# Habitats Regulations Assessment
# Appropriate Assessment

Solent Maritime SAC and Solent and Southampton Water SPA and Ramsar

| Case Details | |
|---|---|
| **Reference:** | F/25/99929 |
| **Application site:** | NETLEY COURT CARE HOME, VICTORIA ROAD, NETLEY ABBEY, SOUTHAMPTON, SO31 5DR |
| **Summary of proposal:** | Replacement of the existing damaged gabion wall sea defences |
| **Description of European nature conservation designation:** | Includes the following overlapping designations in the Solent and parts of the River Hamble: the Solent Maritime SAC, Solent and Southampton Water SPA and Ramsar. Comprises saltmarsh and mudflat habitat. These sites are important for a number of flora and fauna species including breeding and over wintering waterbirds. |
| **Distance of application site to designation:** | The new piling, which will be place seaward of the existing sheet piling, is in close proximity to the Solent and Southampton SPA but not within it. However, the site is within the Solent Wader and Brent Goose Network Site E03 (a low use site) which is functionally linked to the SPA and therefore is considered to have the same statutory protection as the SPA. |

## 1 Introduction

1.1 As part of its duty under the Conservation of Habitats & Species Regulations 2017, Regulation 63 to undertake a Habitats Regulations Assessment Eastleigh Borough Council has produced this document as the Council's statement on the need for Habitats Regulations Assessment for the application indicated above. The assessment will identify and provide mitigation for any individual or in-combination Likely Significant Effects (LSE) on the designated interest features of the **Solent Maritime SAC and Solent and Southampton Water SPA and Ramsar,** collectively known at the **Solent European Sites,** within the context of their conservation objectives.

## 2 Screening statement

2.1 It is that due to the type and location of the development the proposal the development proposal would, without mitigation, have a likely significant effect on the Solent Maritime SAC, Solent and Southampton Water SPA and Ramsar site. As such an Appropriate Assessment is required.

## 3 Appropriate Assessment

3.1 Based on the information given in tables 1 and 2 below it is Eastleigh Borough Council's considered opinion that the mitigation measures set out below would ensure that there is no adverse effect on the integrity of the designated sites identified.

3.2 This is subject to the conditions/legal requirements set out in column (f) of the table below.

| Likely significant effects | | | | | |
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| **Assessment of application *independently*** | | | | | |
| **Water quality** | a. Contaminants carried to the Solent European Sites by surface water drainage and surface run-off, including sediment, and oil, salt and heavy metals could have an adverse impact.<br><br>b. Construction which impacts on the watercourse itself, for example through changes to the banks of the Hamble, or to watercourses which feed into the Hamble can have negative impacts on flow rates. | These contaminants may have a negative impact on the life cycles of flora and fauna of the Solent European Sites.<br><br>Bird populations for which the SPA and Ramsar sites are designated rely on particular flora or fauna for habitat and feeding which may be negatively impacted by changes in flow rates of watercourses. | Potential adverse water quality effects during construction should be addressed by adherence to a construction environment management plan Details should be included relating to:<br>• Storage of fuels and chemicals in non-permeable areas<br>• Safety procedures and mechanisms to ensure no fuel spill during construction<br>• Diagrammatic and written details of a temporary drainage system with three forms of filtration<br><br>Potential adverse water quality effects during operation should be addressed by careful design of a sustainable Urban Drainage System containing three forms of naturalised filtration within the treatment train.<br><br>The altering of natural watercourses should not be permitted except in exceptional conditions.<br><br>Positive enhancement of watercourses such as in channel works and creation of meanders should be considered but only after ensuring any impact on the otter population and the EA and NE have been consulted on the scheme.<br><br>Culverted and canalised waterways | Potential sources of pollution are principally associated with the storage of materials on site, the use of plant over water and vessels. Oil, sewage and fuel.<br><br>Mitigation measures are set out within the Construction Environmental Management Plan. These include all personnel involved in the construction works will be briefed on the ecological mitigation strategy and relevant wildlife legislation. Zones for the piling of soil, storage of materials and machinery associated with the project will be clearly defined and secured via condition. Fuel, oil and other chemicals will be stored in appropriate containers that are impervious to the material being stored. Leaking and empty containers will be removed from the site immediately. | The construction environmental management plan and mitigation within the ecological impact assessment will be secured via a condition.<br><br>Due to the nature of the work, pollution incidents are extremely unlikely. Small amounts of dust may be emitted during the movement of soil and filling of the gabion baskets. There are no statutory or guidance limits for the deposition of dust on vegetation and ecosystems although draft guidance from the Highways Agency suggests that some sensitive species appear to be affected by levels above 1,000 mg/m2/day. Dust emitted through construction processes will be kept to a minimum by a number of methods, including: using water as a dust suppressant during dry weather and reusing existing materials to construct the gabion wall. |

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| | | | should be naturalised whenever it is possible and safe to do so.<br><br>All waterways within the Hamble catchment or which drain into the Solent European Sites should be buffered by 20m from the top of each bank.<br><br>Headwaters and headwater streams of waterways connected to the Solent Complex should be identified within the site and buffered by 20m. | | Machinery and materials for construction will be stored as far away from aquatic habitats as possible and no machinery will be refuelled on site.<br><br>The construction methodology will ensure that there will be no pollution of the inter-tidal habitats from the deposition of silt/dust or other pollutants. |
| **Invasive non-native species** | Invasive non-native species (INNS) can be introduced to the designated site in a number of ways eg. Via water run-off into tributaries of the European site.<br><br>a. Existing INNS on site may be spread during construction or operational phases of the development<br><br>b. INNS can be brought onto site eg. during construction (such as soil) and by use of inappropriate or contaminated planting and seeding in landscape and design. | Invasive non-native species can become dominant, outcompeting native species, transforming ecosystems and causing considerable harm to the interest features of the European site. | All applications should be accompanied by a botanical survey identifying all INNS present on site.<br><br>A bespoke INNS eradication method statement should be produced if INNS are present<br><br><u>Circulation of information leaflets to householders</u> where appropriate.<br><br>A <u>native seeding/planting</u> mix should be used in any landscaping of the site to minimise the risk of invasive non-native plants entering the catchment this location. No species listed on schedule 9 of the Wildlife and Countryside Act or cherry laurel should be used on site. A native plant/seed mix should always be used. | It is possible that the backfill material used to infill the gap between the existing and replacement sheet pile wall will introduce foreign species. It is proposed that the imported material is to be sourced from reputable suppliers with established biosecurity protocols. | A construction environmental management plan has been submitted and this will be secured via a condition. |

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| **Disturbance of breeding and wintering bird species** | Construction processes on or within 200m of land used by breeding or wintering bird species of the SPA/Ramsar.<br><br>A net gain of dwellings within close proximity to the SPA/Ramsar area can result in an increase in recreational disturbance, for example by walkers, dogs, bait diggers and kite Surfers | Construction processes may directly kill or injure breeding and wintering birds and their active nests (the qualifying feature of the SPA).<br><br>The noise and human presence associated with construction may disturb bird populations within the vicinity.<br><br>Disturbance can be defined as any human activity that influences a bird's behaviour or survival. Disturbance from recreation can disrupt breeding | A <u>construction management plan</u> is required to set out when construction activity would take place, avoiding key breeding and wintering bird seasons as appropriate<br><br>The Plan should include an assessment of individual and in-combination noise as recorded on the SPA<br><br>Clearance of any vegetation should take place outside of the bird nesting season between March and August (inclusive) to avoid disturbance and injury to nesting birds. Should any vegetation need to be cleared during this time, a nesting bird survey by an experienced ornithologist prior to commencement would be required. Construction works on, or adjacent to any land used by wintering birds should be undertaken outside October to March inclusive.<br><br>The Solent Recreation Mitigation Project (SRMP) has produced a series of reports on the impacts of recreational disturbance of the SPA/Ramsar of the Solent area. An interim mitigation strategy has been formulated consisting of a wardening team and on site projects to alleviate the impacts from disturbance and contributions of £180 will be required for each new unit built within a 5.6km radius of the site. | The Site is located within Important Bird Areas (GB). It is possible for disturbance to breeding and wintering bird species by temporary construction works in proximity to the land used by breeding or wintering birds in the SPA and Ramsar site. | The timing of the construction works will be conditioned so it is carried out outside of the overwintering bird period.<br><br>The construction environmental management plan will also be revised to cover mitigation for any nesting birds found at the site. An Ecologist should first ascertain whether there is any breeding birds present immediately prior to commencement of the works. An undisturbed buffer around any active nest must be provided until the young have fledged.<br><br><u>Solent Waders and Brent Goose Strategy</u><br>The proposal will result in a very small loss of shingle habitat (rather than mudflat) in a low use SWBG site. The contribution towards the SW&BG strategy would be very small and would cost the council more to administer than the benefits it would deliver. |

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| | | and reduce breeding success, disrupt foraging and feeding, and increase stress on birds increasing the risk or mortality. Disturbance from walkers can have an adverse impact on the distribution of estuary birds as they attempt to avoid areas with disturbance activities. | A full mitigation strategy was published in December 2017 and now needs to be adopted by the individual local authorities. Once adopted the new developer contribution rates will apply to all relevant applications. | | |
| **Coastal squeeze / direct land take** | Construction works or development proposals to the shore line of the coast or to the watercourse of the Hamble may result in direct loss of land and/or inhibit landward retreat. | Both direct loss of land and the inhibition of landward retreat resulting from erosion processes will both result in the reduction in quantity of intertidal habitat. | The North Shoreline Management Plan (SMP) policy for this location takes a 'hold-the-line' stance. The North Solent SMP has undergone Habitats Regulations Assessment by Appropriate Assessment which identified that likely significant adverse effects would occur: "Hold the line policies are likely to have significant detrimental effect on intertidal habitats and vegetated shingle backed by a seawall, causing loss through coastal squeeze... subject to approval to IROPI the North Solent SMP will need to secure compensation to maintain the integrity".<br>In response to this the Southern Regional Habitat Creation Programme has taken into account the mitigation required over the first 20 year period. This is detailed in the | The proposed sea defence will protect inland habitat from coastal erosion. | |

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| | | | North Solent SMP HRA report and is supported by an IROPI as signed by the Secretary of State. No further mitigation measures are required. **Advice should be sought from Natural England on any boundary treatment proposed.**<br><br>Construction management plan to avoid construction processes of development resulting in direct land take.<br><br>The altering of watercourses should not be permitted except in exceptional conditions. Positive enhancement of watercourses such as in channel works and creation of meanders should be considered but only after EA and NE have been consulted on the scheme.<br><br>If the development proposals require or, at this stage, involve direct loss of European protected habitat or supporting habitat please contact Natural England. Direct loss of protected habitat will require a full appropriate assessment | | |
| **Hydrology** | Impacts may occur as a result of changes in hydrology and increases or decreases of the water flow into the Hamble and Southampton water | Degradation of the flora and fauna communities and associated riparian, coastal and marine habitats due to significant increases or decreases in | Hydrological survey to ascertain water flows throughout the site. Safeguards to ensure natural drainage pathways are mirrored within the development.<br><br>Changes in water flow could be addressed by ensuring that the | N/A | |

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| | | fresh water flows into the saline communities | development does not exceed existing greenfield sites runoff levels. If changes may occur the EA biodiversity section should be consulted | | |
| **Loss or disturbance of supporting habitat** | Impacts may occur as a result of the direct loss or disturbance of supporting habitat used by SPA species. | Reduction of available roosting and foraging habitat | Wintering bird surveys on any habitat connected to the SPA or assessed as being likely to support SPA species.<br><br>If supporting habitat is identified within or adjacent to the development measures such as preservation of on-site supporting habitat, buffering of adjacent habitats or compensation for loss or disturbance by creation of replacement habitat functionally connected to the SPA. | The Site is identified in the updated Solent Waders and Brent Goose Strategy as a Low Use site. Brent goose is a terrestrial wader and feeds on mudflats.<br><br>There will be a relatively small loss of shingle habitat (approx. 25m2) over a 65m length within Site E03 and the SINC, between the old and new piling. However, because the loss within Site E03 is shingle habitat, rather than the more extensive and ecologically valuable mudflats (priority habitat with greater feeding opportunities) present within Site E03, it is likely to be concluded that this loss will not affect the integrity of the SPA.<br><br>The potential damage to the gravel shingle beachfront is deemed minimal, primarily because of its location within the tidal zone. The natural ebb and flow of the tides will facilitate the recovery of the | The nature of this replacement scheme to protect further habitat loss by costal erosion / costal squeeze, should offset the marginal habitat loss. The proposal of protecting the shoreline will, in the long term, provide safe feeding ground for wading birds within the Solent and Southampton SPA, including brent goose and other wintering birds.<br><br>The backfill behind the new piling which forms part of this application will be allowed to naturally colonise by plants, invertebrates and other species which will be suited to the environmental conditions. This should therefore provide valuable transitional and resilient coastal habitat which will benefit multiple species.<br><br>To mitigate disruption to the gravel shingle beachfront, appropriate measures will be implemented. This includes the deployment of tracking mats, which serve to distribute the pressure exerted by the piling |

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| | | | | beachfront, with water rising to cover and smooth out any tracked distances left by the heavy plant. | plant over a wider area. By spreading the load more evenly, these mats help minimise the risk of localised damage and prevent concentrated pressure points on the beachfront. Additionally, the use of tracking mats provides a stable platform for the heavy plant, reducing the likelihood of incidental damage during construction activities |
| **Assessment of application *'in-combination'* with other plans and proposals** | | | | | |
| **Adopted Eastleigh Borough Local Plan 2001-2011**<br><br>**Emerging Eastleigh Borough Local Plan 2016-2036** *(limited weight as submitted 31.10.18)*<br><br>Are there any policies/ allocations which could act in combination with this | These could include other applications or infrastructure works that could cause e.g. contamination, noise and or disturbance which alone would not be an issue but taken as a whole could cause impact. | Increases in pollution and nutrient enrichment<br><br>Cumulative noise near to the SPA and Ramsar could cause disturbance. | Safeguards to ensure pollutants and nutrient are not increased to deleterious levels within permissions granted. Regular monitoring of the levels within and adjacent to the European sites.<br><br>Ensure that the timing of construction and works on sites near to and within the European sites do not coincide to produce unacceptable noise levels. | Other recent applications permitted in the locality.<br><br>All schemes have mitigation measures secured, and with these mitigation measures in place for all approved schemes, there is not considered to be any likely significant in-combination impact | |

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| application? | | | | | |
| **Other applications.** Are there any applications which could act in combination with this application? | Consideration should be given to applications not included within the Local Plan or assessed within the in-combination assessment of the strategic HRA e.g. windfall sites, unplanned development | Could increase all impacts to unacceptable levels. As these sites may not be backed up by site specific policies they could cause impacts both individually and in-combination with other developments. | Ensure that safeguards for pollution, spread of invasive species, enrichment, change in water flows and recreational pressure are applied to these applications as well as those included in the Local Plan.<br><br>Require information from the applicant to assess the impact of the development in relation to the strategic HRA and any other unplanned development and integrate appropriate additional mitigation if impacts are assessed as causing in-combination significant impacts. | As above | |
| **Recreational disturbance of the Solent SPA and Ramsar** | A net gain of dwellings within close proximity to the SPA/Ramsar area can result in an increase in recreational disturbance, for example by walkers, dogs, bait diggers and kite surfers | Disturbance can be defined as any human activity that influences a bird's behaviour or survival.<br>Disturbance from recreation can disrupt breeding and reduce breeding success, disrupt foraging and feeding, and increase stress on birds increasing the risk or mortality.<br>Disturbance from walkers can have an adverse impact on the distribution of | The Solent Recreation Mitigation Project (SRMP) has produced a series of reports on the impacts of recreational disturbance of the SPA/Ramsar of the Solent area. An interim mitigation strategy has been formulated consisting of a wardening team and on site projects to alleviate the impacts from disturbance and contributions of £180 will be required for each new unit built within a 5.6km radius of the site.<br><br>A full mitigation strategy was published in December 2017 and now needs to be adopted by the individual local authorities. Once adopted the new developer contribution rates will apply to all relevant applications. | N/A | |

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| | | estuary birds as they attempt to avoid areas with disturbance activities. | | | |

# Appendix A: Habitats Regulations Assessment - Context

**Habitats Regulations Assessment**

European sites provide ecological infrastructure for the protection of sites which are of exceptional importance in respect of rare, endangered or vulnerable natural habitats and species within the European Union. These sites consist of Special Areas of Conservation (SACs, designated under the Habitats Directive) and Special Protection Areas (SPAs, designated under European Union Directive 79/409/EEC *on the conservation of wild birds* (the Birds Directive)). Government policy (Circular 06/05[1]) recommends that Ramsar sites[2] are treated as if they are fully designated European sites for the purposes of considering development proposals that may affect them. This report takes the same approach.

Under Article 6(3) of the Habitats Directive, the assessment must determine whether or not the project will adversely affect the integrity of the European site(s) concerned. Where negative effects are identified, the process should consider alternatives to the proposed actions and explore mitigation opportunities. If it is impossible to avoid or remove the perceived adverse effect, the Local Planning Authority must demonstrate, under the conditions of Article 6(4) of the Habitats Directive, that there are Imperative Reasons of Overriding Public Interest to continue with the proposal. This is widely perceived as an undesirable position and should be avoided if at all possible.

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[1] ODPM (2005): *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.*

[2] UNESCO (1971): Convention on Wetlands of International Importance especially as Waterfowl Habitat. (Ramsar (Iran), 2 February 1971, UN Treaty Series No. 14583).

# Appendix B: European Sites – Solent Maritime SAC and Solent and Southampton Water SPA and Ramsar

## Scope of the Study

European sites of nature conservation interest can be affected by development in a number of different ways. These include the direct footprint of new development, the type of use the land will be put to (for example, a noise emitting use), the pollution a development generates and the resources it uses (during both construction and operation).

Best practice guidance[3] on Habitats Regulations Assessment suggests that all European sites within the area of coverage of a plan, together with all those within a 10km buffer zone should be considered as potential receptors for negative effects. In addition to these, other European sites further than 10km from the area of coverage of a plan may also be affected. This is particularly the case where there is potential for developments resulting from the plan to generate water-borne pollutants, or where there are particularly high demands for water resources.

The following European sites are wholly or partially within the area covered by the proposal, or close to it, and may potentially be affected by activities arising from the proposal:

Solent Maritime SAC; and

Solent and Southampton Water SPA and Ramsar site.

## Site Description

<u>Solent Maritime SAC</u>

The Solent Maritime Special Area of Conservation (SAC) is a complex site encompassing a major estuarine system on the south coast of England. The SAC includes sixteen Sites of Special Scientific Interest (SSSI) spread out along the Solent, including Langstone

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[3] David Tyldesley and Associates (for English Nature, 2006): *Draft Guidance: The Assessment of Regional Spatial Strategies and Sub-Regional Strategies under the Provisions of the Habitats Regulations*. [Please note: similar guidance is being prepared by David Tyldesley and Associates for Natural England but is not yet available. In the absence of this document it has been agreed with Natural England and the Environment Agency that the guidance prepared for RSS and SRS is suitable for use with LDD.]

Harbour SSSI, Chichester Harbour SSSI and extensive areas of inshore Solent along the north coast of the Isle of Wight, the Lymington area, and the western shores of Southampton Water and the Hamble Estuary.

Solent and Southampton Water SPA and Ramsar

The site comprises a series of estuaries and harbours with extensive mud-flats and saltmarshes together with adjacent coastal habitats including saline lagoons, shingle beaches reedbeds, damp woodland and grazing marsh. The mud-flats support beds of *Enteromorpha* spp. and *Zostera* spp. and have a rich invertebrate fauna that forms the food resource for the estuarine birds. In summer, the site is of importance for breeding seabirds, including gulls and four species of terns. In winter, the SPA holds a large and diverse assemblage of waterbirds, including geese, ducks and waders. Dark-bellied Brent Goose *Branta b. bernicla* also feed in surrounding areas of agricultural land outside the SPA.

## Qualifying Features

The qualifying features of the site (that is, the reasons for which the site was designated) are as follows.

Solent Maritime SAC

Solent Maritime qualifies as a SAC for both habitats and species. Firstly, the site contains the following Habitats Directive Annex 1 habitats:

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

Secondly, the site contains the following Habitats Directive Annex II species:

- Desmoulin's Whorl Snail *Vertigo moulinsiana*

Solent and Southampton Water SPA and Ramsar

Solent and Southampton Water qualifies as a SPA for its breeding and wintering bird species. As breeding species the site contains:

• 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)

Over winter:

• 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 Northwestern Europe population (5 year peak mean, 1992/3-1996/7)
The area also qualifies as an SPA by supporting 53,948 individual waterfowl (5 year peak mean 1991/2 - 1995/6).

Solent and Southampton Water qualifies as a Ramsar as illustrated in the table 1 below.

Table 1: Solent and Southampton Water Ramsar site criteria

| Ramsar criterion | Description of Criterion | Solent and Southampton Water |
|---|---|---|
| 1 | A wetland should be considered internationally important if it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region. | 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 with long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reed beds, coastal woodland and rocky boulder reefs. |
| 2 | A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities. | The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site. |
| 5 | A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds | **Species with peak counts in winter:**<br>51343 waterfowl (5 year peak mean 1998/99-2002/2003) |
| 6 | A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird. | **Qualifying Species/populations (as identified at designation):**<br>**Species with peak counts in spring/autumn:**<br>Ringed plover , *Charadrius hiaticula*, Europe/Northwest Africa 397 individuals, representing an average of 1.2%<br>of the GB population (5 year peak mean 1998/9- |

| Ramsar criterion | Description of Criterion | Solent and Southampton Water |
|---|---|---|
| | | 2002/3)<br>**Species with peak counts in winter:**<br>Dark-bellied brent goose, *Branta bernicla bernicla*, 6456 individuals, representing an average of 3% of the population (5 year peak mean 1998/9-2002/3)<br>Eurasian teal , *Anas crecca*, NW Europe 5514 individuals, representing an average of 1.3% of the population (5 year peak mean 1998/9-2002/3)<br>Black-tailed godwit , *Limosa limosa islandica*, Iceland/W Europe 1240 individuals, representing an average of 3.5% of the population (5 year peak mean 1998/9-2002/3) |

## Conservation Objectives

### Table 2: Conservation objectives for Solent European sites and River Itchen

**Solent Maritime SAC**

1. Subject to natural change, maintain* the Estuaries in favourable condition, in particular:

- Shingle communities.
- Reedbed communities.
- Saltmarsh communities.
- Intertidal mudflat & sandflat communities.
- Intertidal mixed sediment communities.
- Subtidal sediment communities.

2. The conservation objective for annual vegetation of drift lines
Subject to natural change, maintain* the Annual vegetation of drift lines in favourable condition.

3. The conservation objective for Atlantic salt meadows (Glauco-Puccinellietalia)
Subject to natural change, maintain* the Atlantic salt meadows (Glauco-Puccinellietalia) in favourable condition, in particular:

- Low marsh communities.
- Mid-marsh communities.
- Upper marsh communities.
- Transitional high marsh communities.

4. The conservation objective for Salicornia and other annuals colonising mud and sand
Subject to natural change, maintain* the Salicornia and other annuals colonising mud and sand in favourable condition, in particular:

- Annual Salicornia saltmarsh communities (SM8).
- Suaeda maritima saltmarsh communities (SM9).

5. The conservation objective for cordgrass swards (Spartinion)
Subject to natural change, maintain* the cordgrass swards (Spartinion) in favourable condition, in particular:

- Small cordgrass (Spartina maritima) communities.
- Smooth cordgrass (Spartina alterniflora) communities.
- Townsend's cordgrass (Spartina x townsendii) communities.

6. The conservation objective for mudflats and sandflats not covered by seawater at low tide
Subject to natural change, maintain* the mudflats and sandflats not covered by seawater at low
tide in favourable condition, in particular:

- Intertidal mud communities.
- Intertidal muddy sand communities.
- Intertidal sand communities.
- Intertidal mixed sediment communities.

7. The conservation objective for sandbanks slightly covered by seawater all the time
Subject to natural change, maintain* the sandbanks slightly covered by seawater all the time in favourable condition, in particular:

- Subtidal gravel and sands.
- Subtidal muddy sand.
- Subtidal eelgrass Zostera marina beds.

8. The conservation objective for lagoons
Subject to natural change, maintain* the lagoons in favourable condition.

9. The conservation objective for perennial vegetation of stony banks
Subject to natural change, maintain* the Perennial vegetation of stony banks in favourable condition.

10. The conservation objective for shifting dunes along the shoreline with Ammophilia arenaria (white dunes)
Subject to natural change, maintain* the Shifting dunes along the shoreline with Ammophilia arenaria (white dunes) in favourable condition.

11. The conservation objective for Vertigo moulinsiana (Desmoulin's Whorl Snail)
Subject to natural change, maintain* in favourable condition the habitats for Vertigo moulinsiana (Desmoulin's Whorl Snail)

*maintenance implies restoration if the feature is not currently in favourable condition.

**Solent and Southampton Water SPA**

1. The conservation objective for the internationally important populations of the regularly occurring Annex 1 Species
Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring Annex 1 species, in particular:

- Standing water
- Sand and shingle
- Saltmarsh
- Intertidal mudflats and sandflats
- Shallow coastal waters
- Lagoons

2. The conservation objective for the internationally important populations of the regularly occurring migratory species
Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring migratory species, in particular:

- Grazing marsh
- Reedbeds
- Standing water
- Coastal and inundation grassland

- Saltmarsh
- Intertidal mudflats and sandflats
- Boulder and cobble shores
- Mixed sediment shores
- Lagoons

3. The conservation objective for the internationally important assemblage of waterfowl
Subject to natural change, maintain* in favourable condition the habitats for the internationally important assemblage of waterfowl, in particular:

- Grazing marsh
- Reedbeds
- Standing water
- Coastal and inundation grassland
- Saltmarsh
- Intertidal mudflats and sandflats
- Boulder and cobble shores
- Mixed sediment shores
- Lagoons

*maintenance implies restoration if the feature is not currently in favourable condition.

**Solent and Southampton Water Ramsar**

The conservation objective for the internationally important populations of the regularly occurring Annex 1 species
Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring Annex 1 species, in particular:

- Standing water
- Sand and shingle
- Saltmarsh
- Intertidal mudflats and sandflats
- Shallow coastal waters
- Lagoons

2. The conservation objective for the internationally important populations of the regularly occurring migratory species
Subject to natural change, maintain* in favourable condition the habitats for the internationally important populations of the regularly occurring migratory species, in particular:

- Grazing marsh
- Reedbeds
- Standing water
- Coastal and inundation grassland
- Saltmarsh
- Intertidal mudflats and sandflats
- Boulder and cobble shores
- Mixed sediment shores
- Lagoons

3. The conservation objective for the internationally important assemblage of waterfowl
Subject to natural change, maintain* in favourable condition the habitats for the internationally important assemblage of waterfowl, in particular:

- Grazing marsh
- Reedbeds

- Standing water
- Coastal and inundation grassland
- Saltmarsh
- Intertidal mudflats and sandflats
- Boulder and cobble shores
- Mixed sediment shores
- Lagoons

*maintenance implies restoration if the feature is not currently in favourable condition.

**Vulnerabilities and Opportunities**

Every European site has distinctive characteristics that make it vulnerable to a variety of impact-inducing activities. Many sites, due to their location or condition, also offer various opportunities for improvement.

The vulnerabilities and opportunities of the above named sites are as follows.

Vulnerabilities:

Solent Maritime SAC

- Physical constraints such as existing flood defence and coast protection works that, combined with sea level rise predictions, may lead to coastal squeeze of intertidal habitats.
- Development pressures including ports, marinas and jetties etc. often involve capital/maintenance dredging to provide/improve deep water access and land-claim of coastal habitats.
- Accidental pollution from dredging programmes, shipping, oil/chemical spills, heavy industrial activities, former waste disposal sites and waste-water discharge
- Introduction of non-native species, for example from formal shipping activity.
- Nutrient enrichment – excessive growth of green weed forming dense mats within the intertidal areas inhibiting the natural functioning of the habitat.
- Reduction of freshwater flows may pose risk to sites integrity by altering the balance of saline and non-saline conditions.

Solent and Southampton Water SPA and Ramsar

Same as the Solent Maritime SAC, with the addition of:

- Recreational pressure both on shore and offshore during sensitive (over-wintering) periods.
- Reduction of freshwater inputs may reduce prey biomass for certain bird species
- Loss of short grasslands may risk maintaining interest features as they are now the key foraging resource.