant site. It is important that an Appropriate Assessment is made in respect of each interest feature for which the site is classified; and for each designation where a site is classified under more than one international obligation..."

- 2.4.10. At paragraph 20 the definition of 'integrity' for the purpose of interpreting the tests contained within the Habitats Regulations is given as:

"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."

- 2.4.11. The Circular included a flow diagram setting out the series of steps competent authorities are required to take in considering proposals affecting internationally designated nature conservation sites. This was based on the information and flow charts given in guidance issued by the European Commission (European Commission Environment DG, 2001). A copy of this flow diagram is included at Appendix 1 of this iHRA report.

National Planning Policy

National Planning Policy Framework (February 2019)

- 2.4.12. Guidance on national policy for biodiversity and geological conservation is provided by the NPPF, published in March 2012, revised on 24 July 2018 and updated on 19 February 2019.
- 2.4.13. The key element of the NPPF is that there should be "a presumption in favour of sustainable development" (paragraphs 10 to 11). It is important to note that this presumption "does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an Appropriate Assessment has concluded that the plan or project will not adversely

affect the integrity of the habitats site" (paragraph 177). 'Habitats site' has the same meaning as the term 'European site' as used in the Habitats Regulations 2017.

- 2.4.14. Hence the direction of Government policy is clear; that is, the presumption in favour of sustainable development is to apply in circumstances where there is potential for an effect on a European site, if it has been shown that there will be no adverse effect on that designated site as a result of the development in prospect.
- 2.4.15. A number of policies in the NPPF are comparable to those in PPS9, including reference to minimisation of impacts to biodiversity and provision of net gains to biodiversity where possible (paragraph 170).
- 2.4.16. The NPPF also considers the strategic approach that Local Authorities should adopt with regard to the protection, maintenance and enhancement of green infrastructure, priority habitats and ecological networks, and the recovery of priority species.
- 2.4.17. Paragraphs 174 to 176 of the NPPF comprise a number of principles that Local Authorities should apply, including encouraging opportunities to incorporate biodiversity in and around developments; provision for refusal of planning applications if significant harm cannot be avoided, mitigated or compensated for; applying the protection given to European sites to potential SPAs, possible SACs, listed or proposed Ramsar sites and sites identified (or required) as compensatory measures for adverse effects on European sites; and the provision for the refusal for developments resulting in the loss or deterioration of 'irreplaceable' habitats – unless there are 'wholly exceptional reasons' (for instance, infrastructure projects where the public benefit would clearly outweigh the loss or deterioration of habitat) and a suitable compensation strategy exists.
- 2.4.18. National policy therefore implicitly recognises the importance of biodiversity and that with sensitive planning and design, development and conservation of the natural heritage can co-exist and benefits can, in certain circumstances, be obtained.

Local Policy

Havant Borough Core Strategy (adopted 2011)

- 2.4.19. The Havant Borough Core Strategy sets the planning framework for the borough communities until 2026.
- 2.4.20. Of relevance to this iHRA, Policy CS11 - Protecting and Enhancing the Special Environment and Heritage of Havant Borough concerns the protection of valuable sites, habitats and landscapes. Specific reference is made to statutory and non-statutory designated sites of nature conservation importance, as well as habitats of biodiversity value.

Havant Borough Local Plan 2036 – Pre-Submission Draft

- 2.4.21. The Pre-Submission Havant Borough Local Plan 2036 as approved by the Full Council on 30 January and consulted on between 1 February and 18 March 2019. The Pre-Submission Local Plan is the version of the plan which the council considers to be 'sound' having been informed by extensive research, before it is formally submitted for examination.
- 2.4.22. Although not formally adopted, the pre-draft still carries some weight when considering development within the borough and includes a policy relevant to this iHRA; E16 – Solent Special Protection Areas.
- 2.4.23. Pertinent policies include; Policy E14 which concerns the protection and enhancement of the local ecological network, including designated sites and Policy E16 deals specifically with Solent Recreation Mitigation Strategy (SRMS), a strategic approach to mitigating potential disturbance of qualifying features of the SPA from recreational activities. The strategy provides a strategic solution to ensure the requirements of the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations) are met with regard to the in-combination effects of increased recreational pressure on the Solent SPAs arising from new residential development. For clarity, the Solent SPA's referred to in the SRMS include:
- Chichester & Langstone Harbours SPA
 - Portsmouth Harbour SPA
 - Solent & Southampton Water SPA.
- 2.4.24. The SRMS is triggered for residential developments within a 5.6km Zone of Influence or 'Zol' (the term Zol, although not adopted by the SRMS, is used here for clarity). The strategy enables relevant developers to make a monetary 'developer contribution' for the strategic mitigation of recreational pressures that would otherwise occur over a wide area, instead of needing to provide bespoke mitigation themselves.

Position Statement on Nutrient Neutral Development

- 2.4.25. Havant Borough Councils Position Statement on Nutrient Neutral Development sets out their proposed, interim avoidance and mitigation package strategy to ensure new development in the Borough upon the Solent's European Sites.
- 2.4.26. For clarity, the Solent European Sites comprise the following sites:
- Solent Maritime SAC
 - Solent and Dorset Coast pSPA
 - Portsmouth Harbour SPA; and
 - Solent & Southampton Water SPA.
- 2.4.27. The proposed mitigation and avoidance strategy requires proposed developments to agree to a Grampian condition which will prevent development commencing until such a time that appropriate mitigation

measures have been approved by the Local Planning Authority. The wording of the proposed Grampian condition is replicated below:

"The development hereby permitted shall not be occupied until:

a) A water efficiency calculation in accordance with the Government's National Calculation Methodology for assessing water efficiency in new dwellings has been undertaken which demonstrates that no more than 110 litres of water per person per day shall be consumed within the development, and this calculation has been submitted to, and approved in writing by, the Local Planning Authority;

b) A mitigation package addressing the additional nutrient input arising from the development has been submitted to, and approved in writing by, the Local Planning Authority. Such mitigation package shall address all of the additional nutrient load imposed on protected European Sites by the development when fully occupied and shall allow the Local Planning Authority to ascertain on the basis of the best available scientific evidence that such additional nutrient loading will not have an adverse effect on the integrity of the protected European Sites, having regard to the conservation objectives for those sites; and

c) All measures forming part of that mitigation package have been provided to the Local Planning Authority.

Reason: *There is existing evidence of high levels of nitrogen and phosphorus in the water environment with evidence of eutrophication at some European designated nature conservation sites in the Solent catchment. The PUSH Integrated Water Management Strategy has identified that there is uncertainty as to whether new housing development can be accommodated without having a detrimental impact on the designated sites within the Solent. Further detail regarding this can be found in the Appropriate Assessment that was carried out regarding this planning application. To ensure that the proposal may proceed as sustainable development, there is a duty upon the local planning authority to ensure that sufficient mitigation for is provided against any impacts which might arise upon the designated sites. In coming to this decision, the Council have had regard to Regulation 63 of the Conservation of Habitats and Species Regulations 2017, Policy CS11 of the Havant Borough Local Plan (Core Strategy) 2011 and Policy E14 of the Pre-Submission Havant Borough Local Plan 2036"*

3. SITE LOCATIONS

3.1.1. The closest European designated site to the Application Site is Chichester and Langstone Harbours (SPA) with this site further designated as Ramsar site and the Solent Maritime SAC which share a largely contiguous border. These designated sites sit approximately 1.3km to the south of the Application Site at their closest point (straight line distance).

3.1.2. Other European / International sites (or potential sites) in the local area include:

- Solent and Dorset Coast potential SPA, located approximately 9.4km to the south-west of the site at its closest point;
- Portsmouth Harbour SPA / Ramsar, located approximately 9.4km to the south-west of the site at its closest point;
- Solent & Southampton Water SPA / Ramsar located approximately 17.8km to the south-west of the site at its closest point;

The Chichester and Langstone Harbours SPA / Ramsar and the Solent Maritime SAC

3.1.3. The Chichester and Langstone Harbours SPA was classified in 1987 and covers an area of 5810.03ha. The SPA boundary is consistent with that of the Ramsar Site.

3.1.4. The Solent Maritime SAC share much of its boundary with that of the Chichester and Langstone Harbours SPA/Ramsar. The Solent Maritime SAC was designated in 2005 and covers an area of 11325.09ha.

3.1.5. The relevant Natura Standard Data Forms and Ramsar Information Sheet for the SPA/SAC/Ramsar sites are included at Appendix 2, 3 and 4 respectively.

3.1.6. The Chichester and Langstone Harbours SPA/Ramsar and the Solent Maritime SAC are each underpinned by a number of individual SSSI designations.

3.1.7. The relationship between these European/international designated sites and the Application Site is shown on Plan ECO1.

Solent and Dorset Coast potential SPA

3.1.8. Natural England have made a recommendation to Defra that an area of land termed the Solent and Dorset Coast potential SPA be classified as an SPA, the current status of which is 'awaiting decision'. Following a period of consultation running from 18 September 2017 to 17 January 2018, a consultation report has been submitted to ministers for decision.

3.1.9. The Solent and Dorset potential SPA is located on the south coast and extends from the Isle of Purbeck to Bognor Regis. It is proposed to protect important foraging areas at sea used by qualifying interest features from colonies within adjacent, already classified SPAs. These

qualifying interest features are three species of tern: Common Tern, Sandwich Tern and Little Tern.

Portsmouth Harbour SPA / Ramsar

- 3.1.10. The Portsmouth Harbour SPA was classified in 1995 and covers an area of 1248.77ha. The SPA boundary is consistent with that of the Ramsar Site.
- 3.1.11. The Portsmouth Harbour SPA / Ramsar site are underpinned by the Portsmouth Harbour SSSI which also shares a contiguous boundary.
- 3.1.12. The relevant Natura Standard Data Forms and Ramsar Information Sheet for the SPA/SAC/Ramsar sites are included at Appendix 5 and 6 respectively.
- 3.1.13. The relationship between these European/international designated sites and the Application Site is shown on Plan ECO1.

Solent & Southampton Water SPA / Ramsar

- 3.1.14. The Solent & Southampton Water SPA is a composite site that was classified in 1998 and which covers an area of 5505.86ha. The SPA boundary is consistent with that of the Ramsar Site.
- 3.1.15. The Solent & Southampton Water SPA / Ramsar site are underpinned by a number of individual SSSI designations.
- 3.1.16. The relevant Natura Standard Data Forms and Ramsar Information Sheet for the SPA/SAC/Ramsar sites are included at Appendix 7 and 8 respectively.
- 3.1.17. The relationship between these European/international designated sites and the Application Site is shown on Plan ECO1.

4. CONSERVATION STATUS OF THE RELEVANT DESIGNATED SITES

Chichester and Langstone Harbours SPA / Ramsar and the Solent Maritime SAC

4.1. Chichester and Langstone Harbours SPA Qualifying Features

4.1.1. The SPA qualifies under Article 4.1 of the Bird Directive by supporting breeding populations of European importance of the following species listed on Annex 1 of the Bird Directive:

- Little Tern *Sterna albifrons*, 100 pairs representing at least 4.2% of the breeding population in Great Britain (5 year peak mean, 1992-1996);
- Sandwich Tern *Sterna sandvicensis*, 158 pairs representing up to 1.1% of the breeding population in Great Britain (1998)

4.1.2. The SPA qualifies under Article 4.1 of the Bird Directive by supporting on passage populations of European importance of the following species listed on Annex 1 of the Bird Directive:

- Little Egret *Egretta garzetta*, 137 individuals representing up to 17.1% of the population in Great Britain (Count as at 1998)

4.1.3. The SPA qualifies under Article 4.1 of the Bird Directive by supporting overwintering populations of European importance of the following species listed on Annex 1 of the Bird Directive:

- Little Egret *Egretta garzetta*, 137 individuals representing up to 17.1% of the population in Great Britain (Count as at 1998)
- Bar-tailed Godwit *Limosa lapponica*, 1,692 individuals representing up to 3.2% of the wintering population in Great Britain (5 year peak mean 1991/2 - 1995/6)
- Little Egret *Egretta garzetta*, 100 individuals representing up to 20.0% of the wintering population in Great Britain (Count as at 1998)

4.1.4. The SPA qualifies under Article 4.2 of the Bird Directive for supporting migratory populations of European importance of the following species.

- Black-tailed Godwit *Limosa limosa islandica*, 1,003 individuals representing up to 1.4% of the wintering Iceland - breeding population (5 year peak mean 1991/2 - 1995/6)
- Dark-bellied Brent Goose *Branta bernicla bernicla*, 17,119 individuals representing up to 5.7% of the wintering Western Siberia/Western Europe population (5 year peak mean 1991/2 - 1995/6)
- Dunlin *Calidris alpina alpina*, 44,294 individuals representing up to 3.2% of the wintering Northern Siberia/Europe/Western Africa population (5 year peak mean 1991/2 - 1995/6)

- Grey Plover *Pluvialis squatarola*, 3,825 individuals representing up to 2.5% of the wintering Eastern Atlantic - wintering population (5 year peak mean 1991/2 - 1995/6)
- Redshank *Tringa totanus*, 1,788 individuals representing up to 1.2% of the wintering Eastern Atlantic - wintering population (5 year peak mean 1991/2 - 1995/6)
- Ringed Plover *Charadrius hiaticula*, 846 individuals representing up to 1.7% of the wintering Europe/Northern Africa - wintering population (5 year peak mean 1991/2 - 1995/6)

4.1.5. The SPA further qualifies under Article 4.2 of the Bird Directive for regularly supporting an assemblage of at least 20,000 wildfowl, with this including for Wigeon *Anas penelope*, Bar-tailed Godwit *Limosa lapponica*, Dark-bellied Brent Goose *Branta bernicla bernicla*, Ringed Plover *Charadrius hiaticula*, Grey Plover *Pluvialis squatarola*, Dunlin *Calidris alpina alpina*, Black-tailed Godwit *Limosa limosa islandica*, Redshank *Tringa totanus*, Little Grebe *Tachybaptus ruficollis*, Little Egret *Egretta garzetta*, Shelduck *Tadorna tadorna*, Curlew *Numenius arquata*, Teal *Anas crecca*, Pintail *Anas acuta*, Shoveler *Anas clypeata*, Red-breasted Merganser *Mergus serrator*, Oystercatcher *Haematopus ostralegus*, Lapwing *Vanellus vanellus*, Knot *Calidris canutus*, Sanderling *Calidris alba*, Cormorant *Phalacrocorax carbo*, and Whimbrel *Numenius phaeopus*.

4.1.6. The Natura 2000 Standard Data Form for the SPA is included at Appendix 2.

4.2. Chichester and Langstone Harbours SPA Conservation Objectives

4.2.1. The Conservation Objectives for Chichester and Langstone Harbours SPA are provided at Appendix 2 and further set out below.

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

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

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

This document should be read in conjunction with the accompanying Supplementary Advice document, which provides more detailed advice

and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

A046a *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
A048 *Tadorna tadorna*; Common shelduck (Non-breeding)
A050 *Anas penelope*; Eurasian wigeon (Non-breeding)
A052 *Anas crecca*; Eurasian teal (Non-breeding)
A054 *Anas acuta*; Northern pintail (Non-breeding)
A056 *Anas clypeata*; Northern shoveler (Non-breeding)
A069 *Mergus serrator*; Red-breasted merganser (Non-breeding)
A137 *Charadrius hiaticula*; Ringed plover (Non-breeding)
A141 *Pluvialis squatarola*; Grey plover (Non-breeding)
A144 *Calidris alba*; Sanderling (Non-breeding)
A149 *Calidris alpina alpina*; Dunlin (Non-breeding)
A157 *Limosa lapponica*; Bar-tailed godwit (Non-breeding)
A160 *Numenius arquata*; Eurasian curlew (Non-breeding)
A162 *Tringa totanus*; Common redshank (Non-breeding)
A169 *Arenaria interpres*; Ruddy turnstone (Non-breeding)
A191 *Sterna sandvicensis*; Sandwich tern (Breeding)
A193 *Sterna hirundo*; Common tern (Breeding)
A195 *Sterna albifrons*; Little tern (Breeding)
Waterbird assemblage'

- 4.2.2. The formal objectives refer to an accompanying Supplementary Advice document, *"which provides more detailed advice and information to enable the application and achievement of the Objectives set out above"*. This supplementary advice has been accessed from the Gov.uk website and has been given due regard as part of this iHRA.

4.3. Chichester and Langstone Harbours Ramsar Qualifying Features

- 4.3.1. Chichester and Langstone Harbours Ramsar site qualifies under criterion 1 on account of it comprising 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. The site qualifies under criterion 5 on account of its internationally important assemblage of waterfowl and under criterion 6 on account of it supporting populations of European importance.

- 4.3.2. The Ramsar Information Sheet for the site is included at Appendix 4.

4.4. Solent Maritime SAC Qualifying Features

- 4.4.1. The Solent Maritime SAC is a composite SAC which overlaps with the Solent and Southampton Water SPA / Ramsar along much of its extent.
- 4.4.2. The following Annex I habitats are identified as a primary reason for the selection of the SAC:

- **1130** Estuaries;
- **1320** *Spartina* swards (*Spartinion maritimae*); and
- **1330** Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*).

4.4.3. In addition, the following Annex I habitats are listed as qualifying interest features of the SAC:

- **1110** Sandbanks which are slightly covered by sea water all the time;
- **1140** Mudflats and sandflats not covered by seawater at low tide;
- **1150** Coastal lagoons;
- **1210** Annual vegetation of drift lines;
- **1220** Perennial vegetation of stony banks;
- **1310** *Salicornia* and other annuals colonizing mud and sand; and
- **2120** "Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")".

4.4.4. Furthermore, the Annex II species **1016** Desmoulin's whorl snail *Vertigo moulinsiana* is also identified as a qualifying species of the SAC (but not a primary reason for the selection of the SAC).

4.4.5. The relevant Natura Standard Data Forms are included at Appendix 3.

4.5. The Solent Maritime SAC Conservation Objectives

4.5.1. The Conservation Objectives for Solent Maritime SAC are provided at Appendix 3 and further set out below.

4.5.2. The conservation objectives for the Solent Maritime SAC are as follows:

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

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

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

Qualifying Features

H1110. Sandbanks which are slightly covered by sea water all the time

H1130. Estuaries

H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats

*H1150. Coastal lagoons**

H1210. Annual vegetation of drift lines

H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves

H1310. Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand

H1320. Spartina swards (Spartinion maritimae); Cord-grass swards

H1330. Atlantic salt meadows (Glauco-Puccinellietalia maritimae)"

- 4.5.3. The formal objectives refer to an accompanying Supplementary Advice document, *"which provides more detailed advice and information to enable the application and achievement of the Objectives set out above"*. This supplementary advice has been accessed from the Gov.uk website and has been given due regard as part of this iHRA.

4.6. Condition of SPA / SAC / Ramsar / SSSI Habitats

- 4.6.1. The Chichester and Langstone Harbours SPA / Ramsar and the Solent Maritime SAC are composite sites which are underpinned by a number of individual SSSI's.
- 4.6.2. For both the SAC and the SPA / Ramsar, the closest of these SSSI's to the Application Site (in terms of hydrological connectivity) is the Chichester Harbour SSSI, with this designated site comprising 43 management units. In total 15.26% of the SSSI is in Favourable condition, 3.56% is in Unfavourable – Recovering condition, and 81.18% of the SSSI area is identified as "Unfavourable – No change". A summary of the unit conditions is provided at Appendix 9.
- 4.6.3. The citation and Conservation Objectives for the Chichester Harbour SSSI are included at Appendix 9.

4.7. Underpinning SSSI qualifying features

- 4.7.1. The Chichester Harbour SSSI is designated on account of its extensive mud and sandflat habitat which supports an assemblage of wintering wildfowl and waders. The SSSI also supports breeding birds within the Harbour and the surroundings permanent pasture fields and woodlands.
- 4.7.2. On the basis that this SSSI (amongst others) underpin the European site designations, consideration is also given to potential effects of the proposed development on these SSSI's where relevant.

Solent and Dorset Coast pSPA

4.8. Solent and Dorset pSPA Qualifying Features

- 4.8.1. Should the pSPA be classified in due course, it is understood that it will be on the basis of the following qualifying features:
- *Sterna sandvicensis*; Sandwich tern (Breeding)
 - *Sterna hirundo*; Common tern (Breeding)
 - *Sternula albifrons*; Little tern (Breeding)
- 4.8.2. A Natura 2000 Standard Data Form has not yet been published for the pSPA, although it is noted that a 'departmental brief' has been provided to UK ministers which includes for much of the same information.
- 4.8.3. The pSPA covers a large area (89075.34ha) and includes for all or part of several other Internationally / European designated sites including the Solent Maritime SAC and Portsmouth Harbour Ramsar/SPA (which are described elsewhere in this report).

4.9. Solent and Dorset pSPA Conservation Objectives

- 4.9.1. The Conservation Objectives for the Solent and Dorset Coast pSPA are set out below.

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

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

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

Qualifying Features

*A191 *Sterna sandvicensis*; Sandwich tern (Breeding)*

*A193 *Sterna hirundo*; Common tern (Breeding)*

*A195 *Sternula albifrons*; Little tern (Breeding)'*

4.10. Condition of pSPA / SSSI

- 4.10.1. The Solent and Dorset Coast pSPA site is underpinned by a large number of SSSI's., the closest of which is Portsmouth Harbour SSSI. A summary of the condition of this SSSI is provided below (see Portsmouth Harbour SPA / Ramsar).

4.11. Underpinning SSSI qualifying features

- 4.11.1. A summary of the qualifying features is provided below ((see Portsmouth Harbour SPA / Ramsar). The citation for Portsmouth Harbour SSSI is included at Appendix 10.

Portsmouth Harbour SPA / Ramsar

4.12. Portsmouth Harbour SPA Qualifying Features

- 4.12.1. The SPA qualifies under Article 4.2 of the Bird Directive for supporting migratory populations of European importance of the following species:

- Dark-bellied Brent Goose *Branta bernicla bernicla*, 2,847 individuals representing at least 0.9% of the wintering Western Siberia/Western Europe population (5 year peak mean 1991/2 - 1995/6)
- Red-breasted Merganser *Mergus serrator* 100 individuals representing 1% of the British Population (five year period 1986/87 to 1990/91)
- Black-tailed Godwit *Limosa limosa*, 70 individuals representing over 1% of the British population (five year period 1986/87 to 1990/91)
- Dunlin *Calidris alpina alpina*, 8010 individuals representing over 1% of the British population (five year period 1986/87 to 1990/91)

- 4.12.2. The Natura 2000 Standard Data Form for the SPA is included at Appendix 5.

4.13. Portsmouth Harbour SPA Conservation Objectives

- 4.13.1. The Conservation Objectives for Portsmouth Harbour SPA are provided at Appendix 5 and further set out below.

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

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

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

This document should be read in conjunction with the accompanying Supplementary Advice document, which provides more detailed advice

and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

A046a Branta bernicla bernicla; Dark-bellied brent goose (Non-breeding)

A069 Mergus serrator; Red-breasted merganser (Non-breeding)

A149 Calidris alpina alpina; Dunlin (Non-breeding)

A156 Limosa limosa islandica; Black-tailed godwit (Non-breeding)

- 4.13.2. The formal objectives refer to an accompanying Supplementary Advice document, *"which provides more detailed advice and information to enable the application and achievement of the Objectives set out above"*. This supplementary advice has been accessed from the Gov.uk website and has been given due regard as part of this iHRA.

4.14. Portsmouth Harbour Ramsar Qualifying Features

- 4.14.1. Portsmouth Harbour Ramsar site qualifies under criterion 3 on account of the extensive intertidal mudflat areas which support Dark-bellied Brent Geese. The site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes. The site qualifies under criterion 5 on account of its internationally important assemblage of waterfowl and under criterion 6 on account of it supporting populations of international importance (i.e. Dark-bellied Brent Geese).
- 4.14.2. The Ramsar Information Sheet for the site is included at Appendix 6.

4.15. Condition of SPA / Ramsar / SSSI

- 4.15.1. The Portsmouth Harbour SPA/Ramsar site is underpinned by Portsmouth Harbour SSSI. This SSSI comprises 23 management units. In total 2.58% of the SSSI is in Favourable condition, 25.7% is in Unfavourable – Recovering condition, 71.21% of the SSSI area is identified as "Unfavourable – No change", 0.15% is identified as "Unfavourable - Declining" and 0.35% is identified as destroyed. A summary of the unit conditions is provided at Appendix 10.

4.16. Underpinning SSSI qualifying features

- 4.16.1. Portsmouth Harbour SSSI is the westernmost of three extensive and connected tidal basins – Portsmouth, Langstone and Chichester Harbours – which share physical characteristics and, in many respects, should be seen as a single biological system.
- 4.16.2. As with Chichester Harbour SSSI (detailed above), The Portsmouth Harbour SSSI is designated on account of the extensive intertidal habitat it supports (including extensive beds of eelgrasses, which in turn support shorebirds).
- 4.16.3. The citation for Portsmouth Harbour SSSI is included at Appendix 10.

Solent & Southampton Water SPA / Ramsar

4.17. Solent and Southampton SPA Qualifying Features

4.17.1. The SPA qualifies under Article 4.1 of the Bird Directive by supporting breeding populations of European importance of the following species listed on Annex 1 of the Bird Directive:

- 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);
- Mediterranean Gull *Larus melanocephalus*, 2 pairs representing at least 20.0% of the breeding population in Great Britain (5 year peak mean, 1994-1998)
- Roseate Tern *Sterna dougallii*, 2 pairs representing at least 3.3% of the breeding population in Great Britain (5 year peak mean, 1993-1997)
- Sandwich Tern *Sterna sandvicensis*, 231 pairs representing at least 1.7% of the breeding population in Great Britain (5 year peak mean, 1993-1997)

4.17.2. The SPA qualifies under Article 4.2 of the Bird Directive for supporting migratory populations of European importance of the following species.

- 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)
- 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)
- 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)
- Teal *Anas crecca*, 4,400 individuals representing at least 1.1% of the wintering North-western Europe population (5 year peak mean, 1992/3-1996/7)

4.17.3. The SPA further qualifies under Article 4.2 of the Bird Directive for regularly supporting an assemblage of at least 20,000 wildfowl, with this including for Gadwall *Anas strepera*, Teal *Anas crecca*, Ringed Plover *Charadrius hiaticula*, Black-tailed Godwit *Limosa limosa islandica*, Little Grebe *Tachybaptus ruficollis*, Great Crested Grebe *Podiceps cristatus*, Cormorant *Phalacrocorax carbo*, Dark-bellied Brent Goose *Branta bernicla bernicla*, Wigeon *Anas penelope*, Redshank *Tringa totanus*, Pintail *Anas acuta*, Shoveler *Anas clypeata*, Red-breasted Merganser *Mergus serrator*, Grey Plover *Pluvialis squatarola*, Lapwing *Vanellus vanellus*, Dunlin *Calidris alpina alpina*, Curlew *Numenius arquata*, Shelduck *Tadorna tadorna*:

4.17.4. The Natura 2000 Standard Data Form for the SPA is included at Appendix 7.

4.18. Solent and Southampton Water Ramsar Qualifying Features

4.18.1. The Solent and Southampton Water Ramsar site qualifies under criterion 1 on account of it comprising a 'major' sheltered channel between an island and the mainland, its unusual tidal flow which includes for long periods of slack water and for the range of wetland habitats it supports. The site qualifies under criterion 2 on account of its assemblage of rare plants and invertebrates, under criterion 5 on account of its internationally important assemblage of waterfowl and under criterion 6 on account of it supporting populations of European importance of 4 waterfowl species (Ringed Plover, Dark-bellied Brent Goose, Eurasian Teal and Black-tailed Godwit).

4.18.2. The Ramsar Information Sheet for the site is included at Appendix 8.

4.19. Solent and Southampton Water SPA Conservation Objectives

4.19.1. The Conservation Objectives for the Solent & Southampton Water SPA are as follows:

"With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change; Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

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

Qualifying Features:

A046a Branta bernicla bernicla; Dark-bellied brent goose (Non-breeding)

A052 Anas crecca; Eurasian teal (Non-breeding)

A137 Charadrius hiaticula; Ringed plover (Non-breeding)

A156 Limosa limosa islandica; Black-tailed godwit (Non-breeding)

A176 Larus melanocephalus; Mediterranean gull (Breeding)

A191 Sterna sandvicensis; Sandwich tern (Breeding)

A192 Sterna dougallii; Roseate tern (Breeding)

A193 Sterna hirundo; Common tern (Breeding)

A195 Sterna albifrons; Little tern (Breeding)

Waterbird assemblage"

- 4.19.2. The formal objectives refer to an accompanying Supplementary Advice document, *"which provides more detailed advice and information to enable the application and achievement of the Objectives set out above"*. This supplementary advice has been accessed from the Gov.uk website and has been given due regard as part of this iHRA.

4.20. Condition of SPA / Ramsar / SSSI

- 4.20.1. Solent and Southampton Water SPA/Ramsar site is underpinned by a number of SSSIs, the closest of which include the Lee-on-The Solent SSSI and the Hythe to Calshot Marshes SSSI.
- 4.20.2. The Lee-on-Solent SSSI comprises 27 management units. In total 73.40% of the SSSI is in Favourable condition, and 26.60% of the SSSI area is identified as "Unfavourable – No change". A summary of the unit conditions is provided at Appendix 11.
- 4.20.3. Hythe to Calshot SSSI comprises 6 management units. In total 89.35% of the SSSI is in Unfavourable – Recovering condition, with 10.65% area identified as "Unfavourable – No change". A summary of the unit conditions is provided at Appendix 11.

4.21. Underpinning SSSI qualifying features

- 4.21.1. The Lee-On-The Solent SSSI is designated on account of its extensive wetland and marine habitats which include for intertidal muds, vegetated shingle, reed bed, marshy grassland and woodland. The site is of considerable importance to waterfowl populations, nationally scarce coastal plants and benthic invertebrate communities.
- 4.21.2. The Hythe to Calshot Marshes SSSI is again designated on account of its saltmarsh, mudflats and saltmarshes, with these habitats in turn supporting nationally important populations of waterfowl.
- 4.21.3. On the basis that these SSSI designations (amongst others) underpin the European site designations, consideration is also given to potential effects of the proposed development on these SSSI's where relevant.
- 4.21.4. The citations for the relevant SSSIs are included at Appendix 11.

5. ASSESSMENT OF THE IMPLICATIONS OF THE DEVELOPMENT PROPOSALS FOR THE CONSERVATION OBJECTIVES OF THE RELEVANT EUROPEAN PROTECTED SITES.

- 5.1.1. Section 2 of this document sets out the legislation, guidance and case law of relevance to an assessment of the implications of a plan / project on a European site. Having regard to this legislation and supporting guidance it is clear that the assessment is a two stage process, the first being the 'likely significant effect' stage, the second being the 'integrity test'.
- 5.1.2. It is clear that the Conservation Objectives of the European site are the most important consideration in determining whether the plan / project will have an adverse effect on the site, including any effects on its integrity. Indeed, some guidance indicates that it is only the Conservation Objectives against which the plan / project should be tested in line with the Habitats Directive / Regulations. However, other European guidance implies that additional information is relevant.
- 5.1.3. It is evident that there is a clear hierarchical approach to assessing effects on European sites in line with the Habitats Directive / Regulations. The primary test is that against the Conservation Objectives (now updated to include specific reference to qualifying interest features) with other considerations following these. Such other considerations would include:
- Other features of interest associated with the site; and
 - Other relevant baseline information for the site.
- 5.1.4. In line with the above, whilst the qualifying interest features of the site and other baseline information have informed this assessment, the greatest weight has been placed upon the formal Conservation Objectives for the European site, as set out by Natural England.
- 5.1.5. This section includes a description of the potentially significant effects arising from the Development Proposals at the Application Site on the integrity of the Solent European Sites complex, as well as the relevant underpinning SSSIs. The potential effects are assessed within this section in order to address the test under Regulation 63 (1) in the first instance (the 'likely significant effect' stage). The assessment of potential significant effects is undertaken at this stage of the Development Proposals "alone" (i.e. not "in combination").
- 5.1.6. In undertaking this assessment, consideration has been had to the best available scientific knowledge. Further consideration under the Habitats Regulations can therefore be undertaken consistent with the Waddenzee Judgement, which requires the use of the best scientific knowledge to inform a decision where no reasonable scientific doubt remains as to the presence and / or absence of effects that would adversely affect the integrity of the designated site (see Section 2 above).

- 5.1.7. Furthermore, consideration is given to the People over Wind Judgement, which confirmed the view of the CJEU that avoidance or mitigation measures can only be taken into consideration at the Appropriate Assessment stage. This overrules the domestic Dilly Lane judgement in the High Court (see Section 2 above).
- 5.1.8. As set out in Section 2, it is appropriate to distinguish between measures which are specifically “intended to avoid or reduce the harmful effects” (i.e. mitigation measures for the purposes of an HRA) and measures which would come forward in any event (i.e. intrinsic elements of scheme design). Notwithstanding that the latter measures may, by default, avoid or reduce harmful effects on a European site(s), they are integral elements of a development proposal. It therefore remains appropriate to consider such measures at the first stage of the test (the ‘Likely Significant Effect’ stage) under Regulation 63.

Identification of Potential Impact Pathways (in the Absence of Mitigation)

- 5.1.9. The reasons for designation of the relevant European/international sites are set out in section 3 of this document, as are details regarding the distance of each designated site from the Application Site.
- 5.1.10. Noting the significant distance of all European/internationally designated sites from the Application Site, the small scale of the proposals and noting a lack of any supporting habitat/function, it is considered that there would be no direct adverse effects on the designated site through lighting, noise or air quality impacts, the loss of supporting habitat or any predation increases (e.g. due to cats).
- 5.1.11. However, noting recent Case Law and moreover in light of the evidence base collected in relation to potential impacts on European Sites in the local area, it is considered that potential impacts have the potential to arise on one or more European Sites, either through hydrological impacts/toxic contamination or disturbance effects arising from recreational pressure.
- 5.1.12. The potential harm pathways for the relevant European sites are detailed in Table 1 below.

European Sites	Potential Impact Pathway
Chichester & Langstone Harbours SPA / Ramsar	Recreational Pressure / Disturbance, Hydrological Impacts
Portsmouth Harbour SPA*	Hydrological Impacts
Solent & Southampton Water SPA*	Hydrological Impacts
Solent Maritime SAC	Recreational Pressure / Disturbance, Hydrological Impacts
Solent and Dorset Coast pSPA	Disturbance, Hydrological Impacts

Table 1. Potential pathways through which the Proposed Development result in harm to nearby European Sites

* These European Sites lie in excess of 5.6km from the Application Site and as such potential recreational impacts are not considered likely to arise as a result of the Proposed Development.

- 5.1.13. Consideration is given to each of these impact pathways below.

Hydrological impacts / Toxic Contamination

Vulnerability

- 5.1.14. Riverine and estuarine and coastal habitats are susceptible to toxic contamination, nutrient enrichment (eutrophication), sedimentation and erosion, with the latter two affecting the structure of the habitats present. Toxic contamination has the potential to kill off benthic, and other invertebrates as well as plant species. Via the uptake of toxins by these groups, knock on effects on organisms further up the food chain (e.g. birds) are also possible.

Potential Effects

- 5.1.15. An existing watercourse (e.g. ditch/stream) forms the western boundary of the Application Site. This watercourse flows north-south past the site, ultimately discharging towards Chichester & Langstone Harbours SPA / Ramsar and the Solent Maritime SAC.
- 5.1.16. Noting the hydrological connectivity between the Application Site and SPA/SAC, it is considered that activities during the construction phase could potentially result in adverse effects on the SPA/SAC (e.g. through contaminated surface water run-off).
- 5.1.17. In this regard, an Environmental Construction and Management Plan (ECMP) will form an intrinsic element of the proposed scheme. This ECMP will include a range of measures to ensure impacts on off-site habitats and features are avoided, not least measures to ensure that any contaminants and surface waters are appropriately dealt with during the construction phase. It is proposed that the production of an ECMP will be secured through an appropriately worded condition as attached to the planning consent. This will be sufficient to ensure that any potential adverse impacts may be fully avoided on the SPA/Ramsar SAC/SSSI.
- 5.1.18. For clarity, measures secured by way of the ECMP, would include the provision of spill kits to machine operators, use of interceptors / bunds where appropriate and agreed safe storage protocols for any chemicals on site. The ECMP will also secure a scheme for any disposal of contaminated waters (including run-off and contaminated drainage) that avoids potential adverse impacts arising on the SPA/Ramsar/SAC/SSSI.
- 5.1.19. On the basis that the provision of an ECMP forms an intrinsic element of scheme design, as opposed to a specific measure coming forward as mitigation for potential impacts on the SPA/SAC, it remains consistent

with the People Over Wind ruling for the measures secured under this ECMP to be considered at the first stage of Regulation 63(1), as opposed to under Appropriate Assessment.

- 5.1.20. The outline surface water drainage strategy to be adopted as part of the development proposals will utilise a Sustainable Urban Drainage System (SuDS). This SuDS strategy will utilise geocellular attenuation storage which will in turn discharge in a swale before release into the adjacent watercourse.
- 5.1.21. Water quality associated with development runoff will be managed through a series of measures, such as gully pots on highways (to remove physical sediment and contaminants) and hydrocarbon interceptors. The rate of discharge into the swale/watercourse will be regulated by hydrobrake (or similar) and maintained at current ('green field') run-off rates. The fine detail of the drainage strategy will be agreed with the Environment Agency at the detailed planning stage, providing a further level of comfort to the decision taker on this matter.
- 5.1.22. The adoption of this drainage strategy will ensure there will be no net change in infiltration volumes within the site as a result of the development proposals. This will in turn prevent any potential changes in the quantity/concentration of surface waters feeding off-site habitats (such as the SPA/SAC/SSSI).
- 5.1.23. The provision and maintenance of SuDS, which again forms an intrinsic element of scheme design as opposed to mitigation for European sites per se, will therefore ensure that potential impacts arising from surface water run-off in the operational phase of the development are fully avoided.
- 5.1.24. In terms of foul water drainage, the proposed development will be connected to the existing public sewer network. Southern Water have undertaken a sewer capacity check and have confirmed that there is sufficient capacity in the local sewer network. Given its proximity to the site, it is considered likely that wastewater will be treated at Thornham Waste Water Treatment Works.
- 5.1.25. The development site also falls within the Chichester, Langstone and Portsmouth Harbours Eutrophic Nitrate Vulnerable Zone (NVZ). New development with this NVZ has the potential to create an adverse in-combination effect on the SPA/SAC by further increasing nitrogen and phosphorus levels in the water environment, causing increased levels of eutrophication.
- 5.1.26. In June 2019, Natural England published interim advice on achieving nutrient neutrality for new development within the Solent region. The aim of this interim advice is to ensure that development does not 'add to the existing nutrient burdens', providing certainty that the whole of the scheme is deliverable in line with requirements of the Conservation of Habitats and Species Regulations 2017 (as amended). The advice includes guidance on assessing a developments' likely nitrogen budget through a nutrient neutrality calculation.

5.1.27. In light of the above, Havant Borough Council have produced a Nutrient Neutrality Position Statement, an interim strategic approach prepared in line with the methodology and supplementary advice from Natural England (and Southern Water).

5.1.28. The nitrogen budget for the development scheme is presented in Table 1 below.

Stage 1	Calculate Wastewater Total Load from Proposed Development	
A	Net No of new Houses	16
B	Average population per dwelling	2.4
C	Additional Population arising from new development (AxB)	38.4
D	Maximum Water use per day (Litres per person per day)	110
E	Permit Limit for total nitrogen at Thornham (mg/1)	9
F	Sewage treatment works operate at 90% of its permitted limit	8.1
G	Wastewater generated by the proposed development (CxD)	4224
H	Total Annual Nitrogen discharged after treatment at Sewerage works (FxG) (mg/day)	34214
	Total Annual Nitrogen discharged after treatment at sewage works (H /,1000,000 x 365) (kg/year)	12.49
Stage 2	Calculation of Nitrogen Load from Current Land Use	
I	Total Area of existing agricultural land to be lost due to the development (HA)	0.93
J	Nitrate loss for farm type (average category applied) (kg/ha/yr)	13
	Total Nitrogen load of current agricultural land uses (I x J) (kg/yr)	12.09
Stage 3	Calculation of the nitrogen from the new development	
K	Area of land occupied by new urban development (ha)	0.52
L	Total nitrogen load from new urban development at a rate of 14.3kg/ha/yr (K x 14.3)	7.436
M	Area of land occupied by new SANG / Open Space (HA)	0
N	Total nitrogen from new SANG / open space at a rate of 13kg/ha/yr (M x 13)	0
	Total nitrogen from the development not passing through WWTW (L + N) (kg/yr)	7.436
Stage 4	Calculate Net Change in Nitrogen Load	
	Stage 3 Total minus Stage 2 Total	-4.654
Stage 5	Total Nitrogen Load (12.49) + Total Nitrogen Offset (-4.654) = Nitrogen Budget	7.836

Table 1. Nitrogen Budget for the Proposed Development

5.1.29. As shown in Table 1 above, the nitrogen budget for the development scheme is +7.836. In line with Natural England's interim guidance

Nitrogen surplus (a positive figure), will require mitigation to achieve nitrogen neutrality.

- 5.1.30. In line with Havant Borough Councils Nutrient Neutrality Position Statement, an avoidance and mitigation package will be delivered with the development and secured via a Grampian Condition.
- 5.1.31. The adoption of the strategic mitigation, as set out within Havant Borough Council's Position Statement on Nutrient Neutral Development, would be sufficient to ensure that the development proposals will avoid any potential significant adverse effects upon the Solent European Sites. At worst, the plan / project would give rise to effects which would be classed as de minimis.
- 5.1.32. Notwithstanding the above, in order to ensure compliance with adopted case law (People Over Wind), mitigation measures cannot be considered at the first stage of Regulation 63(1). The correct procedural approach is for such mitigation to be considered at the second stage of the test (i.e. to proceed to an Appropriate Assessment). Such an assessment is undertaken in Section 6 of this iHRA.

Disturbance effects from Recreational Pressure

Vulnerability

- 5.1.33. With respect to disturbance of bird species, recreational disturbance has the potential to displace birds either temporarily or sometimes permanently. If such disturbance is continuous, or very frequent, it could cause the habitat to become unsuitable for birds, resulting in an effect on their distribution in the immediate locality. This type of disturbance is most likely to occur near to well-used footpaths and may result from a range of recreational uses.
- 5.1.34. The level of disturbance to wetland bird species varies according to the activity undertaken. It is generally recognised that dog walking has the greatest potential to lead to disturbance of birds, especially where dogs are off the lead. However, such disturbance is still typically focused along accessible rights of way, particularly where access into the European sites is restricted for both people and dogs.
- 5.1.35. Consideration must also be afforded to particularly sensitive periods for disturbance. During Winter, birds are susceptible to adverse effects through disturbance due to food sources being scarcer and efficient use of energy being of heightened importance to survival. During the breeding season, disturbance can result in adult birds being flushed from nests, leaving eggs or young exposed to the elements and predation. Prolonged or repeated disturbance can cause the adults to abandon a nest site.

Potential Effects

- 5.1.36. Given the relatively small scale of the development proposals (16 units) and given that the wider site will include for the delivery of public open space as well as provide connections to existing, highly desirable public, it is not considered that the development alone would have the potential to give rise to any significant recreational impacts when considered alone.
- 5.1.37. However, and as set out in Section 2 of this iHRA, the Application Site lies within a Zone of Influence (Zol) within which an emerging evidence base has demonstrated the potential for in-combination recreational impacts to arise as a result of new residential development. Specifically, the Application Site lies within a Zol of Chichester & Langstone Harbours SPA.
- 5.1.38. In accordance with this evidence base, mitigation would be required, on a precautionary basis, to ensure that potential in-combination effects as a result of new residential development do not arise.
- 5.1.39. The Partnership for Urban South Hampshire (PUSH), comprising twelve South Hampshire local authorities (including Havant) has identified a strategic approach to mitigating potential recreational impacts through the Solent Recreation Mitigation Strategy (SRMS).
- 5.1.40. The strategic approach proposed includes monetary 'developer contributions' for the strategic mitigation of recreational pressures. The combined funds will then be utilised for:
- *A team of rangers*
 - *Communications, marketing and education initiatives*
 - *Initiatives to facilitate and encourage responsible dog walking*
 - *Codes of conduct*
 - *Site-specific visitor management and bird refuge projects*
 - *New/enhanced strategic greenspaces*
 - *A delivery officer (called 'Partnership Manager' from here on)*
 - *Monitoring to help adjust the mitigation measures as necessary.*
- 5.1.41. The adoption of the strategic mitigation, as set out within the SRMS, would be sufficient to ensure that the development proposals will avoid any potential significant adverse effects upon SPA/SAC/SSSI. At worst, the plan / project would give rise to effects which would be classed as de minimis.
- 5.1.42. Notwithstanding the above, in order to ensure compliance with adopted case law (People Over Wind), mitigation measures cannot be considered at the first stage of Regulation 63(1). The correct procedural approach is for such mitigation to be considered at the second stage of the test (i.e. to proceed to an Appropriate Assessment). Such an assessment is undertaken in Section 6 of this IAA.

Summary

- 5.1.43. Through adoption of appropriate mitigation measures (which form intrinsic elements of the scheme) in respect of potential hydrological impacts arising from surface waters potential impacts arising from these pathways can be fully avoided. As such there would be no potential for any adverse effects to arise through these pathways either alone or in combination with other plans or projects.
- 5.1.44. In respect of potential wastewater impacts, the Proposed Development would give rise to a residual net gain in nutrients (Nitrogen) entering the Solent European Sites. The adoption of the strategic mitigation, as set out within Havant Borough Council's Position Statement on Nutrient Neutral Development, would be sufficient to ensure that the development proposals will avoid any potential significant adverse effects upon the Solent European Sites. At worst, the plan / project would give rise to effects which would be classed as de minimis.
- 5.1.45. Notwithstanding the above, in order to ensure compliance with adopted case law (People Over Wind), mitigation measures cannot be considered at the first stage of Regulation 63(1). The correct procedural approach is for such mitigation to be considered at the second stage of the test (i.e. to proceed to an Appropriate Assessment). Such an assessment is undertaken in Section 6 of this iHRA.
- 5.1.46. In respect of recreational impacts, given the scale of the scheme and noting that significant recreational opportunities will be delivered / facilitated by the proposals, it is not considered likely that significant recreational impacts may arise on the SPA/SAC when considered alone. Nonetheless, noting the potential for adverse impacts in-combination, appropriate mitigation is proposed on a precautionary basis to mitigate any potential for minor increases in recreational pressure. This mitigation is considered in Section 6 of this report.

6. APPROPRIATE ASSESSMENT

- 6.1.1. As outlined in section 5 above, a range of measures are to be adopted to avoid potential impacts on off-site receptors (including the Solent European Sites complex).
- 6.1.2. These measures include for the delivery and maintenance of SUDS as well as the adoption of an ECMP, form an integral element of scheme design, it is considered appropriate for these to be considered at the 'screening stage' of Regulation 63 as opposed to needing to be considered as part of an Appropriate Assessment.
- 6.1.3. Notwithstanding this position, should Cornwall Council take an alternative view as to when these measures should be considered, the information provided in section 5 would provide them with all the relevant information they require when undertaking their own Appropriate Assessment as the Competent Authority.
- 6.1.4. Taking a precautionary stance, and in line with adopted planning policy and interim guidance in relation to avoiding significant adverse effects on the European designated sites as a result of both recreational pressure and wastewater impacts (nutrient enrichment / eutrophication), a package of mitigation/avoidance measures is proposed.
- 6.1.5. Measures in relation to achieving nutrient neutrality are proposed in respect of Solent Maritime SAC, Solent and Dorset Coast pSPA, Portsmouth Harbour SPA and Solent & Southampton Water SPA. Measures in relation to avoiding adverse recreational impacts are proposed for Chichester & Langstone Harbours SPA.
- 6.1.6. As set out in section 5, a strategic avoidance and mitigation strategy has been identified by Havant Borough Council in respect of both potential impact pathways (nutrient enrichment and recreational pressure).
- 6.1.7. New developments which comply with these strategic approaches will therefore avoid giving rise to adverse recreational impacts on European sites.

Nutrient Enrichment / Eutrophication

- 6.1.8. The proposed development will comply with the interim strategic strategy as proposed by Havant Borough Council within their Position Statement on Nutrient Neutral Development. For clarity, the applicant agrees to the use of a Grampian condition which will secure the delivery of appropriate mitigation prior to occupation of any developments.
- 6.1.9. To this end, the applicant has signed a European Site avoidance and mitigation checklist, as required by Havant Borough Council. This document is provided at Appendix 12.

Recreational Pressure

- 6.1.10. The proposed development will comply with the Solent Recreation Mitigation Strategy and will provide an appropriately scaled financial contribution towards strategic mitigation measures. This financial contribution will accord with that set out within Havant Borough Council's European Site avoidance and mitigation checklist, a signed copy of which is provided at Appendix 12.
- 6.1.11. Taking into account the package of measures proposed, it is considered that the development proposals will avoid any potential significant adverse effects on any European Sites when the project is considered alone. At worst, the plan / project would give rise to effects which would be classed as de minimis.

Specific consideration of the In-Combination Test

- 6.1.12. It is considered by Ecology Solutions that the potential effects identified in relation to the development proposals will be avoided or mitigated through the implementation of the measures set out in this iHRA, such that there would be no significant residual adverse effects on the Solent European Sites, their underpinning SSSIs, or indeed any other European designated sites when the plan / project is considered alone. In this light, as made clear by Lord Justice Sales in the Exminster Judgment, in combination effects would not be possible.
- 6.1.13. Since Development Proposals are scrutinised so carefully by Competent Authorities and the relevant Statutory Authorities in light of the Habitats Regulations, recent case law and guidance, it is not likely that another plan / project would come forward without sufficient mitigation or avoidance measures to offset any perceived deleterious effects on a European designated site.
- 6.1.14. Plans / projects which come forward in the local area do so through the agreement, with Natural England and Havant Borough Council, of a package of measures designed to avoid adverse effects on European designated sites, such that a lawful consent can be granted. To this end, all new residential schemes in the local area need to come forward with appropriate avoidance / mitigation package in line with the SRMS as well as appropriate measures to ensure a net gain in nutrient discharge in the Solent is avoided.
- 6.1.15. On the basis that all relevant development proposals will provide appropriate mitigation / avoidance measures, where necessary in line with a strategic package of measures (in relation to potential in combination effects), as agreed with Natural England, it is therefore concluded that there would not be any potential significant in-combination effects on any of the Solent European Sites.
- 6.1.16. As the project alone or in combination would not contribute to an overall significant effect that may have an adverse effect on the integrity of the Solent European Sites, the approved scheme would by definition be

acceptable, subject to securing the mitigation and avoidance measures proposed.

- 6.1.17. It is therefore concluded that the approved scheme would by definition be acceptable under the tests of the Habitats Regulations and therefore in those terms it is considered that the Competent Authority could legally and safely grant a habitats approval under the Habitats Regulations 2017 for the proposed plan / project.

Summary Conclusion of Appropriate Assessment

- 6.1.18. Having considered all of the potential significant effects that could arise from the Development Proposals, in light of the avoidance and mitigation measures which form an integral part of the application, Ecology Solutions conclude that the proposals would not be likely to give rise to a significant effect on the integrity of the Solent European Sites (nor any other European designated site) when the Development Proposals are considered either alone or in combination with other plans or projects. No additional adverse impacts have been identified in relation to any of the SSSI's which underpin the designations of the European designated sites considered within this document no additional mitigation would be required.

7. SUMMARY AND CONCLUSIONS

- 7.1.1. Ecology Solutions has undertaken a detailed assessment of the implications of the Development Proposals on Chichester & Langstone Harbours SPA, Solent Maritime SAC, Solent and Dorset Coast pSPA, Portsmouth Harbour SPA and Solent & Southampton Water SPA. This assessment has been made in view of the European sites conservation objectives. These sites have together been collectively termed the Solent European Sites for the purpose of this iHRA
- 7.1.2. The findings of this work are set out within this Information to enable a Habitats Regulations Assessment document, such that the competent authority, in exercising its duties under the Habitats Regulations, has all the necessary information before it to considering the application.
- 7.1.3. Assessment under Regulation 63 of the Habitats Regulations is required in this instance, primarily on account of the Application Sites proximity to the aforementioned European/international designated sites. Consideration has also been given to any additional impacts which could arise in relation to the SSSI's which underpin these European sites, wherever relevant.
- 7.1.4. All relevant potential pathways for significant effects to arise on the European designated site as a result of the approved scheme have been fully examined, initially in the absence of avoidance / mitigation measures (at the 'likely significant effect' stage) and subsequently taking into account the package of measures proposed (at the 'Appropriate Assessment' stage). This assessment has been undertaken with due regard to relevant legislation, case law and planning decisions, guidance and information provided by Natural England.
- 7.1.5. Mitigation / avoidance measures, which are integral to the scheme have been highlighted in order to address any perceived adverse effects on qualifying interest features associated with the designated sites. Moreover, the proposed development will provide mitigation in accordance with adopted strategic mitigation approaches in respect of potential recreational impacts, as well as potential nutrient enrichment within the Solent European Sites.
- 7.1.6. Having considered all of the potential significant effects that could arise from the approved scheme, in light of the avoidance and mitigation measures proposed, Ecology Solutions conclude that the proposals would not result in any adverse effects on the integrity of the Solent European Sites (in view of the sites' conservation objectives), when the approved scheme is considered alone or in combination with other plans or projects.
- 7.1.7. As such, the approved scheme would, by definition, be acceptable subject to securing the mitigation and avoidance measures proposed. In those terms the competent authority could legally and safely grant a habitats approval under the Habitats Regulations 2017 for the proposed plan/project.

PLANS AND APPENDICES

PLANS

PLAN ECO1

Application Site Location

In Relation To European Designated Sites



KEY:

- APPLICATION SITE
- SPECIAL PROTECTION AREA (SPA) / RAMSAR SITE
- SPECIAL AREA OF CONSERVATION (SAC)
- SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)



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7723: LAND AT HORNDEN ROAD,
EMSWORTH

PLAN ECO1: APPLICATION SITE
LOCATION IN RELATION TO
RELEVANT DESIGNATED SITES

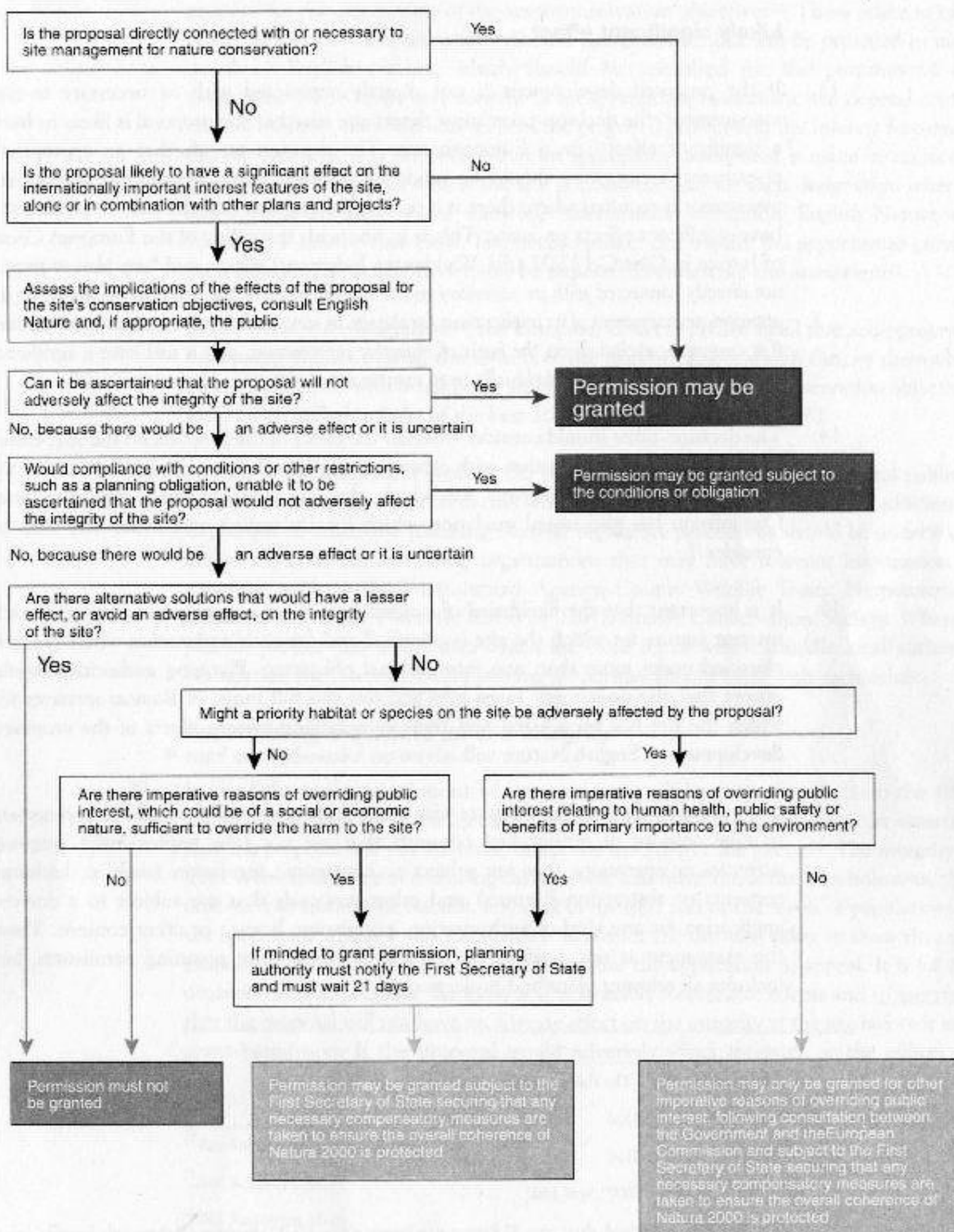
Rev: A
July 2019

APPENDICES

APPENDIX 1

Flow Diagram From ODPM/Defra Circular

Figure 1: Consideration of development proposals affecting Internationally Designated Nature Conservation Sites



APPENDIX 2

Chichester and Langstone Harbours SPA Citation,
Natura 2000 Standard Data Form and
Conservation Objectives

NATURA 2000 – STANDARD DATA FORM

Special Protection Areas under the EC Birds Directive.

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

22/12/2015

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

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

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

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

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

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

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



NATURA 2000 - STANDARD DATA FORM

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

SITE UK9011011
SITENAME Chichester and Langstone Harbours

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

1. SITE IDENTIFICATION

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

Chichester and Langstone Harbours

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

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

1.7 Site indication and designation / classification dates

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

2. SITE LOCATION

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2.1 Site-centre location [decimal degrees]:

Longitude

-0.92

Latitude

50.80638889

2.2 Area [ha]:

5810.95

2.3 Marine area [%]

87.8

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

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

2.6 Biogeographical Region(s)

Atlantic (100.0
%)

3. ECOLOGICAL INFORMATION

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

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

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

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

3.3 Other important species of flora and fauna (optional)

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

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

4. SITE DESCRIPTION

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4.1 General site character

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

Other Site Characteristics

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

4.2 Quality and importance

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

4.3 Threats, pressures and activities with impacts on the site

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

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

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

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

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

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

i = inside, o = outside, b = both

4.5 Documentation

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

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

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

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

5. SITE PROTECTION STATUS (optional)

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5.1 Designation types at national and regional level:

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

6. SITE MANAGEMENT

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6.1 Body(ies) responsible for the site management:

Organisation:	Natural England
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☐	Yes
☐	No, but in preparation
☒	No

6.3 Conservation measures (optional)

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EXPLANATION OF CODES USED IN THE NATURA 2000 STANDARD DATA FORMS

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

1.1 Site type

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

3.1 Habitat representativity

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

3.1 Habitat code

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

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

3.1 Relative surface

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

3.1 Conservation status habitat

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

3.1 Global grade habitat

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

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

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

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

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

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

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

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

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

3.3 Assemblages types

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

4.1 Habitat class code

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

4.3 Threats code

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

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

5.1 Designation type codes

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

EC Directive 79/409 on the Conservation of Wild Birds: Special Protection Area

CHICHESTER AND LANGSTONE HARBOURS (HAMPSHIRE/WEST SUSSEX)

The site is internationally important because it regularly supports more than 10,000 wintering wildfowl (average 25,000) and also by regularly supporting more than 20,000 wintering waders (average 77,000).

The site also supports internationally important numbers of the following species: grey plover Pluvialis squatarola (3.9% of the west European population), sanderling Caldris alba (3.1%), dunlin Caldris alpina (2.6% and over 20,000 birds), redshank Tringa totanus (1.4%), brent goose Branta bernicla (12%), shelduck Tadorna tadorna (4%), and teal Anas crecca (1%).

The site qualifies under Article 4.2 by supporting internationally important numbers of the migratory bird species listed above and nationally important wintering numbers of the following migratory bird species: ringed plover Charadrius hiaticula, curlew Numerius arquata, bar-tailed godwit Limosa lapponica, turnstone Arenaria interpres, wigeon Anas penelope, pintail Anas acuta, shoveler Anas clypeata and the red-breasted merganser Mergus serrator.

The site also qualifies under Article 4.1 because it provides a breeding site for three species of terns Sterna.

This citation / map relates to a site entered in
the Register of European sites for Great Britain.
Register reference number UK 001101
Date of registration 30 JAN 1996

Signed 
on behalf of the Secretary of State for the Environment

European Site Conservation Objectives for Chichester and Langstone Harbours Special Protection Area Site Code: UK9011011



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

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

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

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

Qualifying Features:

- A046a *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- A048 *Tadorna tadorna*; Common shelduck (Non-breeding)
- A050 *Anas penelope*; Eurasian wigeon (Non-breeding)
- A052 *Anas crecca*; Eurasian teal (Non-breeding)
- A054 *Anas acuta*; Northern pintail (Non-breeding)
- A056 *Anas clypeata*; Northern shoveler (Non-breeding)
- A069 *Mergus serrator*; Red-breasted merganser (Non-breeding)
- A137 *Charadrius hiaticula*; Ringed plover (Non-breeding)
- A141 *Pluvialis squatarola*; Grey plover (Non-breeding)
- A144 *Calidris alba*; Sanderling (Non-breeding)
- A149 *Calidris alpina alpina*; Dunlin (Non-breeding)
- A157 *Limosa lapponica*; Bar-tailed godwit (Non-breeding)
- A160 *Numenius arquata*; Eurasian curlew (Non-breeding)
- A162 *Tringa totanus*; Common redshank (Non-breeding)
- A169 *Arenaria interpres*; Ruddy turnstone (Non-breeding)
- A191 *Sterna sandvicensis*; Sandwich tern (Breeding)
- A193 *Sterna hirundo*; Common tern (Breeding)
- A195 *Sterna albifrons*; Little tern (Breeding)

Waterbird assemblage

This is a European Marine Site

This SPA is a part of the Solent Maritime European Marine Site (EMS). These Conservation Objectives should be used in conjunction with the Conservation Advice document for the EMS. Natural England's formal Conservation Advice for European Marine Sites can be found via [GOV.UK](https://www.gov.uk).

Explanatory Notes: European Site Conservation Objectives

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 (as amended) ('the Habitats Regulations'). They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives, and the accompanying Supplementary Advice (where this is available), will also provide a framework to inform the management of the European Site and the prevention of deterioration of habitats and significant disturbance of its qualifying features

These Conservation Objectives are set for each bird feature for a [Special Protection Area \(SPA\)](#).

Where these objectives are being met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

Publication date: 21 February 2019 (version 3). This document updates and replaces an earlier version dated 30 June 2014 to reflect the consolidation of the Habitats Regulations in 2017.

APPENDIX 3

Solent Maritime SAC Natura 2000

Standard Data Forms and Conservation Objectives

NATURA 2000 – STANDARD DATA FORM

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

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

22/12/2015

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

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

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

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

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

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

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



NATURA 2000 - STANDARD DATA FORM

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

SITE UK0030059
SITENAME Solent Maritime

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

1. SITE IDENTIFICATION

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

Solent Maritime

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

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

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

2. SITE LOCATION

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

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

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

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

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

4. SITE DESCRIPTION

4.1 General site character

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Habitat class	% Cover
N02	59.0
N03	23.0
N16	0.5

N01	14.0
N05	3.0
N04	0.5
Total Habitat Cover	100

Other Site Characteristics

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

4.2 Quality and importance

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

4.3 Threats, pressures and activities with impacts on the site

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

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

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

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

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

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

i = inside, o = outside, b = both

4.5 Documentation

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

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

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

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

5. SITE PROTECTION STATUS (optional)

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5.1 Designation types at national and regional level:

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

6. SITE MANAGEMENT

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6.1 Body(ies) responsible for the site management:

Organisation:	Natural England
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☐	Yes
☐	No, but in preparation
☒	No

6.3 Conservation measures (optional)

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

EXPLANATION OF CODES USED IN THE NATURA 2000 STANDARD DATA FORMS

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

1.1 Site type

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

3.1 Habitat representativity

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

3.1 Habitat code

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

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

3.1 Relative surface

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

3.1 Conservation status habitat

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

3.1 Global grade habitat

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

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

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

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

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

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

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

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

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

3.3 Assemblages types

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

4.1 Habitat class code

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

4.3 Threats code

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

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

5.1 Designation type codes

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

EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora

Citation for Special Area of Conservation (SAC)

Name:	Solent Maritime
Unitary Authority/County:	City of Portsmouth, City of Southampton, Hampshire, Isle of Wight, West Sussex
SAC status:	Designated on 1 April 2005
Grid reference:	SU756003
SAC EU code:	UK0030059
Area (ha):	11325.09
Component SSSI:	Bouldnor and Hamstead Cliffs SSSI, Chichester Harbour SSSI, Eling and Bury Marshes SSSI, Hurst Castle and Lymington River Estuary SSSI, Hythe to Calshot Marshes SSSI, King's Quay Shore SSSI, Langstone Harbour SSSI, Lee-on-the-Solent to Itchen Estuary SSSI, Lincegrove and Hackett's Marshes SSSI, Lower Test Marshes SSSI, Medina Estuary SSSI, Newtown Harbour SSSI, North Solent SSSI, Thorness Bay SSSI, Upper Hamble Estuary and Woods SSSI, Yar Estuary SSSI

Site description:

The Solent encompasses a major estuarine system on the south coast of England with four coastal plain estuaries (Yar, Medina, King's Quay Shore, Hamble) and four bar-built estuaries (Newtown Harbour, Beaulieu, Langstone Harbour, Chichester Harbour). The Solent and its inlets are unique in Britain and Europe for their hydrographic regime with its double tides, as well as for the complexity of the marine and estuarine habitats present within the area.

Sediment habitats within the estuaries include extensive estuarine flats, intertidal areas that support eelgrass *Zostera* spp., sand and shingle spits, and natural shoreline transitions. The mudflats range from low and variable salinity in the upper reaches of the estuaries to very sheltered almost fully marine muds in Chichester and Langstone Harbours. As well as occurring within the estuaries, mudflats and sandflats are found throughout the Solent and form the predominant intertidal substrates. Unusual features include the presence of very rare sponges in the Yar estuary and a sandy 'reef' of the polychaete *Sabellaria spinulosa* on the steep eastern side of the entrance to Chichester Harbour.

Shallow sediment communities (comprising the subtidal sandbanks feature) occur around the Solent, particularly in the large harbours. They are typically colonised by a burrowing fauna of worms, crustaceans, bivalve molluscs and echinoderms. Where coarse stable material is present, species attached to the surface may include foliose algae, hydroids, bryozoans and ascidians. Mixtures of sand and associated hard substrate can lead to the presence of very rich communities. Mobile fauna at the surface of the sandbanks may include shrimps, prosobranch molluscs, crabs and fish. Shallow sandy sediments may be important nursery areas for fish and feeding grounds for seabirds.

Pioneer saltmarsh vegetation colonises intertidal mud and sandflats in areas protected from strong wave action. This habitat is dominated by open stands of glasswort *Salicornia* spp. or annual sea-blite *Suaeda maritima*. It occurs within pioneer marsh communities along the lower marsh and at the lower limits of tidal inundation, as well as in small depressions or saltpans in the upper and middle saltmarsh, or in narrow strips running along the margins of

rivulets and creeks within the saltmarsh. This is one of only two sites where significant amounts of the native cordgrass species, small cord-grass *S. maritima* are found. It is also the only site for the naturalised North American species, smooth cord-grass *Spartina alterniflora* in the UK, and one of the few remaining sites for Townsend's cord-grass *S. x townsendii*. There are also extensive areas of common cord-grass *Spartina anglica* throughout the site. Thus all four cord-grass taxa occur here in close proximity.

The Solent contains the second-largest aggregation of Atlantic salt meadows in south and south-west England. The salt meadows are representative of the ungrazed type and support a range of communities dominated by sea-purslane *Atriplex portulacoides*, common sea-lavender *Limonium vulgare* and thrift *Armeria maritima*. In general, the salt meadow is somewhat less truncated by man-made features in the Solent than other parts of the south coast. In places such as Chichester Harbour it shows rare and unusual transitions to freshwater reedswamp and alluvial woodland as well as coastal grassland. Typical Atlantic salt meadow is still widespread in this site, despite a long history of colonisation by cord-grass *Spartina* spp.

Driftline habitats support a number of specialist plant species and can be found on a variety of coarse substrates across the Solent, including shingle beaches, shingle spits, shingle islands and chenier banks (formed by the deposition of broken shells by wave action on the saltmarsh edge). A transition is found in many areas from vegetated shingle to saltmarsh. Two important driftline communities can be identified. The first is dominated by spear-leaved orache *Atriplex prostrata* or grass-leaved orache *A. littoralis* on the seaward edge of the shingle. The second are sea sandwort *Honkenya peploides* – sea rocket *Cakile maritima* strandline communities with perennial associations of sea mayweed *Tripleurospermum maritimum*, curled dock *Rumex crispus*, sea beet *Beta vulgaris* ssp. *maritima*, sea campion *Silene uniflora* and yellow-horned poppy *Glaucium flavum*.

On more stable (typically landward) shingle or stony substrates, additional perennial species are found (these communities comprise the perennial vegetation of stony banks feature). There are at least four distinct community types present within the Solent including a specialised community characterised by hare's-foot clover *Trifolium arvense* occurring with lichens and mosses. Sites such as Calshot Spit and Chichester Harbour are important locations for this feature.

The site supports a number of coastal lagoons both on the Isle of Wight and along the Hampshire coast. This suite of lagoons provides examples of a variety of successional stages and salinity regimes including quite brackish conditions. Some of the lagoons support specialised invertebrates such as the nationally rare insensible shrimp *Gammarus insensibilis* occurring at Yar Bridge lagoon on the Isle of Wight.

The extensive sand dunes at East Head at the mouth of Chichester Harbour are dominated by marram grass *Ammophila arenaria*. There are also accreting sand dunes found at Pilsey Island in Chichester Harbour.

Desmoulin's whorl snail *Vertigo moulinsiana*, which is rare in Great Britain and usually occurs within base-rich wetlands where there are long established swamps, fens and marshes, is found in the reedbeds at the top of Fishbourne channel in Chichester Harbour.

Qualifying habitats: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Annual vegetation of drift lines
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- Coastal lagoons*
- *Spartina* swards (*Spartinion maritimae*). (Cord-grass swards)
- Estuaries
- Mudflats and sandflats not covered by seawater at low tide. (Intertidal mudflats and sandflats)
- Perennial vegetation of stony banks. (Coastal shingle vegetation outside the reach of waves)
- *Salicornia* and other annuals colonising mud and sand. (Glasswort and other annuals colonising mud and sand)
- Sandbanks which are slightly covered by sea water all the time. (Subtidal sandbanks)
- Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes). (Shifting dunes with marram)

Qualifying species: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:

- Desmoulin's whorl snail *Vertigo moulinsiana*

Annex I priority habitats are denoted by an asterisk (*).

This citation relates to a site entered in the Register of European Sites for Great Britain.

Register reference number: UK0030059

Date of registration: 14 June 2005

Signed: *Trevor Salmon*

On behalf of the Secretary of State for Environment,
Food and Rural Affairs

European Site Conservation Objectives for Solent Maritime Special Area of Conservation Site Code: UK0030059



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

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

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

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

Qualifying Features:

H1110. Sandbanks which are slightly covered by sea water all the time

H1130. Estuaries

H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats

H1150. Coastal lagoons*

H1210. Annual vegetation of drift lines

H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves

H1310. *Salicornia* and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand

H1320. *Spartina* swards (*Spartinion maritimae*); Cord-grass swards

H1330. Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

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

S1016. *Vertigo moulinsiana*; Desmoulin's whorl snail

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

This is a European Marine Site

This site is a part of the Solent Maritime European Marine Site. These Conservation Objectives should be used in conjunction with the Conservation Advice document for the EMS. Natural England's formal Conservation Advice for European Marine Sites can be found via [GOV.UK](https://www.gov.uk).

*** Priority natural habitats or species**

Some of the natural habitats and species for which UK SACs have been selected are considered to be particular priorities for conservation at a European scale and are subject to special provisions in the Habitats Regulations. These priority natural habitats and species are denoted by an asterisk (*) in Annex I and II of the Habitats Directive. The term 'priority' is also used in other contexts, for example with reference to particular habitats or species that are prioritised in UK Biodiversity Action Plans. It is important to note however that these are not necessarily the priority natural habitats or species within the meaning of the Habitats Regulations.

Explanatory Notes: European Site Conservation Objectives

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 as amended from time to time (the "Habitats Regulations"). They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment', including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where available) will also provide a framework to inform the measures needed to conserve or restore the European Site and the prevention of deterioration or significant disturbance of its qualifying features.

These Conservation Objectives are set for each habitat or species of a [Special Area of Conservation \(SAC\)](#). Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving Favourable Conservation Status for that species or habitat type at a UK level. The term 'favourable conservation status' is defined in regulation 3 of the Habitats Regulations.

Publication date: 27 November 2018 (version 3). This document updates and replaces an earlier version dated 30 June 2014 to reflect the consolidation of the Habitats Regulations in 2017.

APPENDIX 4

Chichester and Langstone Harbours

Ramsar Information Sheet

Information Sheet on Ramsar Wetlands (RIS)

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

Notes for compilers:

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

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

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

FOR OFFICE USE ONLY.

DD MM YY

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

Designated: 28 October 1987

3. Country:

UK (England)

4. Name of the Ramsar site:

Chichester and Langstone Harbours

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

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

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

a) Site boundary and area:

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

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

7. Map of site included:

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

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

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

b) Describe briefly the type of boundary delineation applied:

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

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

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

8. Geographical coordinates (latitude/longitude):

50 48 23 N 00 55 12 W

9. General location:

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

Nearest town/city: Portsmouth

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

Administrative region: Hampshire; West Sussex

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

Min. -2
Max. 4
Mean 0

12. General overview of the site:

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

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

13. Ramsar Criteria:

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

1, 5, 6

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

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

Ramsar criterion 1

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

Ramsar criterion 5

Assemblages of international importance:

Species with peak counts in winter:

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

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

Qualifying Species/populations (as identified at designation):

Species with peak counts in spring/autumn:

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

Species with peak counts in winter:

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

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

Species regularly supported during the breeding season:

Little tern , <i>Sterna albifrons albifrons</i> , W Europe	130 apparently occupied nests, representing an average of 1.1% of the breeding population (Seabird 2000 Census)
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Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

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

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

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

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

16. Physical features of the site:

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

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

General description of the Physical Features:

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

17. Physical features of the catchment area:

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

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

18. Hydrological values:

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

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

19. Wetland types:

Marine/coastal wetland

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

20. General ecological features:

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

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

Ecosystem services

21. Noteworthy flora:

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

Nationally important species occurring on the site.

Higher plants.

Polypogon monspeliensis, *Zostera angustifolia*, *Zostera marina*, *Zostera noltei*

22. Noteworthy fauna:

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

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

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

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

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

Species with peak counts in spring/autumn:

Little egret , *Egretta garzetta*, West Mediterranean

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

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

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

Whimbrel , *Numenius phaeopus*, Europe/Western Africa

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

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

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

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

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

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

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

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

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

Species with peak counts in winter:

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

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

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

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

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

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

Eurasian teal , *Anas crecca*, NW Europe

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

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

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

Water rail , *Rallus aquaticus*, Europe

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

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

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

Species Information

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

23. Social and cultural values:

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

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

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

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

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

24. Land tenure/ownership:

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

25. Current land (including water) use:

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

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

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

Explanation of reporting category:

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

NA = Not Applicable because no factors have been reported.

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

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?

Erosion - Coastal Defence Strategies, regulation of private coastal defences, shoreline management plans are in place or are being developed.

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

Is the site subject to adverse ecological change? YES

27. Conservation measures taken:

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

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

b) Describe any other current management practices:

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

28. Conservation measures proposed but not yet implemented:

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

No information available

29. Current scientific research and facilities:

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

Contemporary.

Fauna.

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

Bird Ringing by Solent Shorebirds Study Group.

Environment.

Coastal Sediment (SCOPAC)

Water Quality/Eutrophication (EA/Southern Water).

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

Flora.

Spartina survey (EN project).

Completed.

Environment.

Extensive research and survey into:

Tidal regimes.

Proposed:

Intertidal Habitat Monitoring (EN/EA project).

Sediment movement.

Flora and Fauna.

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

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

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

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

31. Current recreation and tourism:

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

Activities, Facilities provided and Seasonality.

Walking, including dog walking: all year.

Birdwatching: all year.

Angling and bait-digging: all year.

Swimming (in restricted areas) - mostly summer.

Sailing, windsurfing, canoeing, waterskiing.

Sept-Feb wildfowling.

32. Jurisdiction:

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

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

33. Management authority:

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

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

34. Bibliographical references:

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

Site-relevant references

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www.jncc.gov.uk/UKSPA/default.htm
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Tubbs, JM (1980) Wader and shelduck feeding distribution in Langstone Harbour, Hampshire. *Bird Study*, 27, 239-248

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APPENDIX 5

Portsmouth Harbour SPA Natura 2000

Standard Data Form and Conservation Objectives

NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type **1.2 Site code**

1.3 Compilation date **1.4 Update**

1.5 Relationship with other Natura 2000 sites

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1.6 Respondent(s)

1.7 Site name

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	
date confirmed as SCI	
date site classified as SPA	199502
date site designated as SAC	

2. Site location:**2.1 Site centre location**

longitude	latitude
01 07 32 W	50 49 41 N

2.2 Site area (ha) **2.3 Site length (km)**

2.5 Administrative region

NUTS code	Region name	% cover
UK561	Hampshire	100.00%

2.6 Biogeographic region
☐
Alpine

☒
Atlantic

☐
Boreal

☐
Continental

☐
Macaronesia

☐
Mediterranean
3. Ecological information:**3.1 Annex I habitats**

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment

3.2 Annex I birds and regularly occurring migratory birds not listed on Annex I

		Population				Site assessment			
Code	Species name	Resident	Migratory			Population	Conservation	Isolation	Global
			Breed	Winter	Stage				
A046a	<i>Branta bernicla bernicla</i>			2847 I		B		C	
A149	<i>Calidris alpina alpina</i>			5123 I		C		C	
A156	<i>Limosa limosa islandica</i>			31 I		C		C	
A069	<i>Mergus serrator</i>			87 I		C		C	

4. Site description:**4.1 General site character**

Habitat classes	% cover
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	85.0
Salt marshes. Salt pastures. Salt steppes	14.0
Coastal sand dunes. Sand beaches. Machair	
Shingle. Sea cliffs. Islets	
Inland water bodies (standing water, running water)	
Bogs. Marshes. Water fringed vegetation. Fens	
Heath. Scrub. Maquis and garrigue. Phygrana	
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	1.0
Alpine and sub-alpine grassland	
Improved grassland	
Other arable land	
Broad-leaved deciduous woodland	
Coniferous woodland	
Evergreen woodland	
Mixed woodland	
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	
Inland rocks. Scree. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	
Total habitat cover	100%

4.1 Other site characteristics**Soil & geology:**

Acidic, Alluvium, Gravel, Mud, Neutral, Nutrient-rich, Sedimentary

Geomorphology & landscape:

Coastal, Enclosed coast (including embayment), Estuary, Intertidal sediments (including sandflat/mudflat), Islands, Lagoon, Lowland, Subtidal sediments (including sandbank/mudbank)

4.2 Quality and importance**ARTICLE 4.2 QUALIFICATION (79/409/EEC)****Over winter the area regularly supports:**

<i>Branta bernicla bernicla</i> (Western Siberia/Western Europe)	0.9% of the population 5 year peak mean 1991/92-1995/96
<i>Calidris alpina alpina</i> (Northern Siberia/Europe/Western Africa)	1% of the population in Great Britain 5 year peak mean 1991/92-1995/96

<i>Limosa limosa islandica</i> (Iceland - breeding)	0.4% of the population in Great Britain 5 year peak mean 1991/92-1995/96
<i>Mergus serrator</i> (North-western/Central Europe)	0.9% of the population in Great Britain 5 year peak mean 1991/92-1995/96

4.3 Vulnerability

Portsmouth Harbour is vulnerable to the: Modification of physical processes through large-scale land-claim, capital and maintenance dredging, sea defences and the knock on effects on the extent and distribution of intertidal habitats; Sea Level Rise and issues related to Coastal Squeeze Maintenance and development of both commercial and military ports; Accidental pollution from shipping and heavy industrial activities, former military and waste disposal sites, re-distribution of contaminated sediments. High levels of recreational pressure both on shore and offshore which can have disturbance effects during sensitive (over-wintering) periods. The Portsmouth Harbour Plan (non-statutory) aims to address many of these issues. Others will be dealt with through on-going casework, joint projects with outside organisations eg Intertidal Sediment Recharge, monitoring of saltmarsh erosion and Site Management Statements. Other more strategic issues will be addressed through the proposed Management Scheme covering European Marine Sites within the Solent complex of estuaries.
--

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK04 (SSSI/ASSI)	100.0

EC Directive 79/409 on the Conservation of Wild Birds Special Protection Area

Portsmouth Harbour, Hampshire

Portsmouth Harbour is a large industrialised estuary and includes one of the four largest expanses of mudflats and tidal creeks on the south coast of Britain. The Wallington River flows into the north-west of the estuary and gives rise to Fareham Creek, the most notable channel. Together with the adjacent Langstone and Chichester Harbours, Portsmouth Harbour forms an unusual intertidal ecosystem receiving comparatively little fresh water and possessing a characteristic hydrology arising from only narrow connections to the sea via the Solent.

Portsmouth Harbour is adjacent to the existing Chichester and Langstone Harbours Special Protection Area. The boundary of Portsmouth Harbour proposed Special Protection Area follows the seaward side of Burrow Island, Foxbury Point, Portchester, Horsea Island and Whale Island ending to the south of the latter. The seaward boundary is the Mean Low Water Mark. It also incorporates several inlets including Gosport and Paulsgrove.

Portsmouth Harbour qualifies under Article 4.2 of the Birds Directive by supporting internationally or nationally important wintering populations of the following species of migratory waterfowl (average peak counts for the five year period 1986/87 to 1990/91): 2,290 dark-bellied brent geese *Branta bernicla bernicla* (1.3% of the north-west European population and 2.5% of the British wintering population), 100 red-breasted merganser *Mergus serrator* (1% of British), 70 black-tailed godwit *Limosa limosa* (over 1% of British) and 8,010 dunlin *Calidris alpina* (over 1% of British).

SPA Citation
DMC August 1992

This citation / map relates to a site entered in
the Register of European sites for Great Britain.
Register reference number UK001103
Date of registration 25 AUG 1998
Signed 
on behalf of the Secretary of State for the Environment

European Site Conservation Objectives for Portsmouth Harbour Special Protection Area Site Code: UK9011051



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

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

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

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

Qualifying Features:

- A046a *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- A069 *Mergus serrator*; Red-breasted merganser (Non-breeding)
- A149 *Calidris alpina alpina*; Dunlin (Non-breeding)
- A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)

This is a European Marine Site

This SPA is a part of the Solent Maritime European Marine Site (EMS). These Conservation Objectives should be used in conjunction with the Conservation Advice document for the EMS. Natural England's formal Conservation Advice for European Marine Sites can be found via [GOV.UK](https://www.gov.uk).

Explanatory Notes: European Site Conservation Objectives

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 (as amended) ('the Habitats Regulations'). They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives, and the accompanying Supplementary Advice (where this is available), will also provide a framework to inform the management of the European Site and the prevention of deterioration of habitats and significant disturbance of its qualifying features

These Conservation Objectives are set for each bird feature for a [Special Protection Area \(SPA\)](#).

Where these objectives are being met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

Publication date: 21 February 2019 (version 3). This document updates and replaces an earlier version dated 30 June 2014 to reflect the consolidation of the Habitats Regulations in 2017.

APPENDIX 6

Portsmouth Harbour Ramsar Information Sheet

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:**Joint Nature Conservation Committee**

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City Road

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Cambridgeshire PE1 1JY

UK

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

Designated: 28 February 1995

3. Country:

UK (England)

4. Name of the Ramsar site:

Portsmouth Harbour

5. Map of site included:Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.**a) hard copy** (required for inclusion of site in the Ramsar List): yes ✓ -or- no**b) digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

50 49 41 N

01 07 32 W

7. General location:

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

Nearest town/city: Portsmouth

Portsmouth Harbour lies on the central south coast of mainland England, to the west of Portsmouth City.

Administrative region: Hampshire

8. Elevation (average and/or max. & min.) (metres): **9. Area** (hectares): 1248.77

Min. -1

Max. 1

Mean 0

10. Overview:

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

Portsmouth Harbour is a large industrialised estuary and includes one of the four largest expanses of mudflats and tidal creeks on the south coast of Britain. The mudflats support large beds of narrow-leaved and dwarf eelgrass, extensive green alga and sea lettuce. The harbour has only a narrow connection to the sea via the Solent, and receives comparatively little freshwater, thus giving it an unusual hydrology. The site supports internationally important numbers of wintering dark-bellied brent geese and nationally important numbers of grey plover, dunlin and black-tailed godwit.

11. Ramsar Criteria:

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

3, 6

12. Justification for the application of each Criterion listed in 11. above:

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

Ramsar criterion 3

The intertidal mudflat areas possess extensive beds of eelgrass *Zostera angustifolia* and *Zostera noltei* which support the grazing dark-bellied brent geese 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.

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

Qualifying Species/populations (as identified at designation):**Species with peak counts in winter:**

Dark-bellied brent goose, <i>Branta bernicla</i> <i>bernicla</i> ,	2105 individuals, representing an average of 2.1% of the GB population (5 year peak mean 1998/9-2002/3)
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Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

See Sections 19/20 for details of noteworthy species

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

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

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

14. Physical features of the site:

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

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

General description of the Physical Features:

Portsmouth Harbour is a large industrialised estuary and includes one of the four largest expanses of mudflats and tidal creeks on the south coast of Britain. Portsmouth Harbour has only a narrow connection to the sea via the Solent, and receives comparatively little fresh water, thus giving it an unusual hydrology.

15. Physical features of the catchment area:

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

Portsmouth Harbour is a large industrialised estuary and includes one of the four largest expanses of mudflats and tidal creeks on the south coast of Britain. Portsmouth Harbour has only a narrow connection to the sea via the Solent, and receives comparatively little fresh water, thus giving it an unusual hydrology.

16. Hydrological values:

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

Shoreline stabilisation and dissipation of erosive forces

17. Wetland types

Marine/coastal wetland

Code	Name	% Area
B	Marine beds (e.g. sea grass beds)	4.8
E	Sand / shingle shores (including dune systems)	0.08
F	Estuarine waters	21.2
G	Tidal flats	59.3
H	Salt marshes	14
J	Coastal brackish / saline lagoons	0.3

Other	Other	0.3
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18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Portsmouth Harbour comprises a large, sheltered estuarine basins supporting extensive intertidal mudflats with *Zostera* beds and significant areas of mainly *Spartina* saltmarsh. The site also includes small, isolated shingle islands supporting scrub and broad-leaved woodland and two saline lagoon habitats. The site supports important overwintering populations of migratory waterfowl. A number of off-site areas of grassland are particularly important feeding sites for overwintering dark-bellied brent geese and as roosting areas for waders.

19. Noteworthy flora:

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

Nationally important species occurring on the site.**Higher Plants.**

Zostera noltei, *Zostera angustifolia*, *Zostera marina*, *Inula crithmoides*

20. Noteworthy fauna:

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

Birds**Species currently occurring at levels of national importance:****Species with peak counts in spring/autumn:**

Little egret , <i>Egretta garzetta</i> , West Mediterranean	47 individuals, representing an average of 2.8% of the GB population (5 year peak mean 1998/9-2002/3)
Black-tailed godwit , <i>Limosa limosa islandica</i> , Iceland/W Europe	343 individuals, representing an average of 2.2% of the GB population (5 year peak mean 1998/9-2002/3)

Species Information

Nationally important species occurring on the site:

Lagoon sand shrimp *Gammarus insensibilis* (nationally scarce)

Starlet sea anemone *Nematostella vectensis* (RDB vulnerable)

21. Social and cultural values:

e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic

Archaeological/historical site

Environmental education/ interpretation

Fisheries production

Non-consumptive recreation

Scientific research

Sport fishing

Subsistence fishing

Tourism

Traditional cultural

Transportation/navigation

22. Land tenure/ownership:

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

23. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Recreation	+	+
Current scientific research	+	
Fishing: (unspecified)	+	+
Fishing: commercial	+	+
Fishing: recreational/sport	+	+
Gathering of shellfish	+	
Bait collection	+	
Industry	+	+
Sewage treatment/disposal	+	+
Harbour/port	+	+
Flood control	+	
Mineral exploration (excl. hydrocarbons)		+
Oil/gas exploration		+
Transport route	+	+
Urban development	+	+
Military activities	+	+

24. Factors adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

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

NA = Not Applicable because no factors have been reported.

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

Unspecified development: urban use	1	Disturbance and land-take pressures (on and off-site) from urban and industrial development.	+	+	
Coastal engineering, e.g. construction of sea defences for coastal protection	2	Coastal squeeze arising from coastal defences	+		+

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?
Coastal engineering, e.g. construction of sea defences for coastal protection - Shoreline management plan should identify areas to offset losses from coastal squeeze when in place.

Is the site subject to adverse ecological change? YES

25. Conservation measures taken:

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

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

26. Conservation measures proposed but not yet implemented:

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

No information available

27. Current scientific research and facilities:

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

Contemporary.

Fauna.

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

Bird Ringing by Solent Shorebirds Study Group.

Environment.

Coastal Sediment (SCOPAC)

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

Proposed:

Intertidal Habitat Monitoring (EN/EA project)

Completed.

Fauna.

Benthic surveys of Haslar, Forton & Tipner Lakes

Lagoon survey - Cockle Pond, Alver Lake

Site-specific Environmental Assessments eg Priddys Hard, Cold Harbour, Tipner, Continental Ferry Port.

28. Current conservation education:

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

Little at present, however there is scope for interpretation through implementation of the Harbour Plan, and Gosport and Portsmouth Millennium projects.

29. Current recreation and tourism:

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

Activities, Facilities provided and Seasonality.

Land-based recreation:

Walking including dog-walking - All year.

Bait-digging - All year - mainly winter

Birdwatching - Autumn-Spring.

Water-based recreation:

Sailing, power-boating, windsurfing, canoeing - Mainly Spring-Autumn

30. Jurisdiction:

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

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

31. Management authority:

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

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

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

Barne, JH, Robson, CF, Kaznowska, SS, Doody, JP & Davidson, NC (eds.) (1998) *Coasts and seas of the United Kingdom. Region 9 Southern England: Hayling Island to Lyme Regis*. Joint Nature Conservation Committee, Peterborough. (Coastal Directories Series.)

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Burd, F (1989) *The saltmarsh survey of Great Britain. An inventory of British saltmarshes*. Nature Conservancy Council, Peterborough (Research & Survey in Nature Conservation, No. 17)

Clark, M & Gurnell, A (1987) *The Solent estuary: environmental background*. Southampton University, GeoData Unit, Southampton

Covey, R (1998) Chapter 7. Eastern Channel (Folkestone to Durlston Head) (MNCR Sector 7). In: *Benthic marine ecosystems of Great Britain and the north-east Atlantic*, ed. by K. Hiscock, 199-218. Joint Nature Conservation Committee, Peterborough. (Coasts and Seas of the United Kingdom, MNCR series)

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- Musgrove, AJ, Langston, RHW, Baker, H & Ward, RM (eds.) (2003) *Estuarine waterbirds at low tide. The WeBS Low Tide Counts 1992–93 to 1998–99*. WSG/BTO/WWT/RSPB/JNCC, Thetford (International Wader Studies, No. 16)
- Musgrove, AJ, Pollitt, MS, Hall, C, Hearn, RD, Holloway, SJ, Marshall, PE, Robinson, JA & Cranswick, PA (2001) *The Wetland Bird Survey 1999–2000: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge.
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- Nicholas Pearson Associates (1996) *Portsmouth Harbour Plan Review: draft for working group. July 1996*. Centre for Coastal Zone Management, University of Portsmouth
- Sneddon, P & Randall, RE (1994) *Coastal vegetated shingle structures of Great Britain: Appendix 3. Shingle sites in England*. Joint Nature Conservation Committee, Peterborough
- Stroud, DA, Chambers, D, Cook, S, Buxton, N, Fraser, B, Clement, P, Lewis, P, McLean, I, Baker, H & Whitehead, S (eds.) (2001) *The UK SPA network: its scope and content*. Joint Nature Conservation Committee, Peterborough (3 vols.)
www.jncc.gov.uk/UKSPA/default.htm
- Tubbs, C (1991) *The Solent: a changing wildlife heritage*. Hampshire and Isle of Wight Wildlife Trust, Romsey

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APPENDIX 7

Solent and Southampton Water SPA
Natura 2000 Standard Data Form and
Conservation Objectives

NATURA 2000 – STANDARD DATA FORM

Special Protection Areas under the EC Birds Directive.

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

22/12/2015

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

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

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

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

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

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

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



NATURA 2000 - STANDARD DATA FORM

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

SITE UK9011061
SITENAME Solent and Southampton Water

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- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type A	1.2 Site code UK9011061	Back to top
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1.3 Site name

Solent and Southampton Water

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

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

1.7 Site indication and designation / classification dates

Date site classified as SPA:	1998-10
National legal reference of SPA designation	Regulations 12A and 13-15 of the Conservation Habitats and Species Regulations 2010, (http://www.legislation.gov.uk/ukxi/2010/490/contents/made) as amended by The Conservation of Habitats and Species (Amendment) Regulations 2011 (http://www.legislation.gov.uk/ukxi/2011/625/contents/made).

2. SITE LOCATION

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2.1 Site-centre location [decimal degrees]:

Longitude

-1.525833333

Latitude

50.74027778

2.2 Area [ha]:

5401.12

2.3 Marine area [%]

59.3

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

UKJ3

Hampshire and Isle of Wight

2.6 Biogeographical Region(s)

Atlantic (100.0
%)

3. ECOLOGICAL INFORMATION

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

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo
B	A052	Anas crecca			w	4400	4400	i		G	B		C	
B	A675	Branta bernicla bernicla			w	7506	7506	i		G	B		C	
B	A137	Charadrius hiaticula			w	552	552	i		G	C		C	
B	A176	Larus melanocephalus			r	2	2	p		G	A		C	
B	A616	Limosa limosa islandica			w	1125	1125	i		G	A		C	
B	A195	Sterna albifrons			r	49	49	p		G	B		C	
B	A192	Sterna dougallii			r	2	2	p		G	B		A	
B	A193	Sterna hirundo			r	267	267	p		G	B		C	
B	A191	Sterna sandvicensis			r	231	231	p		G	C		C	

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public

access enter: yes

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

3.3 Other important species of flora and fauna (optional)

Species					Population in the site				Motivation					
Group	CODE	Scientific Name	S	NP	Size		Unit	Cat.	Species Annex		Other categories			
					Min	Max		C R V P	IV	V	A	B	C	D
B	WATR	Waterfowl assemblage			51361	51361	i						X	

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

4. SITE DESCRIPTION

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4.1 General site character

Habitat class	% Cover
N02	47.7
N07	3.4
N05	10.2
N16	0.6
N03	18.2
N04	2.8
N10	17.1
Total Habitat Cover	100

Other Site Characteristics

1 Terrestrial: Soil & Geology: mud,acidic,alluvium,sedimentary,neutral 2 Terrestrial: Geomorphology and landscape: floodplain,coastal,lowland 3 Marine: Geology: sand,gravel,sedimentary,shingle 4 Marine: Geomorphology: open coast (including bay),lagoon,estuary,intertidal rock,enclosed coast (including

embayment), shingle bar, islands, intertidal sediments (including sandflat/mudflat) Ramsar Wetland
Types: Marine and coastal wetlands

4.2 Quality and importance

ARTICLE 4.1 QUALIFICATION (79/409/EEC) During the breeding season the area regularly supports: *Larus melanocephalus* 15.4% of the GB breeding population 5 year peak mean, 1994-1998 *Sterna albifrons* (Eastern Atlantic - breeding) 2% of the GB breeding population 5 year peak mean, 1993-1997 *Sterna dougallii* (Europe - breeding) 3.1% of the GB breeding population 5 year peak mean, 1993-1997 *Sterna hirundo* (Northern/Eastern Europe - breeding) 2.2% of the GB breeding population 5 year peak mean, 1993-1997 *Sterna sandvicensis* (Western Europe/Western Africa) 1.7% of the GB breeding population 5 year peak mean, 1993-1997 ARTICLE 4.2 QUALIFICATION (79/409/EEC) Over winter the area regularly supports: *Anas crecca* (North-western Europe) 1.1% of the population 5 year peak mean, 1992/3-1996/7 *Branta bernicla bernicla* (Western Siberia/Western Europe) 2.5% of the population 5 year peak mean, 1992/3-1996/7 *Charadrius hiaticula* (Europe/Northern Africa - wintering) 1.2% of the population 5 year peak mean, 1992/3-1996/7 *Limosa limosa islandica* (Iceland - breeding) 1.7% of the population 5 year peak mean, 1992/3-1996/7 ARTICLE 4.2 QUALIFICATION (79/409/EEC): AN INTERNATIONALLY IMPORTANT ASSEMBLAGE OF BIRDS Over winter the area regularly supports: 51361 waterfowl (5 year peak mean 1991/92-1995/96) Including: *Branta bernicla bernicla*, *Anas crecca*, *Charadrius hiaticula*, *Limosa limosa islandica*

4.3 Threats, pressures and activities with impacts on the site

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

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

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

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

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

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

i = inside, o = outside, b = both

4.5 Documentation

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

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

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

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

5. SITE PROTECTION STATUS (optional)

[Back to top](#)

5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK04	100.0	UK01	21.8		

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Natural England
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☐	Yes
☐	No, but in preparation
☒	No

6.3 Conservation measures (optional)

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

EXPLANATION OF CODES USED IN THE NATURA 2000 STANDARD DATA FORMS

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

1.1 Site type

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

3.1 Habitat representativity

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

3.1 Habitat code

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

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

3.1 Relative surface

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

3.1 Conservation status habitat

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

3.1 Global grade habitat

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

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

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

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

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

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

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

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

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

3.3 Assemblages types

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

4.1 Habitat class code

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

4.3 Threats code

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

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

5.1 Designation type codes

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

EC Directive 79/409 on the Conservation of Wild Birds: Special Protection Area (SPA)

Name: Solent and Southampton Water

Unitary Authority/County: Hampshire County Council, New Forest District Council, Test Valley Borough Council, Southampton City Council Unitary Authority, Eastleigh Borough Council, Fareham District Council and Isle of Wight Council Unitary Authority.

Consultation proposal: The Solent and Southampton Water SPA site comprises a series of estuaries and adjacent coastal habitats important for breeding gulls and terns and wintering waterfowl. The following SSSIs; Lymington River Reedbeds, Sowley Pond, Hythe to Calshot Marshes, Eling and Bury Marshes, Lower Test Valley, Lincegrove and Hacketts Marshes and Titchfield Haven, and parts of Yar Estuary, Hurst Castle and Lymington River Estuary, North Solent, Lee-on-Solent to Itchen Estuary, Upper Hamble Estuary and Woods, Newtown Harbour, Thorness Bay, Medina Estuary, King's Quay Shore, Ryde Sands and Wootton Creek, Brading Marshes to St Helen's Ledges, Whitecliff Bay and Bembridge Ledges have been recommended as a Special Protection Area because of their European ornithological importance.

Status: Classified 1 October 1998.

Boundary of SPA: SPA boundary is coincident with Lymington River Reedbeds SSSI, Sowley Pond SSSI, Hythe to Calshot Marshes SSSI and Titchfield Haven SSSI and includes parts of the other SSSI listed above. See map for clarification of the SPA boundary.

European ornithological importance of SPA

Solent and Southampton Water SPA is of European importance because:

a) The site qualifies under article 4.1 of the Birds Directive (79/409/EEC) as it is used regularly by 1 % or more of the Great Britain population of a species listed in Annex 1 in any season:

Annex 1 species	5 yr peak mean	Count years
Mediterranean Gull <i>Larus melanocephalus</i>	2 pairs (8.2-13.9% GB)	1994-1998
Sandwich tern <i>Sterna sandvicensis</i>	231 pairs (1.7 % GB)	1993-1997
Common tern <i>Sterna hirundo</i>	267 pairs (2.2 % GB)	1993-1997
Little tern <i>Sterna albifrons</i>	49 pairs (2 % GB)	1993-1997
Roseate tern <i>Sterna dougalli</i>	2 pairs (3.1 % GB)	1993-1997

Bird Numbers from: JNCC Seabird Colony Register

b) The site qualifies under article 4.2 of the Birds Directive (79/409/EEC) as it is used regularly by 1% or more of the biogeographic population of a regularly occurring migratory species (other than those listed in Annex 1) in any season.

Non- Annex 1 migratory bird species	5 yr peak mean from -1992/93-1996/97
Dark-bellied brent geese <i>Branta bernicla bernicla</i>	7506 ¹ (2.5% W Siberia/W Europe)
Teal <i>Anas crecca</i>	4,400 ¹ (1.1% NW Europe)
Ringed plover <i>Charadrius hiaticula</i>	552 ¹ (1.1% Europe/NW Africa)
Black-tailed godwit <i>Limosa limosa</i>	1125 ¹ (1.6 % Iceland)

Bird Numbers from: WeBS Wildfowl & Waders database

Unit of population size: 1- individual birds wintering

c) The site is used regularly by over 20,000 waterfowl (waterfowl as defined by the Ramsar Convention) or 20,000 seabirds in any season.

5 yr peak mean from 1992/93- 1996/97	
51,361 ¹	(21,401 wildfowl 29,960 waders)

Unit of population size: 1- individual birds wintering

Additional non-qualifying interest

An outstanding assemblage of wintering and passage birds are dependent on wetland habitats within the site, including the following Annex 1 species not mentioned previously: red-throated diver *Gavia stellata*, black-throated diver *G. arctica*, great northern diver *G. immer*, Slavonian grebe *Podiceps auritus*, little egret *Egretta garzetta*, hen harrier *Circus cyaneus*, marsh harrier *Circus aeruginosus*, merlin *Falco columbarius*, peregrine *Falco peregrinus* and short-eared owl *Asio flammeus*.

This citation / map relates to a site entered in
the Register of European sites for Great Britain.
Register reference number UK900001
Date of registration 1991
Signed 
on behalf of the Secretary of State for the Environment

European Site Conservation Objectives for Solent and Southampton Water Special Protection Area Site Code: UK9011061



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

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

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

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

Qualifying Features:

A046a *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)

A052 *Anas crecca*; Eurasian teal (Non-breeding)

A137 *Charadrius hiaticula*; Ringed plover (Non-breeding)

A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)

A176 *Larus melanocephalus*; Mediterranean gull (Breeding)

A191 *Sterna sandvicensis*; Sandwich tern (Breeding)

A192 *Sterna dougallii*; Roseate tern (Breeding)

A193 *Sterna hirundo*; Common tern (Breeding)

A195 *Sterna albifrons*; Little tern (Breeding)

Waterbird assemblage

This is a European Marine Site

This SPA is a part of the the Solent Maritime European Marine Site (EMS). These Conservation Objectives should be used in conjunction with the Conservation Advice document for the EMS. Natural England's formal Conservation Advice for European Marine Sites can be found via [GOV.UK](https://www.gov.uk).

Explanatory Notes: European Site Conservation Objectives

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 (as amended) ('the Habitats Regulations'). They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives, and the accompanying Supplementary Advice (where this is available), will also provide a framework to inform the management of the European Site and the prevention of deterioration of habitats and significant disturbance of its qualifying features

These Conservation Objectives are set for each bird feature for a [Special Protection Area \(SPA\)](#).

Where these objectives are being met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

Publication date: 21 February 2019 (version 3). This document updates and replaces an earlier version dated 30 June 2014 to reflect the consolidation of the Habitats Regulations in 2017.

APPENDIX 8

Solent and Southampton Water

Ramsar Information Sheet

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

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

Joint Nature Conservation Committee

Monkstone House

City Road

Peterborough

Cambridgeshire PE1 1JY

UK

Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948

Email: RIS@JNCC.gov.uk

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DD MM YY

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Designation date

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

Site Reference Number

2. Date this sheet was completed/updated:

01 October 1998

3. Country:

UK (England)

4. Name of the Ramsar site:

Solent and Southampton Water

5. Map of site included:

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

a) **hard copy** (required for inclusion of site in the Ramsar List): yes ☒ -or- no ☐

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

50 44 25 N

01 31 32 W

7. General location:

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

Nearest town/city: Southampton

Solent and Southampton Water lies on the central south coast of England.

Administrative region: Hampshire, Isle of Wight

8. Elevation (average and/or max. & min.) (metres): 9. Area (hectares): 5346.44

Min. No information available

Max. No information available

Mean No information available

10. Overview:

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

The area covered extends from Hurst Spit to Gilkicker Point along the south coast of Hampshire and along the north coast of the Isle of Wight. The site comprises of estuaries and adjacent coastal habitats including intertidal flats, saline lagoons, shingle beaches, saltmarsh, reedbeds, damp woodland, and

grazing marsh. The diversity of habitats support internationally important numbers of wintering waterfowl, important breeding gull and tern populations and an important assemblage of rare invertebrates and plants.

11. Ramsar Criteria:

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

1, 2, 5, 6

12. Justification for the application of each Criterion listed in 11. above:

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

Ramsar criterion 1

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. Includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries and reefs.

Ramsar criterion 2

The site supports an important assemblage of rare plants and invertebrates. At least 39 British Red Data Book invertebrates and eight British Red Data Book plants are represented on site.

Ramsar criterion 5

Assemblages of international importance:

Over winter the area regularly supports:

51361 waterfowl (5 year peak mean 1991/92-1995/96)

Ramsar criterion 6

Species occurring at levels of international importance (as identified at designation):

Over winter the area regularly supports:

Black-tailed Godwit, <i>Limosa limosa islandica</i> (Iceland (breeding))	1125 individuals, representing an average of 1.7% of the population (6 year peak mean, 1992/3-1996/7)
Dark-bellied Brent Goose, <i>Branta bernicla bernicla</i> (Western Siberia/Western Europe)	7506 individuals, representing an average of 2.5% of the population (6 year peak mean, 1992/3-1996/7)
Ringed Plover, <i>Charadrius hiaticula</i> (Europe/Northern Africa (wintering))	552 individuals, representing an average of 1.2% of the population (6 year peak mean, 1992/3-

1996/7)

Teal, *Anas crecca*
(North-western Europe)

4400 individuals, representing an average of
1.1% of the population (6 year peak mean,
1992/3-1996/7)

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

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

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

14. Physical features of the site:

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

Soil & geology	acidic, alluvium, mud, neutral, sand, sedimentary, shingle
Geomorphology and landscape	coastal, enclosed coast (including embayment), estuary, floodplain, intertidal rock, intertidal sediments (including sandflat/mudflat), island, lagoon, lowland, open coast (including bay), shingle bar, subtidal sediments (including sandbank/mudbank)
Nutrient status	eutrophic
pH	no information
Salinity	brackish / mixosaline, fresh, saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Rainy, temperate climate with a mild winter and periodic frost. Mean minimum temperature approximately 8.5° C. Mean maximum temperature approximately 15.7° C. Mean annual precipitation approximately 766.4 mm, with a winter maximum.

15. Physical features of the catchment area:

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

No information available

16. Hydrological values:

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

Shoreline stabilisation and dissipation of erosive forces, Sediment trapping

17. Wetland types

Marine/coastal wetland

Code	Name	% Area
D	Rocky shores	1.5
E	Sand / shingle shores (including dune systems)	12.1
G	Tidal flats	47.9
H	Salt marshes	18.5
J	Coastal brackish / saline lagoons	0.7
Sp	Saline / brackish marshes: permanent	14.9
Tp	Freshwater marshes / pools: permanent	3.7
Xf	Freshwater, tree-dominated wetlands	0.7

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

The estuaries and harbours of the Solent are particularly sheltered and form the largest number and tightest cluster of small estuaries anywhere in Great Britain. The Solent and Isle of Wight system is notable for its large range and extent of different habitats.

The intertidal area is predominantly sedimentary in nature with extensive intertidal mud and sandflats within the sheltered harbours and areas of gravel and pebble sediments on more exposed beaches. These conditions combine to favour an abundant benthic fauna and green algae which support high densities of migrant and over-wintering wildfowl and waders. Eelgrass *Zostera* beds occur discontinuously along the north shore of the Isle of Wight and in a few places along the northern shore of The Solent.

The Solent system supports a wide range of saltmarsh communities. Upper saltmarshes are dominated by sea purslane *Atriplex portulacoides*, sea plantain *Plantago maritima*, sea meadow grass *Puccinellia maritima* and sea lavender *Limonium vulgare*; locally thrift *Armeria maritima* and the nationally scarce golden samphire *Inula crithmoides* are abundant. Lower saltmarsh vegetation tends to be dominated by sea purslane, cord grass *Spartina spp*, glasswort *Salicornia spp* and sea-blite *Suaeda maritima*. Cord grasses dominate much of the saltmarsh in Southampton Water and in parts of the Solent and it was the original location of the introduction of *Spartina alterniflora* and subsequent hybridisation with the native species.

There are several shingle spits including Hurst spit, Needs Ore Point, Calshot spit and Newtown Harbour spits which support a characteristic shingle flora.

A range of grassland types lie inshore of the intertidal zone including unimproved species-rich neutral and calcareous grasslands, brackish grazing marsh systems and reed dominated freshwater marshes.

The brackish water lagoons associated with grazing marsh systems behind the seawalls eg Keyhaven-Lymington, Gilkicker lagoon, and at Brading Marshes contain internationally important communities of rare and endangered invertebrates and plants.

19. Noteworthy flora:

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

Nationally important species occurring on the site.**Higher Plants.**

Eleocharis parvula, *Geranium purpureum forsteri*, *Lotus angustissimus*, *Ludwigia palustris*,
Orobancha purpurea, *Lamprothamnium papulosum*, *Spartina maritima* *Zostera marina*.

20. Noteworthy fauna:

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

Birds**Species currently occurring at levels of national importance:****During the breeding season the area regularly supports:**

Common Tern, <i>Sterna hirundo</i> (Northern/Eastern Europe (breeding))	267 pairs, representing an average of 2.2% of the GB population (5 year peak mean 1993-1997)
Little Tern, <i>Sterna albifrons</i> (Eastern Atlantic (breeding))	49 pairs, representing an average of 2% of the GB population (5 year peak mean 1993-1997)
Mediterranean Gull, <i>Larus melanocephalus</i>	2 pairs, representing an average of 15.4% of the GB population (5 year peak mean 1994-1998)
Roseate Tern, <i>Sterna dougallii</i> (Europe (breeding))	2 pairs, representing an average of 3.1% of the GB population (5 year peak mean 1993-1997)
Sandwich Tern, <i>Sterna sandvicensis</i> (Western Europe/Western Africa)	231 pairs, representing an average of 1.7% of the GB population (5 year peak mean 1993-1997)

Species Information**Nationally important species occurring on the site.****Invertebrates.**

Allomelita pellucida, *Gammarus insensibilis*, *Nematostella vectensis*, *Arctosa fulvolineata*,
Aulonia albimana, *Anisodactylus poeciloides*, *Anthonomus rufus*, *Baris analis*, *Berosus spinosus*,
Cantharis fusca, *Drypta dentata*, *Gyrinus natator*, *Leptura fulva*, *Meligethes bidentatus*,
Paracymus aeneus, *Staphylinus caesareus*, *Aphrosylus mitis*, *Atylotus latistriatus*,
Dorycera graminum, *Empis volucris*, *Haematopoda grandis*, *Hippobosca equina*, *Linnaemya comta*,
Stratiomys longicornis, *Syntormon mikii*, *Tetanocera freyi*, *Villa circumdata*,
Trachysphaera lobata, *Paludinella littorina*, *Truncatellina cylindrica*, *Andrena alfenella*,
Macropis europaea, *Pemphredon morio*, *Philathus triangulum*, *Tenthredopsis friesei*, *Acleris lorquiniana*,
Elachista littoricola, *Melissoblaptes zelleri*, *Platytes alpinella*, *Psamathrocrita argentella*,
Senta flammea, *Coenagrion mercuriale*, *Armandia cirrhosa*.

21. Social and cultural values:

e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc.
Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic

Aquatic vegetation (e.g. reeds, willows, seaweed)

Archaeological/historical site

Conservation education

Current scientific research

Fisheries production

Livestock grazing

Non-consumptive recreation

Sport fishing

Sport hunting

Tourism

Traditional cultural

Transportation/navigation

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation	+	+
Local authority, municipality etc.	+	+
National/Crown estate	+	+
Private	+	+
Public/communal	+	+
Other	+	+

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Nature conservation	+		Large-scale
Tourism	+		Large-scale
Recreation	+		Large-scale
Research	+		Large-scale
Collection of non-timber natural products: (unspecified)	+		Small-scale
Commercial forestry		+	Large-scale
Cutting for firewood	+		Small-scale
Fishing: (unspecified)	+		Small-scale
Fishing: commercial	+		Small-scale
Fishing: recreational/sport	+		Small-scale
Marine/saltwater aquaculture	+		Small-scale
Gathering of shellfish	+		Large-scale
Bait collection	+		Large-scale
Arable agriculture (unspecified)		+	Small-scale
Permanent arable agriculture		+	Small-scale
Permanent pastoral agriculture	+		Large-scale
Hay meadows	+		Small-scale
Hunting: recreational/sport	+		Small-scale
Industry		+	Large-scale
Sewage treatment/disposal	+		Large-scale
Harbour/port	+		Large-scale
Flood control	+		Large-scale

Irrigation (inc agricultural water supply)		+	Small-scale
Mineral exploration		+	Large-scale
Oil/gas exploration		+	Small-scale
Oil/gas production		+	Large-scale
Transport route		+	Large-scale
Domestic water supply		+	Small-scale
Urban development		+	Large-scale
Non-urbanised settlements		+	Large-scale
Military activities	+	+	Small-scale

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

Activity	On-site	Off-site	Scale
Dredging	+		Large-scale
Erosion	+		Large-scale
Pollution - unspecified	+		Small-scale

25. Conservation measures taken:

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

Conservation measure	On-site	Off-site
SSSI / ASSI	+	
NNR	+	+
SPA	+	+
Candidate SAC	+	+
Land owned by a NGO for nature conservation	+	+
Management agreement	+	+
Management plan in preparation	+	

The impact of dredging is addressed by Marine Consents and local planning processes.

Erosion is considered to be a combination of natural phenomena (sea-level rise and *Spartina* die-back) exacerbated by other factors e.g. dredging / land-claim.

No information provided.

26. Conservation measures proposed but not yet implemented:

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

Dredging to be addressed by Solent European Marine Sites Management Scheme (Reg34).

Erosion being addressed by Shoreline Management Plans / Strategies, ChAMPs (Living with the Sea LIFE Project).

Pollution issues addressed through Environment Agency's Review of Consents (Reg 50) process.

27. Current scientific research and facilities:

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

Contemporary.

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

Environment.

Coastal Sediment (SCOPAC)

Water Quality (EA/Southern Water)

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

Flora.

Saltmarsh Monitoring (EN project).

Spartina survey (EN project).

Completed.

Flora.

Sand dune and saltmarsh NVC survey.

Habitats.

Habitat surveys (various local individual surveys).

Species surveys (various local individual surveys).

28. Current conservation education:

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

Various educational programmes exist within the voluntary conservation organisations, research institutes, education centres and also Local Authorities e.g. Newtown National Nature Reserve managed by National Trust, Medina Valley Centre, and Southampton Oceanography Centre.

There are a number of interpretation facilities present and proposed in the area e.g. National Nature Reserve & Local Nature Reserve and proposed centre of coastal management on Isle of Wight.

29. Current recreation and tourism:

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

Activities, Facilities provided and Seasonality.

Almost all the estuaries in the Ramsar site are used extensively for a wide range of leisure and recreational activities, particularly water based recreation.

Land based recreation:

Walking including dogwalking is popular along large stretches of the coast and estuaries. The presence of country parks, NNR and LNRs on the coast also attract large numbers of people to certain locations.

Baitdigging and collection of shellfish occurs in a number of locations. Birdwatching is also a popular activity with a number of favoured locations with easy access. Some golf courses are also present.

Water based recreation:

The Solent is an internationally important centre for yachting, dinghy sailing and power boating and nationally important for canoeing, and water skiing. A small amount of hovercraft racing sometimes occurs.

Wildfowling and egg collection:

Private, syndicate and club wildfowling operate on the marshes. Small-scale egg collecting also occurs. Baitdigging and angling also occur.

Air Recreation:

There is a proposed microlighting centre within the area.

The high degree of recreation in the Solent is accompanied by a high degree of supporting developments e.g. marinas, boatyards, clubs, holiday centres occur throughout the area.

30. Jurisdiction:

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

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

31. Management authority:

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

Designations Manager, English Nature, Site Designations & Monitoring Unit, SST, Northminster
House, Northminster Road, Peterborough, PE1 1UA

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

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APPENDIX 9

Chichester Harbour SSSI Citation and Unit Condition Assessment

COUNTY: WEST SUSSEX/HAMPSHIRE

SITE NAME: CHICHESTER HARBOUR

DISTRICT: CHICHESTER/HAVANT

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981.

Local Planning Authority: CHICHESTER DISTRICT COUNCIL; HAVANT BOROUGH COUNCIL

National Grid Ref: SU 760 000

Area: 2657 ha 6566.7 acres W Sussex
3695 ha 9130.3 acres Total

Ordnance Survey Sheet 1:50,000:197

1:10,000: SU 70 NW,NE,SW,SE, SU 80 NW, SW,SE, SZ 79
NW,NE, SZ 89 NW

Date Notified (Under 1949 Act): 1970

Date of Last Revision: 1980

Date Notified (Under 1981 Act): 1984 (Hants) 1985 (W Sussex)

Other Information: This site lies within the South Coast Plain. It includes Nutbourne Marshes Local Nature Reserve. The site is listed in 'A Nature Conservation Review' and is a Geological Conservation Review site.

Reasons for Notification:

Chichester Harbour is a large estuarine basin in which at low water extensive mud and sandflats are exposed, drained by channels which unite to make a common exit to the sea. The site is of particular significance for wintering wildfowl and waders and also breeding birds both within the Harbour and in the surrounding permanent pasture fields and woodlands. There is a wide range of habitats which have important plant communities.

The intertidal area is fragmented in the upper reaches of the harbour by intruding tongues of land giving a very long and varied coastline. The harbour exhibits a wide range of intertidal and associated terrestrial habitats and with the neighbouring Langstone and Portsmouth Harbours is unusual in providing a large volume of sheltered saline water fed by a few streams of only low volume. The extensive intertidal mudflats are the feeding grounds, at the relevant times of year for internationally important numbers of ringed plover, grey plover, redshank, black-tailed godwit, dunlin, sanderling, curlew and greenshank (the latter two in autumn particularly). Bar-tailed godwit numbers are of European importance. Amongst the wildfowl, shelduck, teal and dark-bellied brent goose numbers are of international importance with 5% of the world population of the latter. The unimproved permanent pasture behind the sea wall provides alternative feeding sites for the geese and major high tide wader roosts. Some of this pasture is floristically rich being a red fescue *Festuca rubra* sward with scarce species such as green-winged orchid *Orchis morio* and adder's tongue fern *Ophioglossum vulgatum*.

The lower saltmarsh habitat fringing the mud flats is dominated by cord grass *Spartina anglica* and in most places the upper saltmarsh is rather restricted by the sea wall but there are some pure stands of sea purslane *Halimione portulacoides* while in some areas there is also sea lavender *Limonium vulgare*, sea aster *Aster tripolium* and other saltmarsh species.

Shingle occurs as spits and islands and most are rather unstable permitting little vegetation to become established. This habitat forms the main breeding grounds in the harbour for ringed plover, blackheaded gull and three species of terns. The extensive sand dunes at East Head are dominated by marram grass *Ammophila arenaria* although the degree of ground cover varies from 90% to 10% on the more recently established dunes.

At the head of Fishbourne Channel saltmarsh grades through a reed *Phragmites australis* bed into fresh marsh

influenced by a chalk spring. Most of the other fresh marshes behind the sea wall are small but at Thorney Deeps reclaimed saltmarsh has given way to extensive fresh water marsh vegetation influenced by salt water intrusion; here the reed is fringed by extensive areas of rushes *Juncus* species and invasive willow *Salix* scrub. A number of small ponds occur one of which contains the rare annual beard grass *Polypogon monspeliensis*. Significant blocks of scrub, mainly hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa* occur which are important for breeding and roosting birds. Hedgerows of oak *Quercus robur* are common and in some places the oak roots are strongly influenced by salt water. Semi-natural broadleaved woodland associated with the Harbour is important for breeding birds and supports two heronries. Oak is the major tree species usually with hazel *Corylus avellana* coppice, as at Old Park Wood, although Tournembury Wood has well spaced oaks with the occasional beech *Fagus sylvatica*, holly *Ilex aquifolium* and yew *Taxus baccata* with a fairly dense ground flora of bramble *Rubus fruticosus* and bracken *Pteridium aquilinum*.

Notable invertebrates include the long-winged conehead *Conocephalus discolor* and the moths, starwort shark *Cucullia asteris*, the sand dart *Agrotis ripae*, shore wainscot *Mythimna litoralis* and lunar hornet *Sphecia bemeciformis*.

Geology and Physiography

East of Langstone, at SU 725053, a low cliff line at high water mark exhibits a complex of Brickearth and Coombe Rock deposits and at East Head, SZ 769991 there is a sizeable sand dune and shingle system both of which are of geomorphological importance.

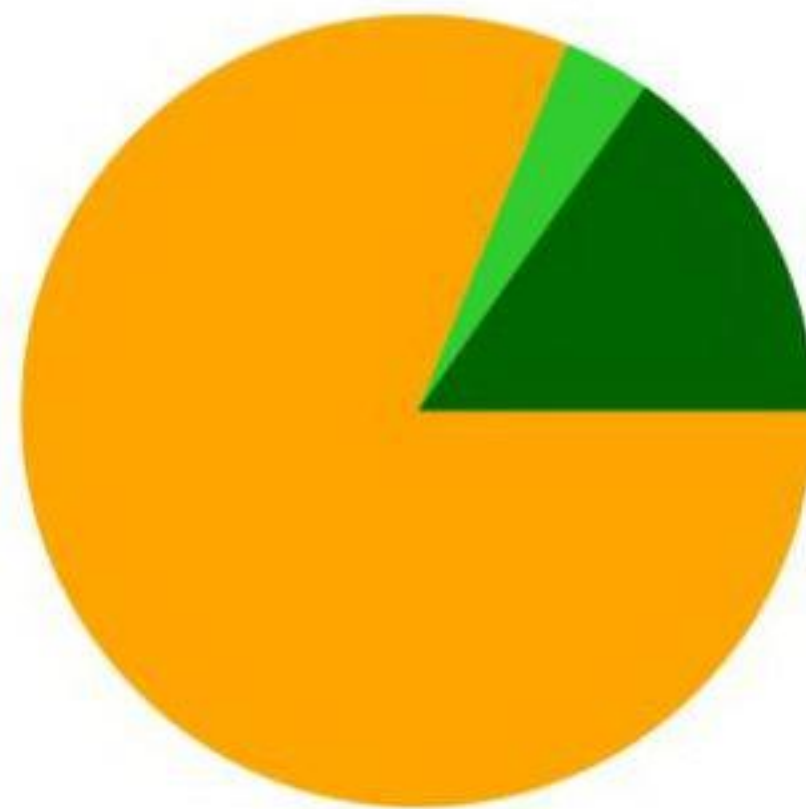
Site: Chichester Harbour SSSI

Report generated on: 30 Jul 2019

	Sites	Units	Units Assessed
Total number	1	43	43
Total area (ha)	3,733.53	3,733.53	3,733.53

	% meeting area of favourable or unfavourable recovering	Favourable	Unfavourable - Recovering	Unfavourable - No change	Unfavourable - Declining	Partially destroyed	Destroyed	Not Recorded
Area (ha)	702.78	569.79	132.99	3,030.75				
Percentage	18.82%	15.26%	3.56%	81.18%	0.00%	0.00%	0.00%	0.00%

Condition Summary



- Favourable
- Unfavourable - Recovering
- Unfavourable - No change

Main Habitat	Responsible Officer	Unit Number	Unit Id	Area (ha)	NNR Overlap Area (ha)	Latest Assessment Date	Assessment Description	Comment	Adverse Condition Reasons
Chichester Harbour SSSI - HAMPSHIRE, WEST SUSSEX (CHICHESTER, HAVANT)									
DWARF SHRUB HEATH - Lowland	KRISTOFFER HEWITT	001	1016975	17.2912	0.00	13/01/2009	Favourable	The site supports a mosaic of dune heath, areas of acid grassland, dense and scattered patches of gorse and bramble scrub, and a permanent pond within the centre of the site, surrounded by hard and soft rush. A fringe of marram grass occurs around the seaward edge of the unit adjacent to the shingle, which over a very short distance grades into the dune heath inland. The heath is dominated by ling with some bell heather, and supports a good variety of species including herbs such as sheep's sorrel and heath bedstraw, bryophytes such as Rhytidiadelphus squarrosus, Pseudoscleropodium purum and Dicranum scoparium, and a good cover of lichens (Cladonia spp). The heath is managed by Hampshire County Council, involving grazing by ponies and Highland cattle maintaining the grass ward on average at 5 ? 10 cm height, and some gorse and bramble clearance. The site is also subject to rabbit grazing, which is not considered to be having a significant adverse impact on the site.	

LITTORAL SEDIMENT	KRISTOFFER HEWITT	002	1016980	147.3011	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous Assessment: This is a large area of intertidal mud with extensive areas of pioneer salt marsh. The habitats are affected significantly by sea level rise and 'coastal squeeze' as much of the unit is backed by hard sea defences so that the habitats are unable to retreat landward as levels rise. This means that	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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BROADLEAVED, MIXED AND YEW WOODLAND - Lowland	KRISTOFFER HEWITT	003	1016959	17.1147	0.00	09/07/2010	Favourable	The northern part of the unit supports deciduous semi-natural ancient woodland, dominated by oak with occasional yew, silver birch and holly and hawthorn in the understorey. Good levels of regeneration of these trees were noted with all three age classes being present. Bluebell, bramble and nettles were present in the groundflora. The woodland in the remaining southern part of the unit supports similar woodland along with pine plantations. Occasional Rhododendron, some of them large, were noted across the unit, which should be removed. Sycamore was noted within the woodland but this is considered to be within acceptable levels, although should continue to be monitored. A pheasant pen is also present in the southwestern part of the unit. The eastern part of the unit is occupied by a residential building and remnants of an old brickworks. The southern boundary of the unit supports small areas of fringing saltmarsh vegetation and mudflats, and saline lagoons are also present. Given there appears to be no apparent decline in extent of the notified woodland, and that the woodland continues to be appropriately managed, the unit is still considered to be favourable, although the Rhododendron will require management in the near future.	
NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	004	1016962	48.785	0.00	10/01/2017	Unfavourable - Recovering	This is an area of grazing marsh, supporting habitat for over wintering birds. Cover of scrub and bare ground less than 5% of the area. Average sward height around 10cm, with a mosaic of heights. Yorkshire fog, dominant, with frequent common bent, and occasional crested dog's tail, sweet vernal grass and meadow barley. Frequent red clover. Meadow buttercup. Common bird's-foot-trefoil occasional. Negative species – common ragwort and creeping thistle rare.	

LITTORAL SEDIMENT	KRISTOFFER HEWITT	005	1016986	169.2144	0.00	26/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of year for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae.	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	006	1016963	20.9525	0.00	29/03/2017	Unfavourable - No change	Nutrient source trends, and efficacy of measures across the Solent are subject to ongoing analysis through the Judicial Review consent order implementation and other programmes	

NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	007	1017002	8.4217	0.00	19/01/2017	Unfavourable - Recovering	Gutner Point pioneer saltmarsh, with frequent common saltmarsh-grass in places, and occasional glasswort spp. Common cord-grass dominant. Low-mid zone frequent glasswort and dwarf seaweeds, with frequent sea purslane, sea, plantain. Sea heath rare. Upper salt marsh transition, with red rescue, sea couch, common sea-lavender, sea wormwood spp, sea thrift, and occasional sea aster. Sea wall along a stretch of this area. Algae present in small thin patches. Sward height variable. No evidence of vehicle damage, bare substrate, or creek realignment. The algal weed and diffuse pollution impacts are starting to be addressed through the South Downs and Harbours Clean Water Partnership Delivery Strategy and the Solent Diffuse Water Pollution Plan. There is also concern around point source pollution from sewerage treatment works. This is starting to be addressed through investment in sewerage treatment work infrastructure. Further work is required to address storm overflow management. Loss of saltmarsh due to coastal squeeze across 'Hold the Line' frontages in the North Solent Shoreline Management Plan (SMP) are mitigated for via the Environment Agency's managed realignment at Medmerry This provides compensation for coastal squeeze on 'Hold the Line' frontages in the North Solent for the first Epoch of the SMP until 2025	
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LITTORAL SEDIMENT	KRISTOFFER HEWITT	008	1016987	267.5454	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous Assessment comments: This is a large area of mainly intertidal mud with small areas of pioneer salt marsh. The habitats are affected significantly by sea level rise and 'coastal squeeze' as much of the unit is backed by hard sea defences so that the habitats are unable to retreat landward as levels rise. This means	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	009	1016964	29.903	0.00	29/03/2017	Unfavourable - No change	Nutrient source trends, and efficacy of measures across the Solent are subject to ongoing analysis through the Judicial Review consent order implementation and other programmes	

LITTORAL SEDIMENT	KRISTOFFER HEWITT	010	1016988	65.7649	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2017 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous Assessment comments: Range of pioneer, low-mid and upper saltmarsh communities, variation of zonations. Common cord-grass rare, with dominant glasswort species. Common saltmarsh-grass, frequent with occasional greater sea-spurrey, sea arrowgrass, annual sea-	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KRISTOFFER HEWITT	011	1016989	260.8892	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2017 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous assessment comments: Unit 11 is predominantly made up of intertidal mudflat with small remnant areas of saltmarsh along the foreshore between the villages of Langstone and Emsworth. Very little saltmarsh was observed during our assessment, and what was present was largely a <i>Spartina anglica</i>	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KRISTOFFER HEWITT	012	1016991	119.1558	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2017 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous assessment comments: Desk based assessment: Using EA data: (saltmarsh extent community monitoring to 2013) Spartina dominated, pioneer, with two isolated pockets of Saltmarsh. Less than 5% algal coverThe algal weed and diffuse pollution impacts are being addressed through the South	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	013	1016965	155.6735	0.00	23/01/2017	Favourable	Predominately grazing marsh, on the eastern fringes transitions to saltmarsh, with occasional cord grass, glasswort spp/ saltmarsh grass/sea couch frequent, sward 20cm. Central area -red fescue, sea couch, undergrazed, with pockets of scrub, sward height 50-60cm, bft, spiny rest harrow, dropwort, knapweed occasional. Rest of the unit mixture of well grazed, and undergrazed with sward height up to 100cm . Requires increased grazing to ensure in target condition – requires sward height – mosaic of between 5cm and 20 cm over 75% of the area to support a wide range of overwintering bird species. Unit is in agri-environment scheme, with continued monitoring to ensure grazing is managed appropriately to deliver the optimal supporting habitat for overwintering birds.	
NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	014	1016967	13.2727	0.00	12/09/2008	Favourable	The grassland here under CSM is notified as supporting habitat for breeding and wintering birds. The structure is OK and cattle were on parts of the site; some parts appeared undergrazed at the time of the visit in late August; these will presumably be grazed at a later date but this should be monitored.	

LITTORAL SEDIMENT	KRISTOFFER HEWITT	015	1016981	572.0334	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2017 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous assessment comments: This is an area of saltmarsh with vegetated shingle fringing the southern end. There is a good range of mid-transitions from SM, occasional cord grass, glasswort spp/ saltmarsh grass/sea couch frequent, sward 20cm lower, and pioneer saltmarsh communities, with abundant sea-	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
BROADLEAVED, MIXED AND YEW WOODLAND - Lowland	KRISTOFFER HEWITT	016	1016977	7.4756	0.00	04/09/2008	Favourable	This unit is site fabric and helps to support the breeding bird assemblage. Comment by Amy Francis 04/09/08.	

LITTORAL SEDIMENT	KRISTOFFER HEWITT	017	1016992	211.0291	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous assessment comments: This unit has high % of Spartina. Although there are species of 3 main saltmarsh communities, not meeting targets for frequencies of species. Spartina within the harbour has historically been frequent and in some locations dominant. Provided that there is no evidence of	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF, FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	018	1016968	9.5233	0.00	16/07/2013	Unfavourable - Recovering	This unit is now in Countryside Stewardship, and will be grazed with cattle, which will begin to address the main reason for the unfavourable status, lack of grazing, which has led to the majority of the site being dominated with tall, rank grasses which is unsuitable for the majority of overwintering bird species	
NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	019	1017003	4.0362	0.00	04/09/2008	Favourable	This unit is site fabric and helps to support the breeding bird assemblage. Comment by Amy Francis 04/09/08.	

LITTORAL SEDIMENT	KRISTOFFER HEWITT	020	1016982	386.5215	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2017 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous assessment comments: Range of pioneer, low-mid and upper saltmarsh communities, variation of zonations. Pioneer dominated by common cord-grass, with occasional and glasswort species, sea aster rare. Common saltmarsh-grass dominant low-mid saltmarsh community, with transition community	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
BROADLEAVED, MIXED AND YEW WOODLAND - Lowland	KRISTOFFER HEWITT	021	1016960	1.3469	0.00	27/08/2008	Favourable	Woodland at SU7834002450 and SU7857002250 assessed against the site's conservation objectives dated November 2007. Small area of non-intervention woodland on the shore of the estuary. The 2 main sections are linked by a narrow strip of oaks and hawthorn which fringe the shore. These 2 small areas of woodland are in favourable condition. Ground layer of bracken, grassland, bramble and ivy. Canopy oak dominated with some hawthorn scrub. Some open areas and lots of dead wood. Comment by Amy Francis 29/08/08.	

LITTORAL SEDIMENT	KRISTOFFER HEWITT	022	1016993	131.7106	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2016 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous Assessment comments: The areas throughout the unit are dominated by Spartina, but there are frequent areas of low-to mid saltmarsh communities, with occasional pioneer and mid-high communities present. Algae present throughout, % cover low in some areas (less than 5%) and in 3	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KRISTOFFER HEWITT	023	1016994	104.4732	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2016 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous assessment comments: Upper reaches of Bosham channel, into the harbour dominated by algae, rest of unit absent or rare. The upper reaches are dominated by cord grass , but there are frequent areas of low-to mid saltmarsh communities, with occasional pioneer and mid-high communities present in the mid and	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KRISTOFFER HEWITT	024	1016995	87.0592	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous assessment comments: This unit includes extensive intertidal habitat. Part is backed by low level flood defenses but the majority is not affected by 'coastal squeeze'. There is concern about raised nutrient levels which is resulting in excessive algal growth in places. This is being addressed through	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	025	1016973	1.9702	0.00	28/01/2010	Favourable	The grassland has not undergone any loss in area, and is botanically rich in species. A running species list provided by the landowner and observing the grassland at the time of survey found constant species such as crested dog's-tail, common knapweed and occasional or rare species such as fescues, meadow vetchling, black medick, bird's-foot trefoil, creeping cinquefoil, meadow and bulbous buttercup and rarer species such as adder's-tongue fern, pepper saxifrage, twayblade and green-winged orchid (the orchids occasionally appear in impressive stands from year to year). The high spring tide mark is apparent approximately 30m from the shoreline, and the botanical composition of the grassland becomes more coastal towards the shore, including species such as sea couch grass, sea beet, thrift, sea plantain, wild carrot, sea-lavender and sea purslane. The site is currently in good management, involving mowing once or twice each summer with the cuttings removed, usually in June/ July. Bare ground and litter levels are satisfactory. At the time of survey, sward height was on average 5cm. A number of negative indicator species were seen such as greater plantain and creeping/ spear thistle, but they occur at satisfactory cover, below 5%. The unit is not subject to heavily invasive species, and scrub levels are maintained at below 5%.	
BROADLEAVED, MIXED AND YEW WOODLAND - Lowland	KRISTOFFER HEWITT	026	1016961	40.8469	0.00	21/03/2019	Unfavourable - Recovering		FORESTRY - FORESTRY AND WOODLAND MANAGEMENT,

LITTORAL SEDIMENT	KRISTOFFER HEWITT	027	1016996	51.3959	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2016 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous assessment comments: The upper reaches of the unit are dominated by Spartina, but in the mid-to lower sections there are a range of low to upper saltmarsh communities, with occasional pioneer communities where the spartina is present in lower frequencies. Algae in one stretch dominant, over the rest of the	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	028	1017004	5.4059	0.00	04/09/2008	Favourable	Favourable 'site fabric' - Healthy looking area of upper saltmarsh grading into grassland dominated by sea couch. Comment by Amy Francis 04/09/08.	

FEN, MARSH AND SWAMP - Lowland	JO BROOKSBANK	029	1017001	6.4553	0.00	23/01/2017	Unfavourable - Recovering	Area of reedbed, dominated by common reed. Requires a programme of infrequent rotational cutting to ensure optimal habitat for range for invertebrates for which the site is notified. Majority of the reedbed is in agri-environment, and rotational cutting has been introduced. The northern area comprises fen habitat, which in the past has supported populations of Desmoulin's whorl snail. Recent surveys suggest that the snail may not now be present. Review of the designated site status for this species to be reviewed. Fen vegetation management required	
LITTORAL SEDIMENT	KRISTOFFER HEWITT	030	1016997	33.1731	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2017 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous assessment comments: Significant areas of saltmarsh/mudflats covered with algae, Apuldram outfall discharging into this unit. Upper reaches dominated by Spartina, mid to lower channel have appropriate communities, but low frequencies of appropriate species for this community. The height of	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF, FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,

LITTORAL SEDIMENT	KRISTOFFER HEWITT	031	1016998	49.3458	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous assessment comments: This unit has frequent Cord Grass (<i>Spartina anglica</i>) . <i>Spartina</i> within the harbour has historically been frequent and in some locations dominant. Provided that there is no evidence of further expansion/dominance into existing saltmarsh communities, consider meeting objectives. There is a	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KRISTOFFER HEWITT	032	1016999	174.7361	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2016 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous assessment comments: This unit has high % of Spartina. Little other pioneer zone present. Mid-upper and mid-low communities present, with frequent sea-purslane, annual sea-blite, glasswort species, and common sea lavender. Spartina within the harbour has historically been frequent and in some locations	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	033	1016969	2.2769	0.00	22/06/2009	Unfavourable - Recovering	This unit appears to be recovering well to salt marsh by a process of natural regeneration. Lower lying parts have a well-developed lower salt marsh community dominated by sea purslane with smaller amounts of samphire, common sea lavender, sea aster and seablite. There are also small patches of an upper salt marsh community with sea campion and buckshorn plantain. The surrounding higher ground is dominated by a tall sward of red fescue and sea couch.	

NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	035	1016970	5.4698	0.00	28/01/2010	Favourable	The unit supports low-lying semi-improved grassland, and appears to still be grazed by cattle. The sward of little botanical interest with constant and occasional species including crested dog's-tail, fescues and creeping bent, as well as creeping thistle and buttercup. The site includes patches of soft and hard rush, with a stand of reed-canary grass along the drains, as well as occasional patches of standing shallow water at time of survey. Scrub levels are below 5% and litter at time of survey was considered acceptable. The site provides a good mosaic of structure, and is considered suitable for supporting the wintering bird assemblage.	
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LITTORAL SEDIMENT	KRISTOFFER HEWITT	036	1016984	112.8351	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous assessment comments: This is an area of saltmarsh and vegetated shingle. Only occasional spartina, with a range of mid upper/mid-lower saltmarsh, with frequent sea-purslane, common sea lavender, greater sea-spurrey and glasswort species. Only occasional algae present. . There is no evidence of bare	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KRISTOFFER HEWITT	037	1016978	35.708	0.00	28/02/2019	Unfavourable - No change	This assessment revises and updates the condition assessment of 2017 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour but where these inputs may have more significance in encouraging the growth of macroalgae. Previous assessment comments: Large area of spartina, with algae dominant or frequent over all the stops, bare ground frequent, no upper saltmarsh species, with lower frequencies of low-mid saltmarsh community species. The excessive algal weed and diffuse pollution impacts are being addressed through the	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
LITTORAL SEDIMENT	KRISTOFFER HEWITT	038	1016979	3.6307	0.00	17/10/2008	Favourable	Unit is notified for the breeding and wintering birds it supports and remains favourable in this respect.	
NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	039	1016971	26.2744	0.00	23/01/2017	Favourable	The majority of this is grassland which is supporting habitat for overwintering birds. This area and adjacent unit 40 support large populations of brent geese. The fields are well grazed, helping to maintain the short sward which is preferred by brent geese. There is a small area of transitional wetland habitat and scrub in the north west area of the unit.	

NEUTRAL GRASSLAND - Lowland	KRISTOFFER HEWITT	040	1016972	3.5176	0.00	23/01/2017	Favourable	An area of grassland which is supporting habitat for overwintering birds. This area and adjacent unit 39, supports large populations of brent geese. The unit is mown, helping to maintain the short sward which is preferred by brent geese.	
SUPRALITTORAL SEDIMENT	KRISTOFFER HEWITT	041	1016976	16.6766	0.00	10/01/2017	Unfavourable - Recovering	Much of the unit is comprised of sand dune system, with strandline, mobile, dune slack and fixed dunes which transitions into saltmarsh. Strandline along the western side of the dunes sparsely vegetated with rare spear-leaved orache and sea rocket. The northern section of the site has embryonic dunes with strandline community –with occasional sea rocket, prickly saltwort, annual seablite, marram grass and frequent sand couch. Vegetated shingle is evolving into embryonic dunes. Mobile dunes: vegetation composition indicative of the species community, with marram grass dominant and occasional sand couch. Negative indicator species rare, with occasional bramble, elder. The centre of the site is composed of a mosaic of communities ranging from dune slack to semi-fixed communities. The area is dominated by sea rush (<i>Juncus maritimus</i>), as well as distant sedge (<i>Carex distans</i>), saltmarsh rush (<i>Juncus gerardii</i>) and yorkshire-fog (<i>Holcus lanatus</i>) Nationally scarce divided sedge (<i>Carex divisa</i>), present here, and nationally scarce sea heath (<i>Frankenia laevis</i>) present in the strandline community. The centre of the site indicates continued development of dune slack and fixed dune communities. This is a dynamic system, and the overall extent and species communities and composition is being maintained. Some evidence of high visitor numbers, particularly along the strandline. A programme of access management is in place. A plan is in place for the gradual removal of hard defences: the breastworks around the hinge,	

LITTORAL SEDIMENT	KRISTOFFER HEWITT	042	1017000	300.268	0.00	26/09/2018	Favourable	This assessment revises and updates the condition assessment of 2017 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Chichester Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There is not generally a dense cover of opportunistic green macroalgae (>75% cover density) in this unit but dense mats occur elsewhere and the harbour overall fails to achieve WFD Good status on macroalgae. The water environment of the unit is assessed as borderline favourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen but here with no strong biological indication of eutrophication shown by phytoplankton and macroalgae. A very large part of the nitrogen load input is carried by tidal flow from the Solent and relatively little by minor rivers into the arms of the harbour. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status in this part of the harbour if there is change in environmental conditions. Previous Assessment comments: Large part of the section forms part of the outer harbour estuary, with no saltmarsh. The western section	
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LITTORAL SEDIMENT	KRISTOFFER HEWITT	044	1025400	3.5412	0.00	01/09/2014	Favourable	This is a small area of developing saltmarsh, ponds and existing grassland. There is a range of salt marsh communities present – pioneer, mid and upper saltmarsh, and a range of species associated with these communities. Although cord grass – <i>Spartina anglica</i> is present, it is not at the expense of the other species that are beginning to colonise. There is little evidence of pollution, with the occasional algae covering small areas of the habitat. There is no evidence of bare substrate from manmade activities (trampling, vehicle use) or realignment of creeks. The height of the saltmarsh is on average around 20-25cm, which is acceptable as this area is not, nor has it traditionally been grazed.	
FEN, MARSH AND SWAMP - Lowland	KRISTOFFER HEWITT	045	1025606	3.5043	0.00	12/03/2009	Favourable	The grassland is notified for the breeding birds it supports and recent BBS data shows that the breeding birds are favourable at Chichester Harbour	

APPENDIX 10

Portsmouth Harbour SSSI Citation and Unit Condition Assessment

File ref:

County: Hampshire

Site Name: Portsmouth Harbour SSSI

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981

Local Planning Authority: Hampshire County Council, Gosport Borough Council, Fareham Borough Council, Portsmouth City Council

National Grid Reference: SU 620035

Ordnance Survey Sheet 1:50,000: 196

1:10,000: SU 50 NE, SE;
SU 60 NW, SE, SW; SZ 69 NW

Area: 1,266.09 (ha) 3,128.50 (ac)

Date Notified (Under 1949 Act): 1974

Date of Last Revision: –

Date Notified (Under 1981 Act): 21 March 1985 **Date of Last Revision:** 29 October 1992

Confirmed: 22 July 1993

Other Information:

Pewit Island (SU 608038) is a Hampshire and Isle of Wight Naturalists' Trust nature reserve.

The SSSI was extended in 1992 to include intertidal areas omitted at the earlier notifications. These include Brick Kiln, Forton, Haslar and Tipner Lakes.

Reasons for Notification:

Portsmouth Harbour is the westernmost of three extensive and connected tidal basins – Portsmouth, Langstone and Chichester Harbours – which share physical characteristics and, in many respects, should be seen as a single biological system. At high water they resemble large, nearly land-locked shallow lagoons. At low water extensive mudflats are exposed which are drained by systems of channels and creeks which, in each harbour, unite to form a narrow exit to The Solent through which the tide runs rapidly on the ebb. The harbours have a salinity approximating to that of the sea but they do receive some fresh water from springs arising in the intertidal zone, and from a number of small streams, the largest of which is the River Wallington, which flows into Fareham Creek, the westernmost channel of Portsmouth Harbour.

The intertidal area of Portsmouth Harbour includes 776ha (1,939 acres) of mudflats and about 173ha (432 acres) of cord-grass *Spartina* marshes. The muds comprise fine silts and organic matter, though over extensive areas angular flint gravel occurs commonly at the surface and similar material forms a beach at high water mark and a floor to the channels. The mudflats support an abundant fauna of benthic marine animals, though of a total fauna of about 60 species, only about ten occur in very large numbers. Of these, however, some occur at very high densities and form the main food sources for shorebirds. The mud surfaces support extensive beds of eelgrasses *Zostera noltii* and *Z. angustifolia* and extensive areas of the mudflats support a high density of green algae, mainly *Enteromorpha* species and *Ulva lactuca* in summer. In general terms the eelgrasses and algae are mutually exclusive in distribution on the mudflats. The eelgrass beds are among the most extensive in Britain and Portsmouth

Harbour is one of only four intertidal areas on the south coast to support extensive eelgrass beds. The beds have a rich associated benthic and epiphytic fauna and algal fauna and the eelgrass itself is an important food of the Brent goose.

The cord-grass marshes occur on mudflats in the upper part of the tidal range and are dominated by *Spartina anglica*. The marshes derive from colonisation of open mud since the late 19th century, and in maturity formed extensive monospecific stands of *Spartina anglica* growing on elevated platforms of accreted mud dissected by ramifying systems of drainage creeks. However, the maturing of the marshes has been succeeded by a phase of recession in which the plants are dying back and the platforms of accreted mud are eroding and slumping back to an approximation of the former mudflat profile. This process is widespread on the central south coast and is itself of great scientific interest. At the uppermost levels of the *Spartina* marshes *Spartina* is replaced locally by saltmarsh dominated by sea purslane *Halimolobos portulacastris*. At their highest levels these marshes grade to tussocky grassland dominated by sea couch *Elymus pycnanthus* and on Pewit Island this grassland has in turn been colonised by oak and blackthorn scrub. The nationally scarce golden samphire *Inula crithmoides* occurs at the upper limits of sea purslane marsh and at the toe of some sea walls.

The biological richness and productivity of Portsmouth Harbour is reflected in the numbers of wetland birds, particularly waders and wildfowl, which it supports. A wide range of feeding adaptations are represented among the species occurring in large numbers, which include waders and ducks dependent on the benthic invertebrates of mudflats and shallow waters; Brent geese and wigeon, which feed on eelgrass and algae; and an array of diving birds which depend on small fish, crustaceans and molluscs sought in the channels at low water and in shallow water over the mudflats at high water. Portsmouth Harbour is of national importance for the numbers of three species of waders (grey plover, black-tailed godwit and dunlin) it supports and is of national importance for the numbers of dark-bellied Brent geese which overwinter there. The total numbers of waders and wildfowl present has at times exceeded 20,000.

The SSSI includes two brackish lagoons adjoining Haslar Lake in the south-west of the Harbour. Brackish lagoons in which there is little rise or fall in water levels support a narrow range of species which are, however, highly specialist to lagoonal conditions. The fauna and flora of Little Anglesey Lake (= lagoon) is the most diverse known in lagoons in south-east England. Cockle Pond has a less diverse fauna but includes, in common with Little Anglesey Lake, populations of both the starlet sea anemone *Nematostella vectensis* and the lagoon sand shrimp *Gammarus insensibilis*, which are specially protected by Section 9(5) and Schedule 5 of the Wildlife and Countryside Act 1981.

The SSSI also includes a small area of terrestrial habitat extending along the southern side of Horsea Island, where chalk spoil dumped early in the 20th century supports a rich chalk grassland flora invaded by hawthorn. The flora includes about 30 species with narrow habitat tolerances or of decided rarity in Britain, including five species of orchids and three species of the pea family. The grassland is dominated by red fescue *Festuca rubra*, creeping bent *Agrostis stolonifera* and quaking grass *Briza media*, with abundant herbs such as lady's bedstraw *Galium verum*, eyebright *Euphrasia* species, rough hawkbit *Leontodon hispidus*, common bird's-foot trefoil *Lotus corniculatus*, and cowslip *Primula veris*. Typical chalk-loving species include kidney vetch *Anthyllis vulneraria*, yellow-wort *Blackstonia perfoliata*, stemless thistle *Cirsium acaule*, autumn gentian *Gentianella amarella*, salad burnet *Sanguisorba minor* and the nationally scarce species yellow vetch *Vicia lutea*, tuberous pea *Lathyrus tuberosus* and yellow vetchling *L. aphaca*.

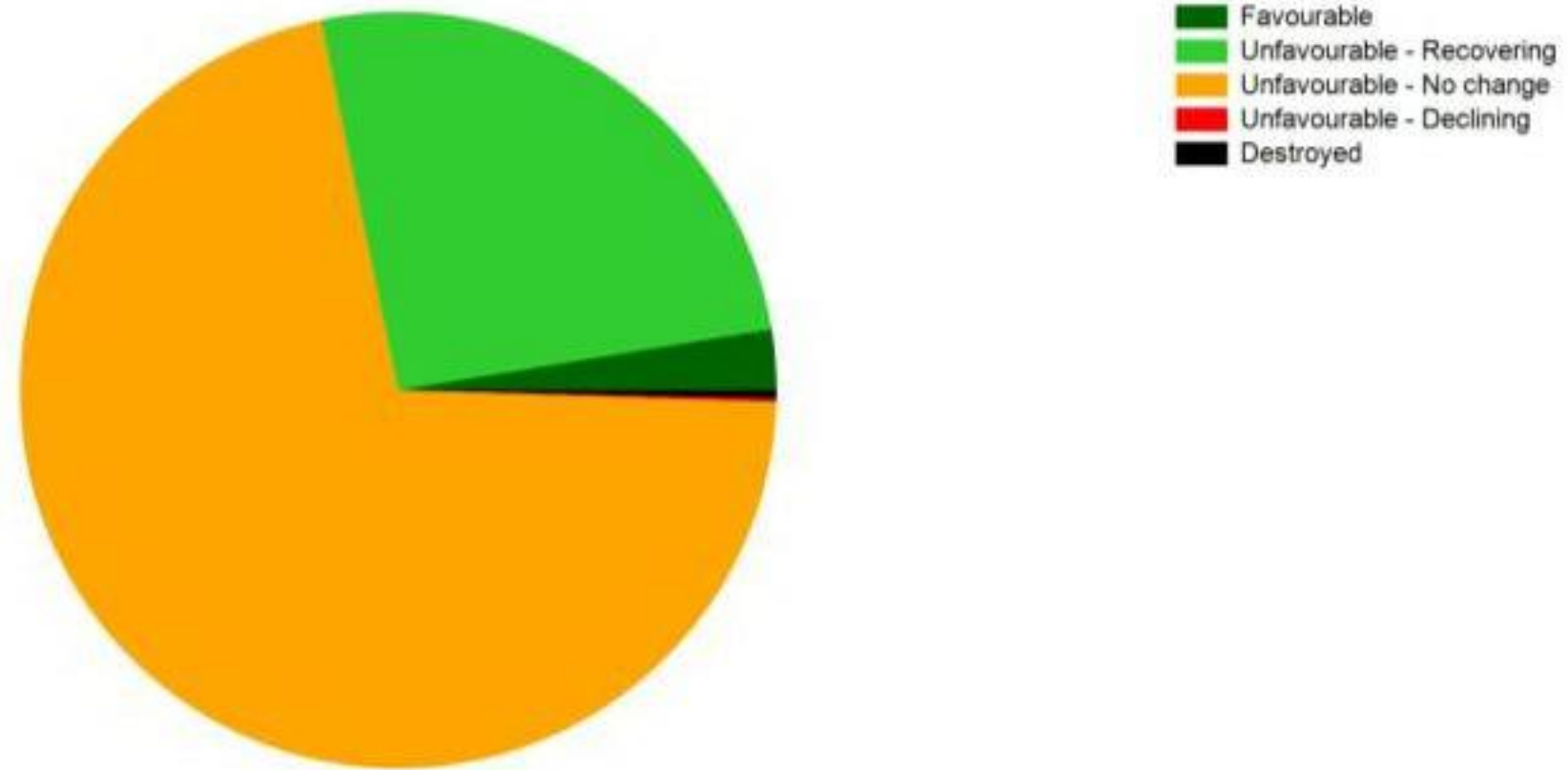
Site: Portsmouth Harbour SSSI

Report generated on: 30 Jul 2019

	Sites	Units	Units Assessed
Total number	1	23	23
Total area (ha)	1,264.21	1,264.21	1,264.21

	% meeting area of favourable or unfavourable recovering	Favourable	Unfavourable - Recovering	Unfavourable - No change	Unfavourable - Declining	Partially destroyed	Destroyed	Not Recorded
Area (ha)	357.58	32.68	324.90	900.22	1.95		4.46	
Percentage	28.28%	2.58%	25.70%	71.21%	0.15%	0.00%	0.35%	0.00%

Condition Summary



Main Habitat	Responsible Officer	Unit Number	Unit Id	Area (ha)	NNR Overlap Area (ha)	Latest Assessment Date	Assessment Description	Comment	Adverse Condition Reasons
Portsmouth Harbour SSSI - HAMPSHIRE (FAREHAM, GOSPORT, PORTSMOUTH)									
INSHORE SUBLITTORAL SEDIMENT - CL	KENNETH JOHNSTONE	001	1012704	1.9502	0.00	24/03/2014	Unfavourable - Declining	Cockle Pond comprises two interconnected artificial pools with concrete walls and bottoms. A concrete and boarding walkway separates the north pool from the south and houses a pipe connection. A sluice from south pool discharges into to Haslar Lake and allows replenishment of saline water into the south pool. The north pool is used extensively by the local swan population and suffers significant inputs of nutrients and litter. As a result it is largely anoxic at its bed. The salinity is too low to support a healthy lagoon community and the water is slightly acidic. The substratum comprises shell-gravel with much anthropogenic debris. Other than occasional Chironomid larvae and prawns (<i>Palaemonetes varians</i>), no fauna or flora were present in the north pool. The south pool has higher water quality but the salinity is still low. Substratum is a mosaic of rubble and muddy shell-gravel with some anthropogenic debris. The benthic community of the south pool is relatively impoverished with a total of only 7 species recorded. The lagoonal specialist alga wireweed, <i>Chaetomorpha linum</i> was present with new growth. The foxtail stonewort <i>Lamprothamnium papulosum</i> was also present. The fauna associated with the wireweed represented a poor quality example of the ENLag.Veg biotope. The Schedule 5 notified Lagoon Sand Shrimp (<i>Gammarus insensibilis</i>) was notably absent in 2013 but juveniles were noted in November 2013. Net sweepings in the lagoon found only prawns (<i>P. varians</i>) and no sessile species were recorded on the concrete walls of the pool.	

LITTORAL SEDIMENT	KENNETH JOHNSTONE	002	1012707	1.4602	0.00	19/09/2018	Favourable	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There is not generally a dense cover of opportunistic green macroalgae (>75% cover density) in this unit but dense mats occur elsewhere and the harbour overall fails to achieve WFD Good status on macroalgae. The water environment of the unit is assessed as borderline favourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen but here with no strong biological indication of eutrophication shown by phytoplankton and macroalgae. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats in this part of the harbour if there is change in environmental conditions. 2014 Assessment comments: Unit 2 of Portsmouth Harbour has been assessed as 'favourable' for its intertidal mudflats and overwintering bird features. This unit is a small area	
INSHORE SUBLITTORAL SEDIMENT - CL	KENNETH JOHNSTONE	003	1012708	3.295	0.00	17/05/2017	Unfavourable - No change	Nutrient source trends, and efficacy of measures across the Solent are subject to ongoing analysis through the Judicial Review consent order implementation and other programmes. Condition trend may therefore be subject to (further) change by end of March 2018.	

LITTORAL SEDIMENT	KENNETH JOHNSTONE	004	1012692	34.1477	0.00	19/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. 2014 Assessment comments: Unit 4 of Portsmouth Harbour has been assessed as 'unfavourable recovering' for its intertidal mudflats, saltmarsh and over-wintering bird features. The variables which this unit failed against during the assessment were presence of pollution by way of assorted plastic and metal debris; excessive macroalgal cover of the intertidal area (92% cover	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	005	1012693	16.232	0.00	19/09/2018	Unfavourable - Recovering	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There is not generally a dense cover of opportunistic green macroalgae (>75% cover density) in this unit but dense mats occur elsewhere and the harbour overall fails to achieve WFD Good status on macroalgae. The water environment of the unit is assessed as borderline favourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen but here with no strong biological indication of eutrophication shown by phytoplankton and macroalgae. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats in this part of the harbour if there is change in environmental conditions. 2014 Assessment comments: Unit 5 of Portsmouth Harbour has been assessed as 'unfavourable recovering' for its intertidal mudflats and over-wintering bird features. Forton Lake	
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	006	1012695	31.2195	0.00	19/09/2018	Favourable	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There is not generally a dense cover of opportunistic green macroalgae (>75% cover density) in this unit but dense mats occur elsewhere and the harbour overall fails to achieve WFD Good status on macroalgae. The water environment of the unit is assessed as borderline favourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen but here with no strong biological indication of eutrophication shown by phytoplankton and macroalgae. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats in this part of the harbour if there is change in environmental conditions. 2014 Assessment comments: Unit 6 of Portsmouth Harbour has been assessed as 'favourable' for its intertidal mudflats and overwintering bird features. Priddy's Hard intertidal	
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	007	1012696	71.0845	0.00	19/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. 2014 Assessment comments: Unit 7 of Portsmouth Harbour has been assessed as 'unfavourable recovering' for its intertidal mudflats, saltmarsh and over-wintering bird features. The Bedenham intertidal area comprises Littoral mud (A2.3) with saltmarsh on the high shore. Characteristic infaunal species of the mudflats include Tubificoides benedii, Hydrobia ulvae, Tharyx	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	008	1012697	61.0054	0.00	19/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. 2014 Assessment comments: Unit 8 of Portsmouth Harbour has been assessed as 'favourable' for its intertidal mudflats, saltmarsh and over-wintering bird features, which represents an improvement in condition since the last assessment of 'unfavourable recovering' in November 2010. The Frater intertidal area comprises Littoral mud (A2.3) with saltmarsh on the high shore.	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	009	1012698	27.7468	0.00	19/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. 2014 Assessment comments: The Fleetlands intertidal area comprises Littoral mud (A2.3) and littoral mixed sediment (A2.421) with saltmarsh on the high shore. Characteristic infaunal species of the mudflats include <i>Hediste diversicolor</i>, <i>Tubificoides benedii</i>, <i>Pygospio elegans</i>, <i>Streblospio</i>, Nematoda, <i>Cerastoderma edule</i>, <i>Corophium</i> sp. and <i>Scrobicularia</i>	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	010	1012699	19.6297	0.00	19/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. 2014 Assessment comments: The lower Fareham Creek intertidal area comprises Littoral mud (A2.3) and littoral mixed sediment (A2.421) with littoral coarse sediment (A2.1) on the upper shore. A small area of saltmarsh is present in the north of the unit. Characteristic infaunal species of the mudflat include Streblospio, Tharyx sp., Tubificoides benedii, Tubificoides	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	011	1012700	54.2337	0.00	19/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. 2014 Assessment comments: The Cams Bay intertidal area comprises Littoral mud (A2.3) with polychaete / oligochaete dominated upper estuarine mud shores (A2.32) and Hediste diversicolor in littoral mud (A2.322) and saltmarsh on the high shore. There is a large seagrass (Zostera noltii) bed present in Cams Bay. Characteristic infaunal species of the mudflats	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	013	1017648	51.1872	0.00	19/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. 2014 Assessment comments: The Paulsgrove Lake intertidal area comprises Littoral mud (A2.3), including Tubificoides benedii and other oligochaetes in littoral mud (A2.323), and Littoral mixed sediment (A2.4). Sections of the high shore along the northern part of Paulsgrove Lake are dominated by littoral coarse sediment (A2.1). Characteristic infaunal species of	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	014	1012702	108.6254	0.00	19/09/2018	Unfavourable - Recovering	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There is not generally a dense cover of opportunistic green macroalgae (>75% cover density) in this unit but dense mats occur elsewhere and the harbour overall fails to achieve WFD Good status on macroalgae. The water environment of the unit is assessed as borderline favourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen but here with no strong biological indication of eutrophication shown by phytoplankton and macroalgae. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats in this part of the harbour if there is change in environmental conditions. 2014 Assessment comments: The Port Solent to Horsea intertidal area comprises Littoral mud (A2.3) and Polychaete / oligochaete dominated upper estuarine mud shores (A2.32), with Littoral	
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CALCAREOUS GRASSLAND - Lowland	KENNETH JOHNSTONE	015	1017650	10.0978	0.00	05/03/2014	Unfavourable - Recovering	This unusual, isolated grassland unit is made up of chalk deposited from diggings under Portsdown Hill. Over the years it developed a chalk grassland flora and significant invertebrate interest. Then the habitat became scrubbed over. A management plan was drawn up and over the past 5 years significant works have been carried out with the help of dedicated volunteers group. The scrub is gradually being reduced and the majority of the area is now grazed with sheep. The improvement is expected to continue with this management regime in place, and the site is moving towards favourable condition. Floristic and invertebrate surveys are carried out regularly by the volunteers, to assess the success of the management and inform future management.	
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	016	1012703	44.2471	0.00	19/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. 2014 Assessment comments: The Tipner Lake intertidal area comprises Littoral mud (A2.3) and Tubificoides benedii and other oligochaetes in littoral mud (A2.323). Characteristic infaunal species of the mudflats include Tubificoides benedii, Hydrobia ulvae, Streblospio spp., Hediste sp., Tharyx sp., Nephythys spp. and Tubificoides galliciensis. The majority of the	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
NEUTRAL GRASSLAND - Lowland	KENNETH JOHNSTONE	017	1017651	3.5851	0.00	07/03/2014	Unfavourable - Recovering	This unit is important as a high tide roost for Brent geese and other wading birds. A visit was carried out to assess the condition of the site in December 2013. The site was found to be scrubbed up with significant amounts of litter in places. So is not in good condition for birds using it as a high tide roost. However as a matter of urgency the owners have undertaken to start clearing brambles, undertake a litter pick, and start work to address other issues before the end of March 2014. It is expected by March 2015 this area will return to Favourable condition.	

LITTORAL SEDIMENT	KENNETH JOHNSTONE	018	1017649	185.1101	0.00	19/09/2018	Unfavourable - Recovering	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There is not generally a dense cover of opportunistic green macroalgae (>75% cover density) in this unit but dense mats occur elsewhere and the harbour overall fails to achieve WFD Good status on macroalgae. The water environment of the unit is assessed as borderline favourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen but here with no strong biological indication of eutrophication shown by phytoplankton and macroalgae. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats in this part of the harbour if there is change in environmental conditions. 2014 Assessment comments: The Whale Island intertidal area comprises Littoral mud (A2.3), including Polychaete/oligochaetes-dominated upper estuarine mud shores (A2.32), and gravel (pebble)	
LITTORAL SEDIMENT	KENNETH JOHNSTONE	019	1023067	4.464	0.00	11/08/2010	Destroyed	This area formerly supported intertidal sediment (mudflat) habitat. The habitat has been completely destroyed through development and there is no scope for restoration in this location.	COASTAL - INAPPROPRIATE DREDGING,

SUPRALITTORAL SEDIMENT	KENNETH JOHNSTONE	020	1021616	1.2476	0.00	29/11/2010	Unfavourable - Recovering	This is a small area of intertidal mud with small areas of pioneer salt marsh. The habitats are affected significantly by sea level rise. This means that the extent of habitat exposed at low tide will be declining and the area of salt marsh is likely to be diminishing. Changes in water level may also be having adverse impacts on the distribution and extent of biotopes associated with the intertidal sediments. The issue is being addressed through the creation of compensatory habitat and coastal re-alignment at Medmerry. Birds numbers, as with elsewhere in the wider Solent, are declining for reasons which are unclear. However Portsmouth Harbour has a high level of disturbance and relatively poor availability of roosting sites for wintering birds which restrict its ability to support waders and wildfowl interests in relation to other parts of the estuary. Disturbance to feeding and roosting birds is being addressed through the Solent Bird Disturbance Project. The littoral habitat is also subject to disturbance by clam dredging. The scale of the impact is unclear but is thought likely to have significant impacts on the sediment in-fauna. This is being tackled through on-going discussions with the Marine Management Organisation and other partners.	
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	021	1029006	15.8277	0.00	19/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. 2014 Assessment comments: The upper Fareham Creek intertidal area comprises Littoral mud (A2.3) and littoral mixed sediment (A2.421) with littoral coarse sediment (A2.1) on the upper shore. Characteristic infaunal species of the mudflat include Streblospio, Tharyx sp., Tubificoides benedii, Tubificoides pseudogaster and Nematoda. The majority of the intertidal habitat	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
INSHORE SUBLITTORAL SEDIMENT - CL	KENNETH JOHNSTONE	022	1029532	0.2361	0.00	05/03/2014	Unfavourable - No change	Unit 22 is classified as intertidal habitat. Unfortunately in the past significant pollution entered the area and it was recommended to isolate the unit from the rest of Portsmouth harbour to reduce the impact of the pollution. Sluice gates are in place and the aim is to clear the polluted material remove the sluice gates so this unit can become intertidal. Research has been carried out to mitigate the pollution by introducing reeds but this has not proved a realistic solution. Further work need to be carried out to assess the problem and suggest a comprehensive solution.	OTHER - OTHER - SPECIFY IN COMMENTS,

LITTORAL SEDIMENT	KENNETH JOHNSTONE	023	1030404	229.6312	0.00	19/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. 2014 Assessment comments: The Portchester intertidal area comprises Littoral mud (A2.3), with polychaete / oligochaete dominated upper estuarine mud shores (A2.32) and Tubificiodes benedii and other oligochaetes in littoral mud (A2.323), and gravel (pebble) and shingle shores (A2.11) on the upper shore in front of the sea walls. Characteristic infaunal species of the mudflats	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	024	1030405	287.945	0.00	19/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2014 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other Portsmouth Harbour units, this part of the harbour achieves WFD Moderate status on mean winter inorganic nitrogen and WFD Good to High status on phytoplankton. There can be areas of dense opportunistic green macroalgae (>75% cover density) in this unit, and across the harbour as a whole the abundance of macroalgae achieves WFD Moderate status. The water environment of the unit is assessed as unfavourable for the interest features on the weight of evidence on elevated levels of inorganic nitrogen and biological indication of eutrophication shown by the abundance of macroalgae. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. A large part of the nitrogen load input is carried by tidal flow from the Solent but relatively very little by minor rivers into the head of the harbour. 2014 Assessment comments: The Bombketch Lake intertidal area comprises Littoral mud (A2.3), including the biotopes Polychaete/bivalve dominated mid estuarine mud shores (A2.31), Polychaete/oligochaetes-dominated upper estuarine mud shores (A2.32) and Tubificoides benedii and other oligochaetes in littoral mud (A2.323). Characteristic infaunal species of the	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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APPENDIX 11

Lee-On-The Solent and Hythe to Calshot Marshes
Citation and Unit Condition Assessment

File ref:

County: Hampshire **Site Name:** Lee-on-The-Solent to Itchen Estuary SSSI

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981

Local Planning Authority: Hampshire County Council, Eastleigh Borough Council, Fareham Borough Council, Gosport Borough Council, Southampton City Council

National Grid Reference: SU 432133 – SZ 569994

Ordnance Survey Sheet 1:50,000: 196 **1:10,000:** SU 40 NE, NW, SE; SU 41 SW; SU 50 NW, SE, SW; SZ 59 NE

Area: 631.91 (ha) 1,561.44 (ac)

Date Notified (Under 1981 Act): 27 August 1992 **Date of Last Revision:** –

Confirmed: 21 May 1993

Other Information:

The SSSI includes in part three Local Nature Reserves (LNR) declared under Section 20 of the National Parks and Access to the Countryside Act, 1949. Chessel Bay LNR (14ha) is owned and managed by Southampton City Council, Hook-with-Warsash LNR (220ha) and Mercury Marshes LNR (6.7ha) are owned and managed by Hampshire County Council.

Reasons for Notification:

The Site of Special Scientific Interest extends along the eastern shore of Southampton Water from Lee-on-the-Solent to the mid-Itchen estuary and includes the lower estuary of the River Hamble. The site comprises extensive intertidal muds with a littoral fringe of vegetated shingle, saltmarsh, reedbed, marshy grasslands and deciduous woodland on alluvium, valley gravels (Hamble Common), and Bracklesham Beds (Hook Links). The site is an integral part of Southampton Water which is of international importance for over-wintering dark-bellied geese, and of national importance for three species of wildfowl (great-crested grebe, teal and wigeon) and five species of wader (black-tailed godwit, dunlin, grey plover, ringed plover, redshank). The SSSI supports an outstanding assemblage of nationally scarce coastal plants. In addition, the cliffs at Brownwich and the foreshore at Lee-on-The Solent are of national geological importance.

The intertidal flats achieve a maximum width of 0.6km at the mouths of the Itchen and Hamble estuaries. West of the Hamble they are mainly of gravelly mud, but eastward of the estuary mouth they grade to fine, muddy sand with intertidal banks of flint at Hillhead. The sediments, which in the Hamble estuary contain a high clay fraction, receive abundant organic matter which enable the intertidal flats to support high densities of benthic invertebrates (molluscs, crustacea, marine worms, etc.), including probably the largest remaining British population of the introduced hard shell clam *Mercenaria mercenaria*. On the lower shore, east of the Hamble, there are extensive beds of the eelgrasses *Zostera angustifolia* and *Z. noltii*, both of which are nationally scarce species. Green algae, mainly *Enteromorpha* and *Ulva lactuca*, are widespread in the intertidal zone. There is limited *Spartina* marsh development in the Hamble and Itchen estuaries, although the marsh is now in recession and the accreted mud platforms are disintegrating.

At low water the intertidal flats comprise major feeding grounds for waders and dark-bellied Brent geese. Total numbers of waders in Southampton Water in winter normally exceed 10,000, which is considered to be the qualifying level for national importance. Numbers of Brent geese can exceed 2,000. At times, most of the geese and more than half of the waders feed within the SSSI which is thus ornithologically a critically important component of the Southampton Water estuary. The SSSI provides important feeding areas for black-tailed godwit, dunlin, grey plover, ringed plover, redshank, curlew and turnstone. The Brent geese feed on green algae and eelgrass on the intertidal flats early in the winter, but later also exploit farmland outside the SSSI and the Hook Links grazing marsh within it. At high tide the very shallow water over the flats between the Hamble and Hillhead is an important feeding and roosting area for great-crested grebes, red-breasted mergansers and other marine birds; the numbers of great-crested grebes here can exceed 200 and are of national importance.

Adjoining the shore the SSSI includes a diversity of wetland habitats of intrinsic and collective importance ornithologically. They also support populations of a number of plant species which are nationally scarce.

At the mouth of the Hamble estuary the SSSI includes grazing marsh reclaimed from saltmarshes in the seventeenth century (Hook Links), a reed-fringed freshwater fleet (Hook Lake) and deciduous woodland extending inland along a former tidal re-entrant. The deciduous woodland is of ancient origin and is dominated by valley alder *Alnus glutinosa* grading into mixed oak *Quercus robur*, with ash *Fraxinus excelsior*, birch *Betula* species, and sycamore *Acer pseudoplatanus* woodland on the higher slopes. Willow carr occurs on the margins of the reedbed at Hook Lake. The shrub layer in the oak woodland is dominated by hazel *Corylus avellana* and holly *Ilex aquifolium*, with a variable ground flora of bracken *Pteridium aquilinum*, ivy *Hedera helix*, bluebell *Hyacinthoides non-scripta*, and, occasionally, climbing corydalis *Corydalis claviculata*. In the valley bottom greater tussock-sedge *Carex paniculata*, alternate-leaved golden-saxifrage *Chrysosplenium oppositifolium* and narrow buckler-fern *Dryopteris carthusiana* grow in abundance. In addition to the normal suite of breeding birds, the alder is attractive in autumn and winter to flocks of feeding goldfinch, redpoll and siskin.

The unimproved and semi-improved grasslands of the old grazing marshes at Hook Links are dominated by bent *Agrostis* species and fescue *Festuca* species grasses, with meadow foxtail *Alopecurus pratensis* and meadow barley *Hordeum secalinum*. The nationally scarce slender hare's-ear *Bupleurum tenuissimum* occurs on the seawall. Hook Links supports breeding lapwing, oystercatchers and redshank and is an important mid and late winter feeding ground for Brent geese. The excavation of the scrape has enhanced its function as a feeding and high water roost for waders and ducks.

Swamp and fen vegetation occurs at several points immediately beyond tidal influence and mainly within the Hamble estuary. Fine transitions from tidal flat to fen occur at Bunny Meadows, on the left bank of the estuary, and at Mercury Marshes, on the right bank. Here, common reed *Phragmites australis* is dominant together with patches of sea club-rush *Scirpus maritimus*. At Mercury Marshes hemlock water-dropwort *Oenanthe crocata*, lesser and greater pond-sedges *Carex acutiformis*, *C. riparia* respectively, and jointed rush *Juncus articulatus* are found. At Hook Lake, the large reedbed supports a good breeding bird population including little grebe, Cetti's warbler, reed bunting and reed warbler. Bearded tit visit in winter, but, as yet, do not breed.

Where the reed grades into saltmarsh, there can be found sea purslane *Halimione portulacoides* with varying combinations and amounts of sea aster *Aster tripolium*, common sea-lavender *Limonium vulgare* and common saltmarsh-grass *Puccinellia maritima*. The nationally scarce borrer's and stiff saltmarsh-grasses *P. fasciculata* and *P. rupestris* respectively, have also been found at Bunny Meadows. Cord-grass *Spartina* is also dominant over large, lower-lying areas, especially outside the

seawall at Bunny Meadows, where the saltmarsh has been the subject of erosion for the past 50 years. In places, algae-draped mud hags with just a few clumps of *Spartina* survive. At Hamble Common, the saltmarsh, partially blocked-off at the end of a tidal inlet, is dominated by saltmarsh and sea rushes *Juncus gerardii* and *J. maritimus* respectively.

At Chessel Bay the transition occurs from shingly mud through clumps of *Spartina* marsh to a fringe of common reed at the toe of a Brickearth terrace. The edge of the terrace is covered by mature oak woodland which is believed to be ancient in origin.

Vegetated shingle, a nationally restricted habitat, is found fronting the reedbed at Beach Close, at Hook Spit, and on the well-developed shingle ridges at Hook Links, where ringed plover nest. Typical plant species adapted to the relatively harsh environmental conditions found, include the nationally scarce sea-kale *Crambe maritima*, together with sea beet *Beta vulgaris* subspecies *maritima*, sea rocket *Cakile maritima*, sea bindweed *Calystegia soldanella*, yellow-horned poppy *Glaucium flavum*, sand couch *Elymus farctus*, sticky ragwort *Senecio viscosus* and sea campion *Silene maritima*. On the more stable substratum on the landward-most shingle ridge, additional species are found including thrift *Armeria maritima* subspecies *maritima*, sea wormwood *Artemisia maritima*, buck's-horn plantain *Plantago coronopus*, sea pearlwort *Sagina maritima*, biting stonecrop *Sedum acre* and spring vetch *Vicia lathyroides*.

On the western side of the Hamble estuary mouth, the SSSI includes a mosaic of acidic grassland and wet heath found on Hamble Common, with cross-leaved heath *Erica tetralix* and purple moor-grass *Molinia caerulea* dominant or co-dominant amongst patches of bracken or gorse. Bristle bent *Agrostis curtisii*, brown bent *A. vinealis* and saw-wort *Serratula tinctoria* are also present.

Geological importance:

The cliffs north of Hillhead provide important exposures in terrace gravels of the former Solent river system, in the area of its confluence with the tributary Test valley. These cliffs are also important as a rich source of Palaeolithic artefacts. They allow the study of gravel sedimentology over a large continuous exposure and, in conjunction with other sites along the Solent coast, provide a cross-section through the 'staircase' of Solent terraces. This adds significantly to the understanding of this geomorphological and geological phenomenon.

The important site at Lee-on-The-Solent yielded the first British bird fossils of mid-Eocene age. The avifauna includes type material for five species, and shows the continuity of typical Lower Eocene families such as the Rallidae and the Phasianidae; one of only a few locations to yield a mid-Eocene avifauna. Stratigraphically younger horizons have here yielded remains of three further species, one of which is the large flamingo-like duck *Headonornis hantoniensis* which has also been recorded from the upper Eocene and lower Oligocene of the Isle of Wight. This family, the Presbyornithidae, is unique to Britain from the mid-Eocene onwards.

Also at Lee-on-The-Solent, natural residues, derived from several horizons in the Bracklesham Beds, are building up here on the surface of the exposure, and these yield more large teeth than at the type locality of Bracklesham. The site is particularly rich in sharks teeth. Thirty-seven species of shark are recorded, including nineteen rays and five species of chimaeroids. This locality yields the unique species *Alopias leensis* and a chimaeroid, *Elasmodus kempi*. Chimaeroids, poorly known cartilaginous fish are rarely found as fossils and the site yields important evidence of the order. Seventy-seven species of teleost have been recorded here, forty-five of these from otoliths.

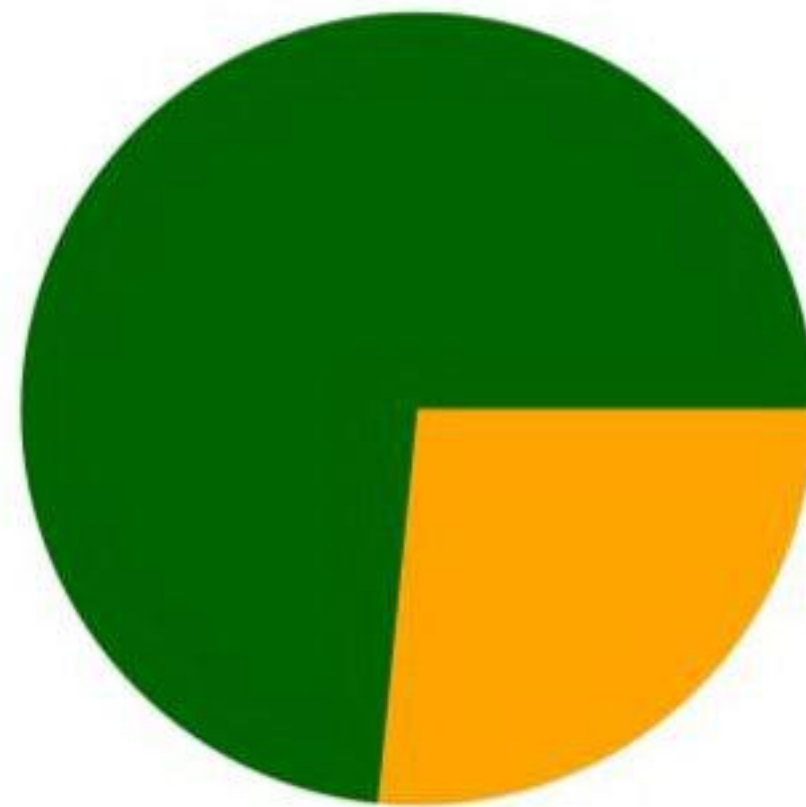
Site: Lee-on-The Solent to Itchen Estuary SSSI

Report generated on: 30 Jul 2019

	Sites	Units	Units Assessed
Total number	1	27	27
Total area (ha)	585.90	585.90	585.90

	% meeting area of favourable or unfavourable recovering	Favourable	Unfavourable - Recovering	Unfavourable - No change	Unfavourable - Declining	Partially destroyed	Destroyed	Not Recorded
Area (ha)	430.06	430.06		155.84				
Percentage	73.40%	73.40%	0.00%	26.60%	0.00%	0.00%	0.00%	0.00%

Condition Summary



Favourable
Unfavourable - No change

Main Habitat	Responsible Officer	Unit Number	Unit Id	Area (ha)	NNR Overlap Area (ha)	Latest Assessment Date	Assessment Description	Comment	Adverse Condition Reasons
Lee-on-The Solent to Itchen Estuary SSSI - HAMPSHIRE (EASTLEIGH, FAREHAM, GOSPORT, SOUTHAMPTON)									
LITTORAL SEDIMENT	KENNETH JOHNSTONE	001	1007795	13.2603	0.00	19/09/2018	Favourable	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with Southampton Water, the Itchen sub-estuary contributes to achieving WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. Within the Itchen sub-estuary the abundance of macroalgae achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m ² . The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. There is a significant nitrogen load input, both from Southampton Water and the River Itchen. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: the SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with	

LITTORAL SEDIMENT	KENNETH JOHNSTONE	002	1007796	13.306	0.00	19/09/2018	Favourable	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with Southampton Water, the Itchen sub-estuary contributes to achieving WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. Within the Itchen sub-estuary the abundance of macroalgae achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. There is a significant nitrogen load input, both from Southampton Water and the River Itchen. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: the SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with	
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	003	1007797	3.8214	0.00	19/09/2018	Favourable	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with Southampton Water, the Itchen sub-estuary contributes to achieving WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. Within the Itchen sub-estuary the abundance of macroalgae achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. There is a significant nitrogen load input, both from Southampton Water and the River Itchen. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: the SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with	
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	004	1007799	5.7346	0.00	19/09/2018	Favourable	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with Southampton Water, the Itchen sub-estuary contributes to achieving WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. Within the Itchen sub-estuary the abundance of macroalgae achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. There is a significant nitrogen load input, both from Southampton Water and the River Itchen. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: the SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with	
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	005	1007800	3.5364	0.00	18/09/2018	Favourable	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: The SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with gravel and	
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	006	1007802	62.2166	0.00	18/09/2018	Favourable	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: The SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with gravel and	
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	007	1007803	33.5022	0.00	18/09/2018	Favourable	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: The SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with gravel and	
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	008	1007804	31.9614	0.00	18/09/2018	Favourable	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: The SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with gravel and	
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	009	1023165	26.1859	0.00	18/09/2018	Favourable	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: The SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with gravel and	
DWARF SHRUB HEATH - Lowland	KENNETH JOHNSTONE	010	1007833	16.6402	0.00	11/04/2008	Favourable		

LITTORAL SEDIMENT	KENNETH JOHNSTONE	011	1007838	6.6796	0.00	18/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with Southampton Water, the Hamble sub-estuary contributes to achieving WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. Within the Hamble sub-estuary the abundance of macroalgae achieves WFD Moderate status and there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as unfavourable for the interest features on the on the weight of evidence on inorganic nitrogen and biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the River Hamble and by tidal flow from Southampton Water and the Solent. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. 2010 assessment comments: The SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with gravel and cobbles at the surface. Coarse materials provide a habitat for barnacles and molluscs, generally the most numerous animals. Other widespread taxa are common cockle <i>Cerastoderma edule</i> and sand mason <i>Janice</i>	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	012	1007839	10.1133	0.00	18/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with Southampton Water, the Hamble sub-estuary contributes to achieving WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. Within the Hamble sub-estuary the abundance of macroalgae achieves WFD Moderate status and there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as unfavourable for the interest features on the on the weight of evidence on inorganic nitrogen and biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the River Hamble and by tidal flow from Southampton Water and the Solent. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. 2010 Assessment Comments: The SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with gravel and cobbles at the surface. Coarse materials provide a habitat for barnacles and molluscs, generally the most numerous animals. Other widespread taxa are common cockle <i>Cerastoderma edule</i> and sand mason <i>Janice</i>	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	013	1007848	14.7843	0.00	18/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with Southampton Water, the Hamble sub-estuary contributes to achieving WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. Within the Hamble sub-estuary the abundance of macroalgae achieves WFD Moderate status and there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as unfavourable for the interest features on the on the weight of evidence on inorganic nitrogen and biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the River Hamble and by tidal flow from Southampton Water and the Solent. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. 2010 Assessment Comment: The SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with gravel and cobbles at the surface. Coarse materials provide a habitat for barnacles and molluscs, generally the most numerous animals. Other widespread taxa are common cockle <i>Cerastoderma edule</i> and sand mason <i>Janice</i>	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	014	1007850	38.0856	0.00	18/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with Southampton Water, the Hamble sub-estuary contributes to achieving WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. Within the Hamble sub-estuary the abundance of macroalgae achieves WFD Moderate status and there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as unfavourable for the interest features on the on the weight of evidence on inorganic nitrogen and biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the River Hamble and by tidal flow from Southampton Water and the Solent. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. 2018 Assessment Comments: The SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with gravel and cobbles at the surface. Coarse materials provide a habitat for barnacles and molluscs, generally the most numerous animals. Other widespread taxa are common cockle <i>Cerastoderma edule</i> and sand mason <i>Janice</i>	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	015	1023166	38.6606	0.00	18/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with Southampton Water, the Hamble sub-estuary contributes to achieving WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. Within the Hamble sub-estuary the abundance of macroalgae achieves WFD Moderate status and there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as unfavourable for the interest features on the on the weight of evidence on inorganic nitrogen and biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the River Hamble and by tidal flow from Southampton Water and the Solent. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. 2010 Assessment comments: The SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with gravel and cobbles at the surface. Coarse materials provide a habitat for barnacles and molluscs, generally the most numerous animals. Other widespread taxa are common cockle <i>Cerastoderma edule</i> and sand mason <i>Janice</i>	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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LITTORAL SEDIMENT	KENNETH JOHNSTONE	016	1007809	45.3161	0.00	18/09/2018	Favourable	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: The SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with gravel and	
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BROADLEAVED, MIXED AND YEW WOODLAND - Lowland	KENNETH JOHNSTONE	017	1007865	13.485	0.00	26/08/2009	Favourable	This unit consisted of good quality wet alder woodland, dissected by a water channel, which was supporting a dense stand of common reed. The main canopy species was alder with frequent sycamore and some oak and beech along the slopes. The understory consisted of willow, holly and young canopy species. There was a varied ground flora with opposite-leaved golden-saxifrage, hemlock water-dropwort, currant, enchanter's-nightshade, ferns, remote sedge, nettle and a few garden escapes. The wood had good structural variation with a varied age range, some dead wood, open spaces and wet pools.	
FEN, MARSH AND SWAMP - Lowland	KENNETH JOHNSTONE	018	1007866	12.6005	0.00	26/08/2009	Favourable	Area of reedbed with some open water and adjacent cattle grazed pasture. There was no evidence to suggest any reduction in the extent of these habitats. The stand of common reed looked in good condition with few weeds present and no scrub encroachment. The water table was variable across the unit. A good minimal intervention area contributing to the overall coastal habitat mosaic. No signs of any problems.	

NEUTRAL GRASSLAND - Lowland	KENNETH JOHNSTONE	019	1007852	6.759	0.00	26/08/2009	Favourable	This unit consisted mainly of coastal grazing marsh with a mix of grasses, rushes and sedges and some open water pools/ channels. The sward had good structural variation with short grazed areas and tussocky areas, some bare ground and scattered scrub. Ground conditions over much of the unit were fairly dry at this time. The open water body had graded poached margins with shallow water, offering feeding opportunities for wading birds probing for invertebrates, diving birds predating small fish and waterfowl feeding on algae. There were islands offering anti-predator roosting sites and the surrounding grazing marsh offered varying sward heights with soft leaved plants and grasses for waterfowl that require vegetation for grazing. The unit was part of a larger expanse of land, reducing the vulnerability of these birds to predation. Disturbance levels were minimised by fencing and hedging along adjacent public foot paths. One of the drains leading from the pond was dominated by reed and another had a water filled channel containing abundant algae. This had been dug out relatively recently, and the spoil had been deposited along the edge. The bare substrate had been colonised by sea-spurrey, curled dock and sheep's sorrel. Along the western boundary of the unit there was a thin strip of shingle supporting a specialised plant community including sea campion, sea beet, yellow horned-poppy and sea couch (vegetated shingle, SAC feature). This unit contained good supporting habitat for a range of wading birds and waterfowl offering a	
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NEUTRAL GRASSLAND - Lowland	Conservation Delivery Team	020	1023160	45.2323	0.00	26/08/2009	Favourable	This unit was mainly species poor coastal grazing marsh, with areas of rush pasture and open water to the north, acid grassland and shingle communities along the western boundary and a small area of willow scrub and reed bed to the south of the unit. The grassland was cattle grazed and consisted of a good mix of grasses but only a few scattered forbs. The sward varied in height across this large unit from around 2 to 20cm. The rush pasture had more floristic and structural interest and was dominated by hard/ soft rush with greater bird's-foot-trefoil, occasional meadow vetchling, common sorrel and a channel supporting iris, common fleabane, water dock, sea club rush and common spike-rush. The shorter grazed turf to the north had abundant common knapweed, hawkbit and common bird's-foot-trefoil. The open water body had graded muddy edges with shallow water areas for feeding waders, surrounded by a mix of tussocky marginal vegetation and short grass turf for grazing waterfowl. There were also islands adding safe roosting and additional feeding areas. At the time of this visit the islands were supporting a range of birds including little egret, sandpiper, oystercatcher, lapwing and black-headed gull. None of these species are listed as part of the aggregation of non-breeding birds. I was only assessing supporting habitat and it was suboptimal survey time for recording the listed wintering birds. Below this the shingle was supporting a specialised plant community with sea-kale (part of rare plant assemblage), sea campion, sea beet,	
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LITTORAL SEDIMENT	Conservation Delivery Team	021	1017642	70.7346	0.00	18/09/2018	Favourable	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m2. The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: The SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with gravel and	
EARTH HERITAGE	Conservation Delivery Team	022	1017645	1.9728	0.00	09/11/2007	Favourable	Approximately 80% favourable, 20% obscured by vegetation between SZ525029 and SZ 528026 - comprising scrub and small trees. Some scree and sediment build up at base of cliff but not obscuring gravel deposits. Some removal of vegetation could be advisable in the future to prevent its spread along the section.	

LITTORAL SEDIMENT	Conservation Delivery Team	023	1007814	20.7747	0.00	18/09/2018	Favourable	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m2. The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: The SSSI has a large, varied intertidal sediment resource, including estuarine mud, sandy beaches and mixed sediments with gravel and	
LITTORAL SEDIMENT	Conservation Delivery Team	024	1017643	38.5771	0.00	23/05/2017	Unfavourable - No change	Nutrient source trends, and efficacy of measures across the Solent are subject to ongoing analysis through the Judicial Review consent order implementation and other programmes. Condition trend may therefore be subject to (further) change by end of March 2018.	

EARTH HERITAGE	Conservation Delivery Team	025	1017646	8.9371	0.00	07/09/2006	Unfavourable - No change	1. The features of interest are exposed or can practically be re-exposed if required - No The condition assessment in 2006 was carried out at low tides of 0.8m. A visual estimate of around 50% of the SSSI area is covered by shingle, with the majority of remaining lower foreshore within the SSSI covered by silt/sand probably derived from the beach recharged material. At one location, original bed clay is visible, but this is a rare occurrence. To re-expose the foreshore would require major work including the use of heavy machinery. The lower foreshore is covered by sand/silt but would also be difficult to expose by hand as the opportunities for study would be restricted to very low tides, and the overlying sand/silt would need to be removed off site. Exposure of the geological interest using vehicles could damage the interest features. I therefore conclude that the SSSI unit is in unfavourable condition as the practical re-exposure of the foreshore would require heavy machinery and therefore study has become restricted to times of very low tides and the use of machinery to expose the geological interest. 2. Coastal processes, which cause erosion, are not constrained within or adjacent to the site. ? NoBeach recharge and the rock groynes constrain natural coastal processes in this location. It is not clear how much coastal processes would contribute to exposure of the foreshore without the groynes, but the groynes will constrain long-shore drift. The impacts of the beach recharge are discussed above. In short, the recharge is at an	EARTH SCIENCE - EARTH SCIENCE FEATURE OBSTRUCTED,
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BROADLEAVED, MIXED AND YEW WOODLAND - Lowland	Conservation Delivery Team	026	1023162	0.7646	0.00	26/08/2009	Favourable	Mixed broadleaved woodland with a canopy mainly of oak and beech with an understory of hazel, rowan, alder, willow, holly, elm and blackthorn. Ground flora species included bracken, bramble, gorse, broom, butterbur and pendulous sedge. There were a few non native species present at low levels including snowberry, laurel, sweet chestnut, cotoneaster and holm oak. The woodland had a varied age structure with plenty of natural regeneration, good structural diversity and lots of deadwood. There was a lot of litter that had been washed up along the edge of the unit and a small fire site on the path. Overall it was a very diverse bit of woodland considering its small size. There was a nice habitat transition as the woodland graded into a band of common reed, and then into the littoral sediments of unit two. At the time of this assessment the mud flats were supporting oystercatcher, little egret, mute swan, black-headed gull and herring gull. The unit was assessed as in favourable condition, adding value as part of the coastal habitat mosaic and helping to support target species (bird assemblage). It was also acting as an important buffer between the bird feeding areas and the disturbance of the railway line and the residential areas.	
FEN, MARSH AND SWAMP - Lowland	Conservation Delivery Team	027	1023158	2.2579	0.00	26/08/2009	Favourable	Good quality reedbed with few weeds or scrub. Some ruderal species around the edge including orange balsam, nettle and bindweed. Some litter build up, water table variable across the unit. Reedbed adding to habitat mosaic along with willow scrub and adjoining rough grassland and shingle communities.	

COUNTY: HAMPSHIRE

SITE NAME:

Hythe To Calshot
Marshes SSSI

Status: Site of Special Scientific Interest (SSSI) Notified under Section 28 of the Wildlife and Countryside Act 1981

Local Planning Authority: Hampshire County Council
New Forest District Council

National Grid Reference: SU408107-SU486018

Ordnance Survey Sheet: 1:50 000 196 1:10 000 SU40NW NE SE SU41SW

Hectares/Acres: 683.10/1687.94

Date Notified (Under 1949 Act): 1979

Date of Last Revision:

Date Notified (Under 1981 Act): 1984

Date of Last Revision: 30 July 1993

Date Confirmed: 22 April 1994

Other Information: The SSSI includes Calshot Marshes Local Nature Reserve (49ha), owned and managed by Hampshire County Council. Hythe Marsh is owned by the New Forest District Council and managed as a nature reserve by the Hampshire and Isle of Wight Naturalists' Trust.

Reasons for Notification:

The Hythe to Calshot Marshes Site of Special Scientific Interest embraces the most extensive remaining areas of saltmarsh and mudflats in Southampton Water. Southampton Water supports nationally important numbers of migratory and over-wintering waders and wildfowl. It regularly supports more than 1% of the national winter populations of wigeon, teal, ringed plover, grey plover, black-tailed godwit, redshank and dunlin and is thus considered to be of national significance to each of these species in accordance with accepted criteria. It also regularly holds more than 1% of the world population of the dark-bellied brent goose and is thus considered internationally significant for that species. The numbers of some other species, notably the great crested grebe, gadwall and shoveler, often approach or achieve nationally important population levels. Total numbers of all waterfowl regularly exceed 10,000 in winter and sometimes approach twice that number. The SSSI provides a large proportion of the feeding grounds and many of the roosting sites for these birds and its protection is thus critical to the function of Southampton Water as a nationally and internationally important intertidal wetland. The occurrence of these populations of birds reflect the high densities of benthic invertebrates inhabiting the mudflats on which they mainly feed. The benthic and shallow water fauna is rich in species and locally the muds also support extensive areas of green algae, mainly *Enteromorpha* species and *Ulva lactuca*, on which brent geese and some other wildfowl feed.

The upper shore levels within the SSSI comprise saltmarshes, which grade from monospecific cord-grass *Spartina anglica* swards upshore to mixed marsh in which the dominant species are generally sea purslane *Halimione portulacoides*, saltmarsh grass *Puccinellia maritime* and *Spartina*. The marshes near Hythe are the location in which

hybrids between the indigenous cord-grass *Spartina maritima* and the introduced north American species *S. alterniflora* were found in the 1860s. The transplanted to other estuaries as an aid to reclamation.

A further, fertile form, *S. anglica* appears to have arisen from a doubling of the chromosomes in the hybrid form and it was this plant which then spread widely around the north European coastline to form widespread and extensive *Spartina* marshes on midshore mudflats. The SSSI retains a wide range of genetic material including *S. maritima*, *S. alterniflora*, *S. x townsendii*, *S. anglica* and back-crosses, an assemblage of plants which is probably unique to the SSSI and which is of great scientific importance.

The *Spartina* marshes are now in a recessive phase and exhibit die-back within the monospecific swards, whilst there is extensive erosion of the terminal cliffs. In places, however, the outer margins of the marshes are masked by shell and shingle banks which support an interesting strandline flora and are important high water roosting sites for the waders which feed in the intertidal zone. At the uppermost marsh levels, the sea purslane-saltmarsh grass-*Spartina* plant community is replaced locally by sea club rush *Scirpus maritimus* and common reed *Phragmites australis* with fringing oaks, sallows and gorse just above high water mark of spring tides. The graduation from oak fringe downshore to open mudflat via saltmarsh is characteristic of the central south coast but appears to be of local occurrence elsewhere.

Site: Hythe to Calshot Marshes SSSI

Report generated on: 30 Jul 2019

	Sites	Units	Units Assessed
Total number	1	6	6
Total area (ha)	591.80	591.80	591.80

	% meeting area of favourable or unfavourable recovering	Favourable	Unfavourable - Recovering	Unfavourable - No change	Unfavourable - Declining	Partially destroyed	Destroyed	Not Recorded
Area (ha)	528.76		528.76	63.04				
Percentage	89.35%	0.00%	89.35%	10.65%	0.00%	0.00%	0.00%	0.00%

Condition Summary



Unfavourable - Recovering
Unfavourable - No change

Main Habitat	Responsible Officer	Unit Number	Unit Id	Area (ha)	NNR Overlap Area (ha)	Latest Assessment Date	Assessment Description	Comment	Adverse Condition Reasons
Hythe to Calshot Marshes SSSI - HAMPSHIRE (NEW FOREST)									
LITTORAL SEDIMENT	BRIDGET LEYDEN	001	1023207	58.3384	0.00	18/09/2018	Unfavourable - Recovering	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: This is an extensive area of intertidal mud. The habitat is affected significantly by sea level rise and 'coastal squeeze' as much of the unit is	

LITTORAL SEDIMENT	BRIDGET LEYDEN	002	1023208	18.9929	0.00	18/09/2018	Unfavourable - Recovering	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: This is a large area of intertidal mud. The habitat is affected significantly by sea level rise and 'coastal squeeze' as much of the unit is backed by	
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LITTORAL SEDIMENT	BRIDGET LEYDEN	003	1007521	233.8656	0.00	18/09/2018	Unfavourable - Recovering	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: This is a large area of intertidal mud with extensive areas of salt marsh. The habitats are affected significantly by sea level rise and 'coastal	
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LITTORAL SEDIMENT	BRIDGET LEYDEN	004	1007523	45.3294	0.00	18/09/2018	Unfavourable - Recovering	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: This is a large area of intertidal mud with extensive areas of salt marsh. The habitats are affected significantly by sea level rise and 'coastal	
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LITTORAL SEDIMENT	BRIDGET LEYDEN	005	1007524	172.2379	0.00	18/09/2018	Unfavourable - Recovering	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some years there can be areas of dense opportunistic green macroalgae (>75% cover density) and a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as borderline favourable for the interest features on the on the weight of evidence on inorganic nitrogen and some but not consistently strong biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. The unit is considered at future risk of failing a favourable situation on the water environment as it is unclear whether the nutrient status is adequate to substantially prevent the growth of dense macroalgae mats with a wet weight biomass exceeding WFD Good status, especially if there is change in environmental conditions. 2010 Assessment comments: This is a large area of intertidal mud with extensive areas of salt marsh. The habitats are affected significantly by sea level rise and 'coastal	
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LITTORAL SEDIMENT	BRIDGET LEYDEN	006	1015688	63.0377	0.00	21/09/2018	Unfavourable - No change	This assessment revises and updates the condition assessment of 2010 for estuarine water quality in relation to the interest features of the designated sites and should be read in conjunction with this earlier assessment on other aspects of site condition. Assessed in combination with other units in Southampton Water, this unit achieves WFD Moderate status on mean winter inorganic nitrogen and WFD High status on phytoplankton. The abundance of macroalgae along Southampton Water as a whole achieves WFD Good (borderline) status, but in some parts where environmental conditions are probably more conducive to macroalage growth, such as along tidal saltmarsh creeks within this unit, there can be a wider presence of dense opportunistic green macroalgae (>75% cover density) and this may have a wet biomass exceeding 1 kg/m². The water environment of the unit is assessed as unfavourable for the interest features on the on the weight of evidence on inorganic nitrogen and biological indication of eutrophication shown by macroalgae abundance. A large part of the nitrogen load input is carried by the inflowing rivers and by tidal flow from the Solent. There is poor evidence of a reducing nutrient status adequate to substantially prevent the growth of dense macroalgae mats. 2010 Assessment comments: This is a large area of intertidal mud and salt marsh. The habitats are affected significantly by sea level rise and 'coastal squeeze' as much of the unit is backed by hard sea defences so that the habitats are unable to retreat	FRESHWATER POLLUTION - WATER POLLUTION - AGRICULTURE/RUN OFF,FRESHWATER POLLUTION - WATER POLLUTION - DISCHARGE,
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APPENDIX 12

Signed European Site Avoidance
And Mitigation Checklist

Appendix 1: European Site avoidance and mitigation checklist

This checklist must be completed and provided in order for the Local Planning Authority to validate any planning application for one or more dwellings. It sets out how an avoidance and mitigation package will be provided to remove any likely significant effect on a European Site.

All relevant boxes should be completed and the form must be signed. If signed by an agent, it is their responsibility to ensure that the applicant is aware of the commitment to providing a mitigation package, in the form of a financial contribution, the scale of which is currently not known.

Application details	
Site name:	LAND REAR OF 15 - 27 HORNDEN ROAD, EMSWORTH, HAMPSHIRE
Site address:	AS ABOVE.

Recreational disturbance																	
The proposed development would be within 5.6 km of Chichester and Langstone Harbour, which is a Special Protection Area and Ramsar site. As such, mitigation will need to be provided. The Council considers that mitigation provided in line with the Solent Recreation Mitigation Strategy (available at www.birdaware.org/strategy) is appropriate to the applicable planning applications. This would result in a mitigation package based on the table below. It will be necessary for a suitable avoidance and mitigation package to be provided in order for the Council to lawfully grant permission for applicable schemes. <table border="1"> <thead> <tr> <th>Size of units</th> <th>Scale of mitigation per unit</th> </tr> </thead> <tbody> <tr> <td>1 bedroom</td> <td>£346.00</td> </tr> <tr> <td>2 bedroom</td> <td>£500.00</td> </tr> <tr> <td>3 bedroom</td> <td>£653.00</td> </tr> <tr> <td>4 bedroom</td> <td>£768.00</td> </tr> <tr> <td>5 bedroom</td> <td>£902.00</td> </tr> <tr> <td colspan="2">Please note that a monitoring fee is attached, at 5% of mitigation cost.</td> </tr> <tr> <td colspan="2">Please note that an administration fee of £20 per application is applied.</td> </tr> </tbody> </table>		Size of units	Scale of mitigation per unit	1 bedroom	£346.00	2 bedroom	£500.00	3 bedroom	£653.00	4 bedroom	£768.00	5 bedroom	£902.00	Please note that a monitoring fee is attached, at 5% of mitigation cost.		Please note that an administration fee of £20 per application is applied.	
Size of units	Scale of mitigation per unit																
1 bedroom	£346.00																
2 bedroom	£500.00																
3 bedroom	£653.00																
4 bedroom	£768.00																
5 bedroom	£902.00																
Please note that a monitoring fee is attached, at 5% of mitigation cost.																	
Please note that an administration fee of £20 per application is applied.																	
Please select one of the following options:																	
I hereby confirm that the proposed development will include an avoidance and mitigation package in line with the Solent Recreation Mitigation Strategy.	☒																
An alternative approach to avoiding and mitigating the recreational impact arising out of the development is proposed (please set out in more detail in a supporting document appended to this checklist).	☐																
The site is located more than 5.6km from the Solent Special Protection Areas (this applies to only a small section of the Borough in Cowplain).	☐																

Water quality

There is existing evidence of high levels of nitrogen and phosphorus in the water environment with evidence of eutrophication at some designated sites. As such, there is considered to be a likely significant effect from residential (and similar) developments located anywhere in Havant Borough. As a result, an avoidance and mitigation package will be needed in order for the Council to lawfully grant any planning permission. The Council has published a Nutrient Neutrality Position Statement which sets out that it is possible to mitigate development in the short term.

The position statement highlights those developments which are expected to provide avoidance and mitigation on-site, thus resulting in a nutrient neutral development. It also sets out that, for any other applicable developments, the exact scale of avoidance and mitigation package (which would take the form of a financial contribution) is not yet known.

As a result, in order for the development to comply with the requirements of the Conservation of Habitats and Species Regulations and for the Council to lawfully be able to grant planning permission, it will be necessary to impose a grampian condition requiring the provision of an avoidance and mitigation package prior to the occupation of the development.

It would be the applicants risk as to whether to proceed with any development that is granted planning permission without the knowledge of the precise scale of the avoidance and mitigation package.

Please select **one** of the following options:

I hereby confirm that the proposed development will include an avoidance and mitigation package, in line with the Nutrient Neutrality Position Statement and confirm that I am content that a grampian condition is used to secure this prior to occupation.



The proposed development would be 'nitrogen neutral'. A nitrogen budget is attached to this checklist (this option is particularly applicable to developments proposed on agricultural land)

The proposed development is not nitrogen neutral and no avoidance or mitigation package is proposed (please note that planning permission could not lawfully be granted in these circumstances).

Please select one of the following options to the right, then complete all boxes below

Signed by applicant



Signed by agent

By submitting this form to Havant Borough Council, the applicant is committing to providing mitigation packages, usually in the form of a financial contribution. If the top option for 'water quality' has been selected, the applicant specifically understands that the scale of the contribution is unknown at this time.

If an agent is signing on behalf of an applicant, it is the agent's responsibility to seek the agreement of the applicant to the commitments selected above as it will be the applicant's who assumes the risk and responsibility upon the granting of any planning permission.

Signed:

Print name:

ALISTAIR HARRIS

Date:

31/07/2019.