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Habitats Regulations Assessment for the Fareham Borough Local Plan Part 2: Development Sites and Policies Plan

Appropriate Assessment Report

January 2014



Habitats Regulations Assessment for the Fareham Borough Local Plan Part 2: Development Sites and Policies Plan

**Appropriate Assessment Report for the
Proposed Submission Document**

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Contents

Executive Summary	i
E1 Introduction	i
E2 Screening Findings	i
E3 Impact Assessment	ii
E4 Avoidance and Mitigation	iii
E5 Conclusions	iv
1 Introduction	1
1.1 Purpose of this Report	1
1.2 The Development Sites and Policies Plan	1
1.3 Habitats Regulations Assessment	2
2 Methodology	5
2.1 Guidance and Best Practice	5
2.2 Methodology	6
2.3 Screening	6
2.4 Appropriate Assessment	8
2.5 In Combination Effects	9
3 European Site Information	11
3.1 Scope of the Assessment	11
3.2 Ecological Information about the European Sites	11
3.3 Conservation Objectives for SAC and SPA	16
3.4 Conservation Objectives for Ramsar Sites	17
3.5 Results of Screening Assessment	17
4 Identifying Impact Pathways	19
4.1 Introduction	19
4.2 Atmospheric Pollution	19
4.3 Disturbance	25
4.4 Displacement from Wind Turbines	27
4.5 Habitat Loss/Degradation	28

4.6	Water Abstraction	30
4.7	Wastewater Discharge	34
5	Impact Assessment	37
5.1	Introduction	37
5.2	Solent Maritime SAC	37
5.3	Portsmouth Harbour SPA/Ramsar	37
5.4	Solent and Southampton Water SPA/Ramsar	40
5.5	Chichester and Langstone Harbours SPA/Ramsar	41
5.6	Important/Uncertain Sites for Waders and Brent Goose	41
6	Avoidance and Mitigation	43
6.1	Recommended Avoidance and Mitigation Measures	43
6.2	Measures now included within the Proposed Submission DSP Plan	43
7	Determining Effects on Site Integrity	47
7.1	Introduction	47
8	Conclusion	49
8.1	Summary	49
8.2	Conclusions	49
	References and Bibliography	51
	Appendix I: Revised Screening Matrix	A
	Appendix II: SRTM Welborne Run 8b AADT Traffic Flows	C
	Appendix III: Southern Water's Revised Draft WRMP Proposed Supply Projects	E

List of Tables and Figures

<i>Table 2.1: Stages in the HRA process drawing on guidance from DCLG and Natural England</i>	7
<i>Table 3.1: The qualifying features of European sites close to Fareham borough</i>	13
<i>Table 3.2: European sites likely to be affected by the Development Sites and Policies Plan</i>	17
<i>Table 5.1: Uncertain wader or Brent goose sites within 500m of residential allocations</i>	42
<i>Table 5.2: Uncertain sites with one or more proposed allocation within 500m</i>	42
<i>Table 6.1: Proposed avoidance and mitigation measures</i>	44
<i>Table 7.1: Adverse effects on integrity: Solent Maritime SAC</i>	47
<i>Table 7.2: Adverse effects on integrity: Chichester and Langstone Harbours SPA/Ramsar</i>	47
<i>Table 7.3: Adverse effects on integrity: Portsmouth Harbour SPA/Ramsar</i>	48
<i>Table 7.4: Adverse effects on integrity: Solent and Southampton Water SPA/Ramsar</i>	48
<i>Figure 1.1: Proposed allocations around Fareham borough</i>	
<i>Figure 3.1: Internationally designated sites in and around Fareham borough</i>	
<i>Figure 4.1: Locations of modelled links relative to European sites</i>	21
<i>Figure 4.2: Priority habitats at the M27 Hamble crossing (Source: HBIC)</i>	
<i>Figure 4.3: Priority habitats at the A27 near Portsmouth Harbour (Source: HBIC)</i>	
<i>Figure 4.4: Portsmouth Waters' Peak Week Water Supply-Demand Balance (Source: Portsmouth Water, 2013)</i>	31
<i>Figure 4.5: Hampshire South Final Planning supply demand balance – DYCP</i>	33

Abbreviations

AADT	Annual Average Daily Traffic	MOD	Ministry of Defence
AAP	Area Action Plan	N	Nitrogen
C	Carbon	NE	Natural England
CAMS	Catchment Abstraction Management Strategy	NO2	Nitrogen dioxide
CIL	Community Infrastructure Levy	NOx	Nitrogen oxides
CO2	Carbon dioxide	NPPF	National Planning Policy Framework
DCLG	Department of Communities and Local Government	ODPM	Office of the Deputy Prime Minister
DEFRA	Department of the Environment, Food and Rural Affairs	P	Phosphorous
DMRB	Design Manual for Roads and Bridges	PDO	Peak-period Deployable Output
DPD	Development Plan Document	PUSH	Partnership for Urban South Hampshire
DSP	Development Sites and Policies	RoC	Review of Consents
DWF	Dry Weather Flow	RSPB	Royal Society for the Protection of Birds
DYCP	Dry Year Critical Period	SAC	Special Area of Conservation
EA	Environment Agency	SANG	Suitable Alternative Green Space
GIS	Geographic information systems	SAP	Species Action Plan
HBIC	Hampshire Biodiversity Information Centre	SDMP	Solent Disturbance Mitigation Project
HCC	Hampshire County Council	SINC	Site of Importance for Nature Conservation
HRA	Habitat Regulations Assessment	SPA	Special Protection Area
IUCN	International Union for Conservation of Nature	SRTM	Sub Regional Transport Model
JNCC	Joint Nature Conservancy Committee	SSSI	Site of Special Scientific Interest
LDF	Local Development Framework	WFD	Water Framework Directive
MHW	Mean High Water	WTW	Wastewater Treatment Works

Executive Summary

E1 Introduction

E1.1 This report presents the Habitats Regulations Assessment of the Fareham Borough Local Plan Part 2: The Development Sites and Policies Plan. It presents an updated screening assessment to determine which aspects of the plan are likely to lead to significant effects, and an Appropriate Assessment to determine whether there will be adverse effects on the integrity of:

- ▶ Solent Maritime SAC;
- ▶ Chichester & Langstone Harbours SPA;
- ▶ Portsmouth Harbour SPA;
- ▶ Solent and Southampton Water SPA;
- ▶ Chichester & Langstone Harbours Ramsar;
- ▶ Portsmouth Harbour Ramsar; and
- ▶ Solent & Southampton Water Ramsar.

E1.2 The report establishes the nature of effects on ecological integrity and assesses the avoidance and mitigation measures put forward within the DSP Plan, drawing on the information that is currently available. It provides recommendations for additional avoidance and mitigation measures to help ensure that adverse effects on the European sites can be avoided.

E2 Screening Findings

E2.1 The Council undertook consultation on a screening report in October 2012. The initial screening assessment found that significant effects were considered a likely or uncertain outcome of the following 12 sites and/or their corresponding policies:

- ▶ Site H1 Croft House, Redlands Lane (ID 1381)
- ▶ Site H4 Land Between 335-357 Gosport Road, Fareham (ID 1076)
- ▶ Site H8 Land off Church Road, Warsash (ID 1070)
- ▶ Site H9 Land to rear 347-411 Hunts Pond Road (ID 1072)
- ▶ Site H12 Land at Stubbington Lane, Stubbington (ID 1078)
- ▶ Site H13 Land at Sea Lane, Stubbington (ID 1394)
- ▶ Site H15 Land to the rear of Red Lion Hotel, East Street and Bath Lane (ID 1426)
- ▶ Site H16 Fareham Station West (ID 212)
- ▶ Policy DSP27 and Site TC3 Market Quay (ID 199)

- ▶ ID 40: Gosport Road Bus Depot (*NOW DELETED*)
- ▶ ID 1215: Seaeye House & Adjoining Properties, Lower Quay Road (*NOW DELETED*)
- ▶ ID 1948: Windmill Gove (*NOW DELETED*)

E2.2 Some of these sites have now been removed from the Plan, including Gosport Road Bus Depot, Seaeye House and Windmill Grove. However, additional sites have come forward during 2013. Appendix I presents the findings of a revised screening exercise for the final list of sites and policies for the Proposed Submission document, which indicate that significant or in combination effects were considered a likely or uncertain outcome of the following 10 sites and/or their corresponding policies, in addition to those listed above:

- ▶ Site E3 Kites Croft
- ▶ Site E5 The Walled Garden, Cams Hall
- ▶ Site H7 Fleet End Road, Warsash (ID 1068)
- ▶ Site H14 Maytree Road (ID 154)
- ▶ Site GT1 The Retreat, Newgate Lane (ID 1402)
- ▶ Policy DSP26 and Site TC1 Civic Area (ID 198)
- ▶ Policy DSP28 and Site TC2 Fareham Shopping Centre (ID 1914)
- ▶ Policy DSP30 and Site TC4 Fareham Station East (ID 211)
- ▶ Policy DSP33 and MU1 Fareham College
- ▶ Policy DSP54 New Moorings

E3 Impact Assessment

E3.1 A range of possible impacts during construction and operation of these proposals were assessed, including:

Construction impacts

- ▶ Habitat loss due to the location/footprint of development;
- ▶ Construction noise;
- ▶ Construction activity; and
- ▶ Aquatic/atmospheric pollution during remediation, demolition or construction.

Operation impacts

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

E4 Avoidance and Mitigation

E4.1 Mitigation for the site-specific construction and operational impacts of proposed allocations will need to be drawn up in detail at the planning application stage, and accompanied where necessary by a project-level HRA. However, the Plan and its HRA need to demonstrate that predicted impacts are capable of being avoided or mitigated prior to the Plan being adopted, while retaining sufficient flexibility for site proponents to devise their own measures. These measures are summarised below. These measures have now been incorporated within the DSP Plan to help avoid and reduce adverse effects.

Avoidance / mitigation

Construction impacts

Habitat loss (within SAC/SPA/Ramsar)

Policy wording / supporting text should be amended to identify location of, and potential risks to, designated sites (*NOTE: this has now been largely incorporated*). Proposals should be required to demonstrate suitable site selection, designs and construction methods (including pollution prevention measures) to avoid/reduce risk of impacts.

Construction noise

The timing (seasonal and/or tidal state) of construction works should be adjusted to avoid periods when qualifying species are present. Construction methods should adopt technologies with lower noise emissions (e.g. vibro-piling). Screening and sound barriers should be installed around development sites to dissipate noise.

Construction activity

None required

Pollution during remediation, demolition or construction

Potentially contaminated sites will require desk-study and possibly site investigation/remediation before development. A Construction Environment Management Plan should be prepared to enable risks to be managed, including measures such as: use of interceptors/bunds; sealing of disused drain connections; temporary drainage and dewatering systems; best practice techniques for storage of fuels/chemicals/materials.

Operation impacts

Operational activity

None required

Displacement (line-of-sight requirements)

If tall buildings are proposed, building heights should be stepped-down in height towards the waterfront. Gaps between buildings should be maintained or designed into developments, or planted buffer zones created, to break-up continuous facades when viewed from the water.

Protection of Brent goose / wader sites

No Important Brent goose / wader sites are likely to be affected by newly proposed allocations, but the following sites of Uncertain importance could be cumulatively affected by more than one allocation:

Avoidance / mitigation

- Waders: F02, F06, F13, F18, F19A, F26, F27, F36, F82
- Brent goose: F19A

Overwintering bird surveys for three seasons should be completed for all Uncertain sites, to establish their importance in supporting qualifying species. Development sites listed in the main report which potentially contribute to cumulative impacts have been pushed back in the housing trajectory to allow surveys to be completed. For Uncertain sites confirmed as Important, s.106 (<6 proposals) or CIL contributions could be collected towards site improvements to prevent disturbance impacts, such as: changes to more favourable management, installation of signage / interpretation, creation of seasonal refuge zones, screening of active areas (dog-walking, cycling, etc).

E5 Conclusions

- E5.1 The report concludes that adverse effects on the ecological integrity of European sites in and around the borough are capable of being mitigated.
- E5.2 It can be concluded that the DSP Plan will not adversely affect the ecological integrity of any of the sites included within the HRA. The Plan can be considered to be compliant with the Habitats Regulations in this respect.
- E5.3 Following the publication of the Plan, the HRA will be revisited to assess any policy changes which are considered necessary in response to representations.

1 Introduction

1.1 Purpose of this Report

- 1.1.1 This report has been prepared for Fareham Borough Council as part of the Habitats Regulations Assessment (HRA) for the Fareham Borough Local Plan Part 2: The Development Sites and Policies Plan. The report accompanies the Proposed Submission version of the plan and forms part of the evidence base upon which the Plan is based.
- 1.1.2 HRA is a requirement of the Conservation of Habitats and Species Regulations 2010 ('the Habitats Regulations'). The assessment focuses on the likely significant effects of the plan on the nature conservation interests of European-protected areas in and around Fareham borough, and seeks to establish whether or not there will be any adverse effects on the ecological integrity of these European sites as a result of proposals in the plan.

1.2 The Development Sites and Policies Plan

- 1.2.1 The Development Sites and Policies (DSP) Plan will be a Development Plan Document (DPD) and form a key part of the Local Plan for Fareham Borough. It will implement the strategic direction established in the Adopted Core Strategy 2011 and allocate sites to meet the borough's development needs between now and 2026, as well setting a framework of development management policies against which individual proposals can be assessed.
- 1.2.2 The Core Strategy makes provision for 3,729 new homes, at least 41,000m² of employment floorspace, as well as convenience and comparison retail floorspace and the necessary associated facilities, infrastructure and services. In addition to the Core Strategy residential and employment targets, the DSP Plan will deliver a further 472 dwellings and 59,000m² of employment floorspace, in line with the South Hampshire Strategy refresh (PUSH, 2012)¹.
- 1.2.3 The Plan addresses the whole of Fareham Borough, including Fareham Town Centre, other towns and villages and the countryside, with the exception of land within the Welborne policy boundary. The Local Plan Part 3: The Welborne Plan is being developed separately to govern the way in which strategic development north of Fareham takes place. The Welborne Plan will seek to deliver around 6,000 new homes, c.20ha of employment land, retail, facilities, infrastructure, open space and services.
- 1.2.4 Following a Call for Sites in 2007 and late 2011, the Council identified a shortlist of 61 sites that could help to implement Core Strategy policy, selected in accordance with the Council's published site assessment methodology. The 61 shortlisted sites, together with approximate development quanta, were supplied to the assessment team to carry out an initial HRA

¹ Partnership for Urban South Hampshire (PUSH; October 2012): *A Framework to Guide Sustainable Development and Change to 2026*.

screening exercise. The results were passed back to the Council in early summer 2012 and, through further stages of iterative assessment, the shortlist was reduced to 34 sites for possible allocation. These underwent public consultation at the draft plan stage in late 2012. Further work on the DSP Plan was undertaken throughout 2013 and additional sites were identified for possible inclusion in the plan. Figure 1.1 shows the location of all sites now being proposed for allocation.

1.3 Habitats Regulations Assessment

- 1.3.1 Habitats Regulations Assessment is a requirement of the Conservation of Habitats and Species Regulations 2010 (as amended; 'the Habitats Regulations'), the UK's transposition of *European Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora* ('the Habitats Directive'). HRA must be applied to any plan or project in England and Wales with the potential to adversely affect the ecological integrity of any sites designated for their nature conservation importance as part of a system known collectively as the Natura 2000 network of European sites.
- 1.3.2 European sites provide ecological infrastructure for the protection of rare, endangered or vulnerable natural habitats and species of exceptional importance 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 Council Directive 2009/147/EC on the conservation of wild birds* ('the Birds Directive')). Meanwhile, the National Planning Policy Framework (DCLG, 2012) and Circular 06/05 (ODPM, 2005) require that Ramsar sites (UNESCO, 1971) are treated as if they are fully designated European sites for the purposes of considering development proposals that may affect them.

Fareham BC Proposed Development Sites

- TC Opportunity Areas
- Employment Allocations
- Fareham College
- Gypsies & Travellers
- Housing Allocations
- Important/Uncertain Brent Geese Sites
- Important/Uncertain Wader Sites
- Special Area of Conservation
- Ramsar site
- Special Protection Area
- Flood Zone 2
- Flood Zone 3
- Fareham Town Centre
- Urban Area
- Fareham Boundary
- District Boundaries

Contains data from Natural England 2013



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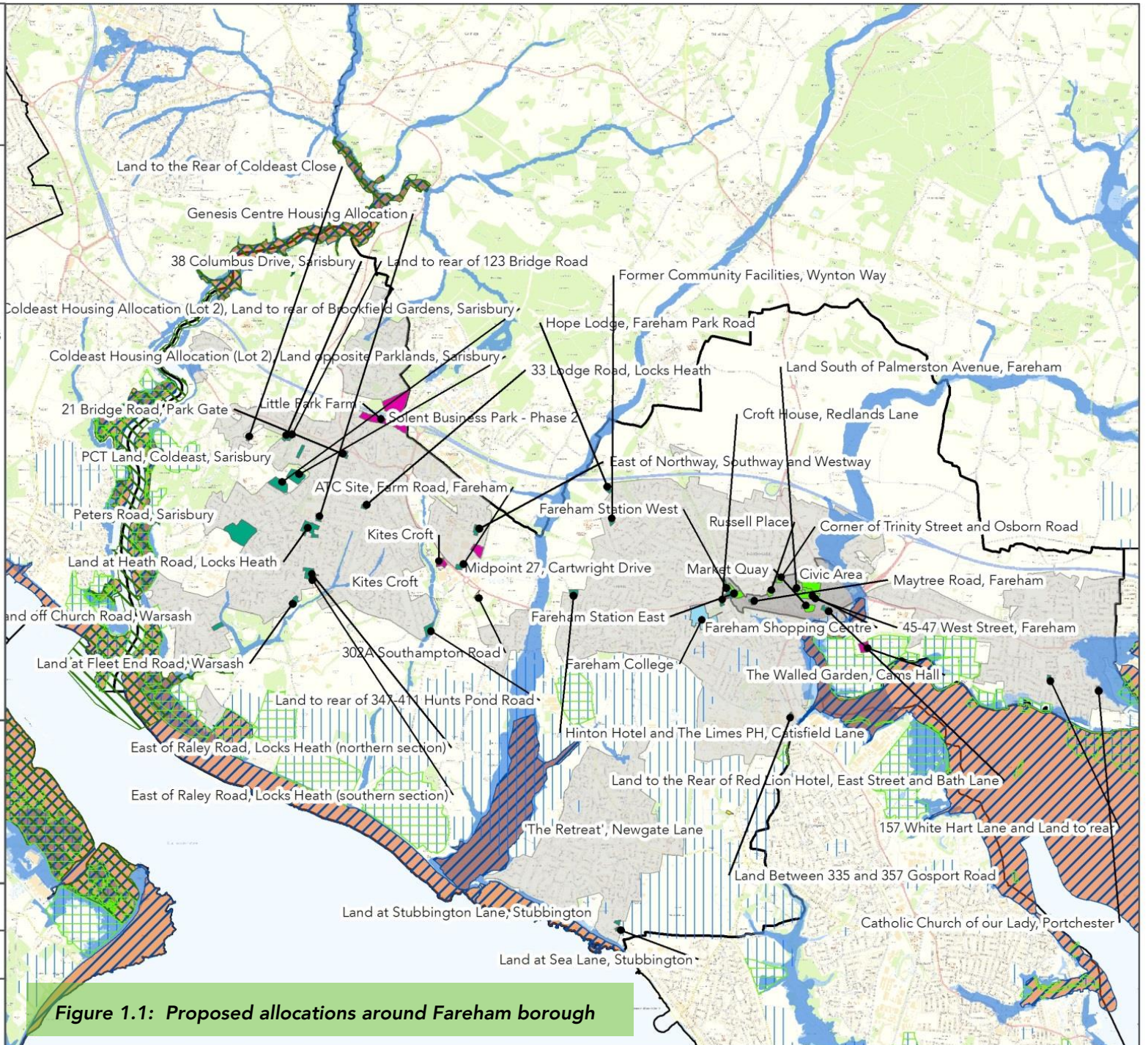


Figure 1.1: Proposed allocations around Fareham borough

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2 Methodology

2.1 Guidance and Best Practice

2.1.1 Draft guidance on HRA has been defined by DCLG (2006) with more detailed draft guidance from Natural England (Tyldesley, 2009) and a range of other bodies². The guidance recognises that there is no statutory method for undertaking Habitats Regulations Assessment and that the adopted method must be appropriate to its purpose under the Habitats Directive and Regulations. DCLG guidance identifies three main stages to the HRA process:

- ▶ **Screening:** Analysing draft options for likely significant effects on internationally designated sites;
- ▶ **Appropriate Assessment:** Ascertaining the effects on site integrity; and
- ▶ **Alternative Solutions:** Devising alternatives to the plan options, avoidance or mitigation measures.

2.1.2 An HRA must determine whether or not a plan or project will adversely affect the integrity of the European site(s) concerned, in view of the site's conservation objectives. Where adverse effects are anticipated changes must be made to the plan or project. The process is characterised by the precautionary principle. The European Commission (2000a) describes the principle as follows:

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

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

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

2.1.3 The hierarchy of intervention is important: where significant effects are likely or uncertain, decision-makers must firstly seek to avoid the effect through for example, a change of policy. If this is not possible, mitigation measures should be explored to remove or reduce significant effects. If neither avoidance, nor subsequent mitigation is possible, alternatives to the plan or

² For example European Commission (2001) and RSPB (Dodd et al, 2007)

project should be considered. Such alternatives should explore ways of achieving the objectives that avoid significant effects entirely. If there are no alternatives suitable for removing an adverse effect, decision-makers must demonstrate 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.

2.2 Methodology

- 2.2.1 The guidance from DCLG and Natural England was written for use in assessing strategic plans. Where individual projects come into play, as may be the case for any individual site allocation requiring Appropriate Assessment for instance, it may prove to be more suitable to use previous guidance from Natural England’s forerunner, English Nature (1997a&b, 1999 and 2001) in conjunction with guidance European Commission (2001) and Countryside Council for Wales (Tyldesley, 2011).
- 2.2.2 The overall objective of an Appropriate Assessment will be to ascertain whether any part of the plan will lead to an adverse effect on the ecological integrity of nearby European sites and, if so, make recommendations on how such effects can be avoided or mitigated. It will be carried out in accordance with the draft Natural England guidance (Tyldesley, 2009); see Table 2.1.

2.3 Screening

- 2.3.1 All proposed policies and site allocations were screened for likely significant effects on the European sites. Such effects can be sorted into one of 17 categories which are derived from the draft HRA guidance document produced for Natural England (Tyldesley, 2009). They help to determine which, if any, elements of the plan would be likely to have a significant effect on any interest feature of any European site, alone or in combination with other projects and plans, directly or indirectly. The 17 categories fall into four broader sections which are described as:

Category A	Elements of the plan / options that would have no negative effect on a European site at all
Category B	Elements of the plan / options that could have an effect, but the likelihood is there would be no significant negative effect on a European site either alone or in combination with other elements of the same plan, or other plans or projects
Category C	Elements of the plan / options that could or would be likely to have a significant effect alone and will require the plan to be subject to an appropriate assessment before it may be adopted
Category D	Elements of the plan / options that would be likely to have a significant effect in combination with other elements of the same plan, or other plans or projects and will require the plan to be subject to an appropriate assessment before the plan may be adopted

Table 2.1: Stages in the HRA process drawing on guidance from DCLG and Natural England

DCLG Stage	Natural England (Tyldesley) Steps	
AA1: Likely significant effects	1. Gather the evidence base about international sites.	
	2. Consult Natural England and other stakeholders on the method for HRA and sites to be included.	
	3. Screen elements of the plans for likelihood of significant effects.	
	4. Eliminate likely significant effects by amending the plan / option.	
	5. Consult Natural England and other stakeholders on the findings of the screening stage, and scope of the Appropriate Assessment if required.	
AA2: Appropriate Assessment and ascertaining the effect on integrity	6. Appropriate Assessment of elements of the plan likely to have significant effects on a European site.	8. Assess additions and changes to the plan and prepare draft HRA record.
AA3: Mitigation measures and alternative solutions	7. Amend the plan / option or take other action to avoid any adverse effect on integrity of European site(s).	9. Complete the draft Appropriate Assessment and draft HRA record.
Reporting and recording	10. Submit draft HRA and supporting documents to Natural England.	
	11. Consult Natural England, other stakeholders and the public (if suitable).	
	12. Publish final HRA record and submit with Natural England letter to Inspector for Examination.	
	13. Respond to any representations relating to the HRA and to Inspector's questions.	
		14. Check changes to the plan, complete HRA record and establish any monitoring required.

ITERATIVE

Findings of the screening stage

2.3.2 The categories, and traffic light colour-coded sub-categories, provide the means of recording the results of the assessment in such a way that important issues are identified whilst policies and proposed allocations that have no effect are screened out. Categories A, C and D are subdivided so that the specific reason why the assessor has allocated the policy or proposal to that category is more transparent, and more directly related to the ways in which the plan may affect a European site.

2.3.3 The Council undertook consultation on a screening report in October 2012. The initial screening assessment found that significant effects (C1 or C2) were considered a likely or uncertain outcome of the following 12 sites and/or their corresponding policies:

- ▶ Site H1 Croft House, Redlands Lane (ID 1381)
- ▶ Site H4 Land Between 335-357 Gosport Road, Fareham (ID 1076)
- ▶ Site H8 Land off Church Road, Warsash (ID 1070)
- ▶ Site H9 Land to rear 347-411 Hunts Pond Road (ID 1072)
- ▶ Site H12 Land at Stubbington Lane, Stubbington (ID 1078)
- ▶ Site H13 Land at Sea Lane, Stubbington (ID 1394)
- ▶ Site H15 Land to the rear of Red Lion Hotel, East Street and Bath Lane (ID 1426)
- ▶ Site H16 Fareham Station West (ID 212)
- ▶ Policy DSP27 and Site TC3 Market Quay (ID 199)
- ▶ ID 40: Gosport Road Bus Depot (*NOW DELETED*)
- ▶ ID 1215: Seaeye House & Adjoining Properties, Lower Quay Road (*NOW DELETED*)
- ▶ ID 1948: Windmill Gove (*NOW DELETED*)

2.3.4 Some of these sites have now been removed from the DSP Plan, including Gosport Road Bus Depot, Seaeye House and Windmill Grove. However, additional sites have come forward during 2013. Appendix I presents the findings of a revised screening exercise for the final list of sites and policies for the Proposed Submission document, which indicate that significant (C1/C2) or in combination (D1/D2/D3) effects were considered a likely or uncertain outcome of the following 10 sites and/or their corresponding policies, in addition to those listed above:

- ▶ Site E3 Kites Croft
- ▶ Site E5 The Walled Garden, Cams Hall
- ▶ Site H7 Fleet End Road, Warsash (ID 1068)
- ▶ Site H14 Maytree Road (ID 154)
- ▶ Site GT1 The Retreat, Newgate Lane (ID 1402)
- ▶ Policy DSP26 and Site TC1 Civic Area (ID 198)
- ▶ Policy DSP28 and Site TC2 Fareham Shopping Centre (ID 1914)
- ▶ Policy DSP30 and Site TC4 Fareham Station East (ID 211)
- ▶ Policy DSP33 and MU1 Fareham College
- ▶ Policy DSP54 New Moorings

2.4 Appropriate Assessment

2.4.1 The purpose of the Appropriate Assessment (HRA Stage AA2) is to further analyse likely significant effects identified during the screening stage, as well as those effects which were uncertain or not well understood and taken forward for assessment in accordance with the precautionary principle. The assessment should seek to establish whether or not the plan's effects, either alone or in combination with other plans or projects, will lead to adverse effects

on site integrity, in view of the site's conservation objectives (see Chapter 3). Site integrity can be described as follows (ODPM, 2005):

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

2.4.2 The assessment first focuses on the effects generated by the proposals of the DSP Plan and considers ways in which they can be avoided altogether. Where adverse effects cannot be avoided by changes to the plan, mitigation measures are introduced to remove or reduce the effects to the level of non-significance.

2.4.3 The assessments presented in the following chapters are comprised of the following main sections:

- ▶ Chapter Three defines the European sites, qualifying habitats and species which were considered at the screening stage, and those which are addressed by the Appropriate Assessment;
- ▶ Chapter Four considers the pathways for impacts to the European sites, qualifying habitats and species, and summarises those which are considered by the Appropriate Assessment;
- ▶ Chapter Five presents an impact assessment for each European site potentially affected by the DSP Plan;
- ▶ Chapter Six discusses measures for avoiding and mitigating adverse effects; and
- ▶ Chapter Seven considers each of the European site's conservation objectives in turn and states whether or not the impacts of the plan would prevent the conservation objective from being met.

2.4.4 Where one or more objective is impeded, and in accordance with guidance from English Nature (2004; now Natural England), additional factors are considered in order to reach a decision regarding the effects on site integrity. Such factors include:

- Scale of impact;
- Duration of impact and recovery/reversibility;
- Conflicting feature requirements;
- Uncertainty in cause and effect relationships and a precautionary approach.
- Long term effects and sustainability;
- Dynamic systems;
- Off-site impacts; and

2.5 In Combination Effects

2.5.1 Other plans and projects being prepared or implemented in the area may have the potential to cause negative effects on the integrity of European sites. These effects may be exacerbated when experienced in combination with the effects of the DSP Plan, possibly leading an insignificant effect to become significant. It is therefore important to consider which other plans and projects could generate similar effects as development at Welborne, at the same European sites, and which may act in-combination.

2.5.2 The plans and projects listed below have been considered during the HRA for their potential to contribute to in combination effects:

- ▶ Strategic Development at North of Whiteley
- ▶ West of Waterlooville, Havant
- ▶ The Fareham Development Sites and Policies Plan
- ▶ Eastleigh Adopted Local Plan Review 2001-2011 (adopted 2006)
- ▶ Eastleigh Draft Local Plan (LDF) 2011-2029
- ▶ Winchester saved adopted policies in the Local Plan 2006
- ▶ Winchester Local Plan Part 1 - Joint Core Strategy (adopted 2013)
- ▶ Winchester emerging Local Plan Part 2 – Development Management and Allocations Document.
- ▶ Gosport Local Plan Review 2001 to 2016 (Adopted 2006)
- ▶ Gosport Borough Draft Local Plan 2011 to 2029
- ▶ Portsmouth City Local Plan saved policies (adopted 2006)
- ▶ The Portsmouth Plan (adopted 2012)
- ▶ Portsmouth AAPs (Somerstown and North Southsea AAP & Southsea Town Centre AAP)
- ▶ Portsmouth emerging Site Allocations DPD
- ▶ North Solent Shoreline Management Plan (December 2010)
- ▶ Hampshire Local Transport Plan (2011-2031)
- ▶ Joint Hampshire Minerals and Waste Plan (adopted 2013) (includes Portsmouth, Southampton, New Forest National Park and South Downs National Park)

3 European Site Information

3.1 Scope of the Assessment

3.1.1 Each European site has its own intrinsic qualities, besides the habitats or species for which it was designated, that enable the site to support the ecosystems that it does. This is represented by the site's functionality at the landscape ecology scale; how the site interacts with the zone of influence of its surroundings. Hence the ecological integrity of a European site is vulnerable to change from natural and human induced activities in the surrounding environment. This is particularly the case where developments generate water- or air-borne pollutants, use water resources or otherwise affect water levels, or involve an extractive or noise emitting use. Adverse effects may also occur via impacts to mobile species occurring outside of a designated site but which are qualifying features of the site. For example, there may be effects on protected birds that use land outside the designated site for foraging, feeding or roosting.

3.1.2 European sites in and around Fareham borough that may be vulnerable to changes emanating from developments within the borough are listed below and depicted on Figure 3.1:

- ▶ Butser Hill SAC;
- ▶ River Itchen SAC;
- ▶ Solent Maritime SAC;
- ▶ Chichester & Langstone Harbours SPA;
- ▶ Solent and Southampton Water SPA;
- ▶ Chichester & Langstone Hbrs Ramsar;
- ▶ Solent & Soton Water Ramsar; and
- ▶ Emer Bog SAC;
- ▶ Solent and Isle of Wight Lagoons SAC;
- ▶ The New Forest SAC;
- ▶ Portsmouth Harbour SPA;
- ▶ The New Forest SPA;
- ▶ Portsmouth Harbour Ramsar;
- ▶ The New Forest Ramsar.

3.2 Ecological Information about the European Sites

3.2.1 Ecological information for each European site was given in the Screening Statement (UEEC, October 2012), including site accounts, qualifying features, conservation objectives and known environmental conditions that support site integrity. Readers are referred to that document for further details, however, the sites' qualifying features are reproduced in Table 3.1 for clarity.

European Nature Conservation Sites

-  Special Area of Conservation
-  Ramsar site
-  Special Protection Area
-  Green Land (Winchester)
-  Welborne Plan Area
-  Fareham Town Centre
-  Urban Area
-  Fareham Boundary
-  District Boundaries

Contains data from Natural England 2012



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 ENVIRONMENTAL
 CONSULTING
 Unit 5 Westergate
 Business Centre
 Brighton
 BN2 4QN

Scale 1:175,000	Date Aug13
Created by SP	Reviewed by NP
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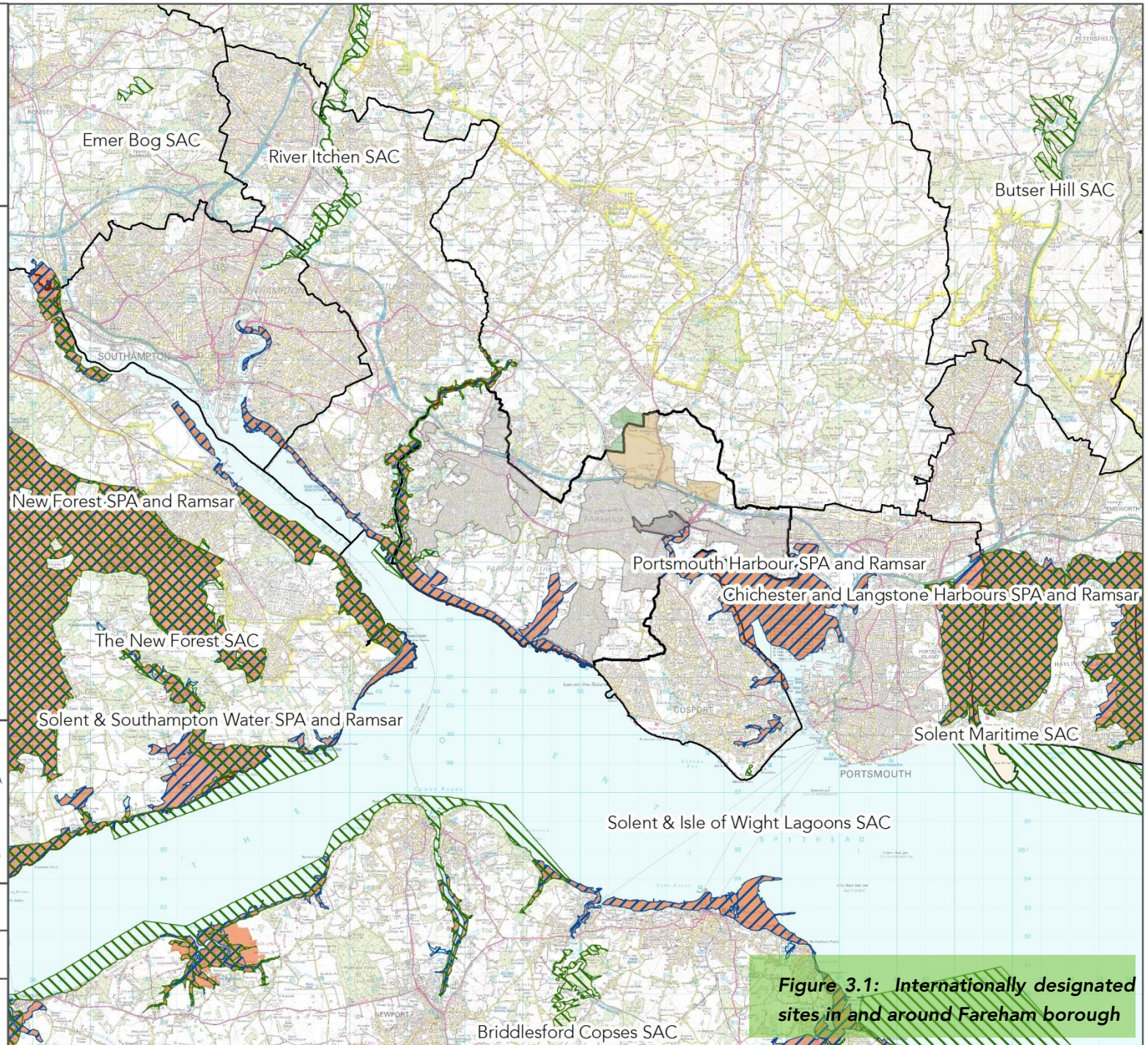


Figure 3.1: Internationally designated sites in and around Fareham borough

Table 3.1: The qualifying features of European sites close to Fareham borough

Solent & Southampton Water SPA	Solent & Soton Water Ramsar	Chichester & Langstone SPA	Chichester & Langstone Ramsar
<p>Breeding</p> <ul style="list-style-type: none"> - Little Tern <i>Sterna albifrons</i> - Sandwich Tern <i>Sterna sandvicensis</i> - Common Tern <i>Sterna hirundo</i> - Mediterranean Gull <i>Larus melanocephalus</i> - Roseate Tern <i>Sterna dougallii</i> <p>Overwintering</p> <ul style="list-style-type: none"> - Black-tailed Godwit <i>Limosa limosa islandica</i> - Dark-bellied Brent Goose <i>Branta bernicla bernicla</i> - Ringed Plover <i>Charadrius hiaticula</i> - Teal <i>Anas crecca</i> <p>Bird Assemblage</p> <ul style="list-style-type: none"> - Over winter the area regularly supports 51,361 individual waterfowl (5 year peak mean 1998) 	<p>Criterion 1</p> <ul style="list-style-type: none"> - Several outstanding wetland habitat types, including unusual double tidal flow, a major sheltered channel, saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs <p>Criterion 2</p> <ul style="list-style-type: none"> - Nationally rare species assemblage <p>Criterion 5</p> <ul style="list-style-type: none"> - Winter assemblage of 51,343 waterfowl (5 year peak mean 02/03) <p>Criterion 6</p> <p>Breeding</p> <ul style="list-style-type: none"> - Sandwich Tern <i>Sterna sandvicensis</i> - Common Tern <i>Sterna hirundo</i> - Little Tern <i>Sterna albifrons</i> - Roseate Tern <i>Sterna dougallii</i> <p>Overwintering</p> <ul style="list-style-type: none"> - Black-tailed Godwit <i>Limosa limosa islandica</i> - Dark-bellied Brent Goose <i>Branta bernicla bernicla</i> - Teal <i>Anas crecca</i> <p>On passage</p> <ul style="list-style-type: none"> - Ringed Plover <i>Charadrius hiaticula</i> 	<p>Breeding</p> <ul style="list-style-type: none"> - Little Tern <i>Sterna albifrons</i> - Common Tern <i>Sterna hirundo</i> - Sandwich Tern <i>Sterna sandvicensis</i> <p>Overwintering</p> <ul style="list-style-type: none"> - Bar-tailed Godwit <i>Limosa lapponica</i> - Pintail <i>Anas acuta</i> - Shoveler <i>Anas clypeata</i> - Eurasian Teal <i>Anas crecca</i> - Wigeon <i>Anas penelope</i> - Turnstone <i>Arenaria interpres</i> - Dark-bellied Brent Goose <i>Branta bernicla bernicla</i> - Sanderling <i>Calidris alba</i> - Dunlin <i>Calidris alpina alpina</i> - Ringed Plover <i>Charadrius hiaticula</i> - Red-breasted Merganser <i>Mergus serrator</i> - Eurasian Curlew <i>Numenius arquata</i> - Grey Plover <i>Pluvialis squatarola</i> - Shelduck <i>Tadorna tadorna</i> - Redshank <i>Tringa totanus</i> <p>Bird Assemblage</p> <ul style="list-style-type: none"> - Over winter the area regularly supports 93,230 individual waterfowl (5yr peak mean 1998) 	<p>Criterion 1</p> <ul style="list-style-type: none"> - Two outstanding estuarine basins, the site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes <p>Criterion 5</p> <ul style="list-style-type: none"> - Winter assemblage of 76,480 waterfowl (5 year peak mean 1998/99 - 2002/03) <p>Criterion 6</p> <p>Breeding</p> <ul style="list-style-type: none"> - Little Tern <i>Sterna albifrons albifrons</i> <p>Overwintering</p> <ul style="list-style-type: none"> - Dark-bellied Brent Goose <i>Branta bernicla bernicla</i> - Dunlin <i>Calidris alpina alpina</i> - Grey Plover <i>Pluvialis squatarola</i> - Common Shelduck <i>Tadorna tadorna</i> <p>On passage</p> <ul style="list-style-type: none"> - Ringed Plover <i>Charadrius hiaticula</i> - Black-tailed Godwit <i>Limosa limosa islandica</i> - Common Redshank <i>Tringa totanus totanus</i>

Portsmouth Harbour SPA	Portsmouth Harbour Ramsar	River Itchen SAC	Solent Maritime SAC
<p><u>Overwintering</u></p> <ul style="list-style-type: none"> - Dark-bellied Brent Goose <i>Branta bernicla bernicla</i> - Dunlin <i>Calidris alpina alpina</i> - Black-tailed Godwit <i>Limosa limosa islandica</i> - Red-breasted Merganser <i>Mergus serrator</i> 	<p><u>Criterion 3</u></p> <ul style="list-style-type: none"> - <i>Species assemblage of importance to maintaining biogeographic biodiversity</i> <p><u>Criterion 6</u></p> <p><u>Overwintering</u></p> <ul style="list-style-type: none"> - Dark-bellied Brent Goose <i>Branta bernicla bernicla</i> 	<p><u>Annex I Habitat</u></p> <ul style="list-style-type: none"> - Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation <p><u>Annex II Species</u></p> <ul style="list-style-type: none"> - White-clawed (or Atlantic stream) crayfish <i>Austropotamobius pallipes</i> - Southern damselfly <i>Coenagrion mercuriale</i> - Bullhead <i>Cottus gobio</i> - Brook lamprey <i>Lampetra planeri</i> - Otter <i>Lutra lutra</i> - Atlantic salmon <i>Salmo salar</i>. 	<p><u>Annex I Habitat</u></p> <ul style="list-style-type: none"> - Estuaries - <i>Spartina</i> swards (<i>Spartinion maritimae</i>) - Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) - Sandbanks - slightly covered by sea water all the time - Mudflats and sandflats not submerged at low tide - Annual vegetation drift lines - Perennial vegetation of stony banks - <i>Salicornia</i> and other annuals colonising mud and sand - Shifting white dunes with <i>Ammophila arenaria</i> - Coastal lagoons* <p><u>Annex II Species</u></p> <ul style="list-style-type: none"> - Desmoulin's whorl snail <i>Vertigo moulinsiana</i>
The New Forest SPA	The New Forest Ramsar	The New Forest SAC	Emer Bog SAC
<p><u>Breeding</u></p> <ul style="list-style-type: none"> - Nightjar <i>Caprimulgus europaeus</i> - Woodlark <i>Lullula arborea</i> - Honey Buzzard <i>Pernis apivorus</i> - Dartford Warbler <i>Sylvia undata</i> 	<p><u>Criterion 1</u></p> <p>Valley mires and wet heaths are found throughout the site and are of outstanding scientific interest. The mires and heaths are within catchments whose uncultivated and undeveloped state buffer the mires against</p>	<p><u>Annex I Habitat</u></p> <ul style="list-style-type: none"> - Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) - Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea</i> 	<p><u>Annex I Habitat</u></p> <ul style="list-style-type: none"> - Transition mires and quaking bogs.

<p>Overwintering</p> <p>- Hen Harrier <i>Circus cyaneus</i></p>	<p>adverse ecological change. This is the largest concentration of intact valley mires of their type in Britain</p> <p>Criterion 2</p> <p>Diverse assemblage of wetland plants and animals including several nationally rare species. Seven species of nationally rare plant are found on the site, as are at least 65 British Red Data Book species of invertebrate</p> <p>Criterion 3</p> <p>The mire habitats are of high ecological quality and diversity and have undisturbed transition zones. The invertebrate fauna of the site is important due to the concentration of rare and scarce wetland species. The whole site complex, with its examples of semi-natural habitats is essential to the genetic and ecological diversity of southern England</p>	<p><i>uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i></p> <ul style="list-style-type: none"> - Northern Atlantic wet heaths with <i>Erica tetralix</i> - European dry heaths - <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) - Depressions on peat substrates of the <i>Rhynchosporion</i> - Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>) - <i>Asperulo-Fagetum</i> beech forests - Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains - Bog woodland * - Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) * - Transition mires and quaking bogs. - Southern damselfly <i>Coenagrion mercuriale</i> - Stag beetle <i>Lucanus cervus</i> - Great crested newt <i>Triturus cristatus</i> 	<p>Solent and IoW Lagoons SAC</p> <p>Annex I Habitat</p> <ul style="list-style-type: none"> - Coastal lagoons* <p>Butser Hill SAC</p> <p>Annex I Habitat</p> <ul style="list-style-type: none"> - Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) - <i>Taxus baccata</i> woods of the British Isles *
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* Denotes priority feature

3.3 Conservation Objectives for SAC and SPA

3.3.1 The Habitats Directive requires that Member States maintain or where appropriate restore habitats and species populations of European importance to favourable conservation status. European site conservation objectives are referred to in the Habitats Regulations and Article 6(3) of the Habitats Directive. They are for use when there is a need to undertake an Appropriate Assessment under the relevant parts of the respective legislation. The conservation objectives are set for each feature (habitat or species) of an SAC/SPA. Where the objectives are met, the site can be said to demonstrate a high degree of integrity and the site itself makes a full contribution to achieving the aims of the Habitats and Birds Directives. The conservation objectives recently defined by Natural England for the SACs and SPAs included within the scope of this HRA are given in Box 1.

Box 1: Conservation objectives for SAC and SPA

Special Protection Areas

With regard to the individual species and/or assemblage of species for which the site has been classified;

Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.

Subject to natural change, to maintain or restore:

- ▶ 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 populations of the qualifying features;
- ▶ The distribution of the qualifying features within the site.

Special Areas of Conservation

With regard to the natural habitats and/or species for which the site has been designated;

Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.

Subject to natural change, to maintain or restore:

- ▶ The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- ▶ The structure and function of qualifying natural habitats and habitats of qualifying species;
- ▶ The supporting processes on which qualifying natural habitats and habitats of qualifying species rely;
- ▶ The populations of qualifying species;
- ▶ The distribution of qualifying species within the site.

3.4 Conservation Objectives for Ramsar Sites

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

3.5 Results of Screening Assessment

- 3.5.1 All proposed site allocations and development management policies were screened for likely significant effects on the European sites, the results of which were reported in the Screening Statement. The screening assessment found that seven of the European sites are not negatively affected by the Development Sites and Policies Plan, as shown in Table 3.2.

Table 3.2: European sites likely to be affected by the Development Sites and Policies Plan

Sites likely to be affected	Sites not affected
▶ Solent Maritime SAC	▶ Butser Hill SAC
▶ Chichester and Langstone Harbours SPA	▶ Emer Bog SAC
▶ Chichester & Langstone Harbours Ramsar	▶ River Itchen SAC
▶ Portsmouth Harbour SPA	▶ Solent and Isle of Wight Lagoons SAC
▶ Portsmouth Harbour Ramsar	▶ New Forest SAC
▶ Solent and Southampton Water SPA	▶ New Forest SPA
▶ Solent and Southampton Water Ramsar	▶ New Forest Ramsar

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4 Identifying Impact Pathways

4.1 Introduction

4.1.1 The Core Strategy HRA found that the likely significant effects of the higher tier plan were:

- ▶ Atmospheric pollution;
- ▶ Disturbance from recreational pressure;
- ▶ Displacement from wind turbines;
- ▶ Habitat loss and/or degradation;
- ▶ Water abstraction; and
- ▶ Waste water discharge.

4.1.2 This chapter re-visits each of these in turn, updating the basis for assessment with the latest available information, and considers whether there are any additional site-specific impact pathways that are relevant to the Development Sites and Policies Plan.

4.2 Atmospheric Pollution

4.2.1 The Core Strategy HRA could not rule out the potential for certain European sites to be adversely affected by atmospheric pollution. Since the Core Strategy was adopted work has continued on a Sub-Regional Transport Model (SRTM) to examine how these impacts may operate in greater detail, and to allow consideration of a suitable response.

Predicted traffic growth

4.2.2 The Design Manual for Roads and Bridges (DMRB; Highways Agency, 2007) provides guidance on assessing the impact that road projects may have on local air quality. Specific provision is made in relation to sites designated under the Habitats Directive. In this instance the assessment is in relation to existing, as opposed to new roads, however the guidance clarifies that *'where appropriate, the advice may be applied to existing roads'*. DMRB provides a scoping assessment for local air quality and initially requires the identification of roads which are likely to be affected by the proposals. The criteria for defining an affected road are:

- ▶ Road alignment will change by 5 metres or more; or
- ▶ Daily traffic flows will change by 1,000 annual average daily traffic (AADT) or more; or
- ▶ Heavy Duty Vehicle (HDV) flows will change by 200 AADT or more; or
- ▶ Daily average speed will change by 10km/hr or more; or
- ▶ Peak hour speed will change by 20km/hr or more.

- 4.2.3 The scoping assessment then requires that nature conservation sites (e.g. SAC/SPA/Ramsar) within 200m of the road and their characteristics be identified. The guidance states that if none of the roads in the network meet the traffic/alignment criteria (that is, they are not affected roads) or there are no relevant designated sites near the affected roads, then the impact of the scheme can be considered neutral in terms of local air quality and no further work is needed.
- 4.2.4 The Council commissioned specific model runs within the South Hampshire Sub-regional Transport Model (SRTM) to explore potential future growth in traffic associated with the Welborne Plan (the new community to the north of Fareham). The latest of these was prepared in December 2013 (MVA, 2013). The modelled scenarios include background traffic growth in the context of continuing development and prevailing economic conditions in the sub-region, together with the added traffic impacts of developing Welborne, to a future year of 2036. The model outputs thus represent an assessment of in combination effects because the local development plan residential and employment targets of each borough/district in the sub-region are included within the modelled baseline.
- 4.2.5 Within the latest SRTM runs the following items were modelled for AM peak, inter-peak and PM peak periods:
- ▶ Run1: 2010 (re-)validated reference case plus baseline traffic growth projected forward to 2014, 2019, 2016, 2036, plus known developments and committed transport schemes; and
 - ▶ Run8b: As Run1, plus (up to) 6,500 dwellings and (up to) 112,000m² at Welborne, plus Welborne-specific transport interventions.
- 4.2.6 In early 2013 a re-validation exercise was undertaken on the SRTM with a prime objective to improve highway link flow validation on the strategic highway network including on the M27 in the vicinity to the proposed Welborne site. The re-validation work incorporated traffic data provided post original model development (2010) and advancements/ best practice in the coding of specific highway and junction arrangements. The SRTM model represents conditions up to the year 2036. Known developments and committed highway schemes are included within the models' reference case scenarios (2014, 2019, 2026, 2031 and 2036) to provide the most accurate representation of future year conditions. A list of the known developments and committed highway schemes included in the Reference Cases is provided in MVA 2013, Appendix B.
- 4.2.7 Further work was undertaken in December 2013 to extract traffic flow change data on major road links passing within 200m of European sites in the sub-region. The locations of these road links are shown at Figure 4.1. Run 8b outputs are compared against run 1, which is a modelled representation of the changing baseline situation between 2010 and 2036. Predicted traffic flow figures for the AM peak, PM peak and inter-peak hours were converted to Annual Average Daily Traffic (AADT) flow format for use with reference to the DMRB guidance; see Appendix II.
- 4.2.8 For the majority of modelled road links, the predicted traffic flow in 2036 decreases in relation to the modelled 2010 baseline traffic flow following implementation of Welborne development. Just one of the modelled road links shown in Figure 4.1 is predicted to exceed the DMRB threshold. Two-way traffic flow at link 21 (M27 J8-J9 at the Hamble crossing) is predicted

increase by 2,959 AADT vehicle movements. The Solent Maritime SAC is the only European site present within 200m of the M27 at this location.

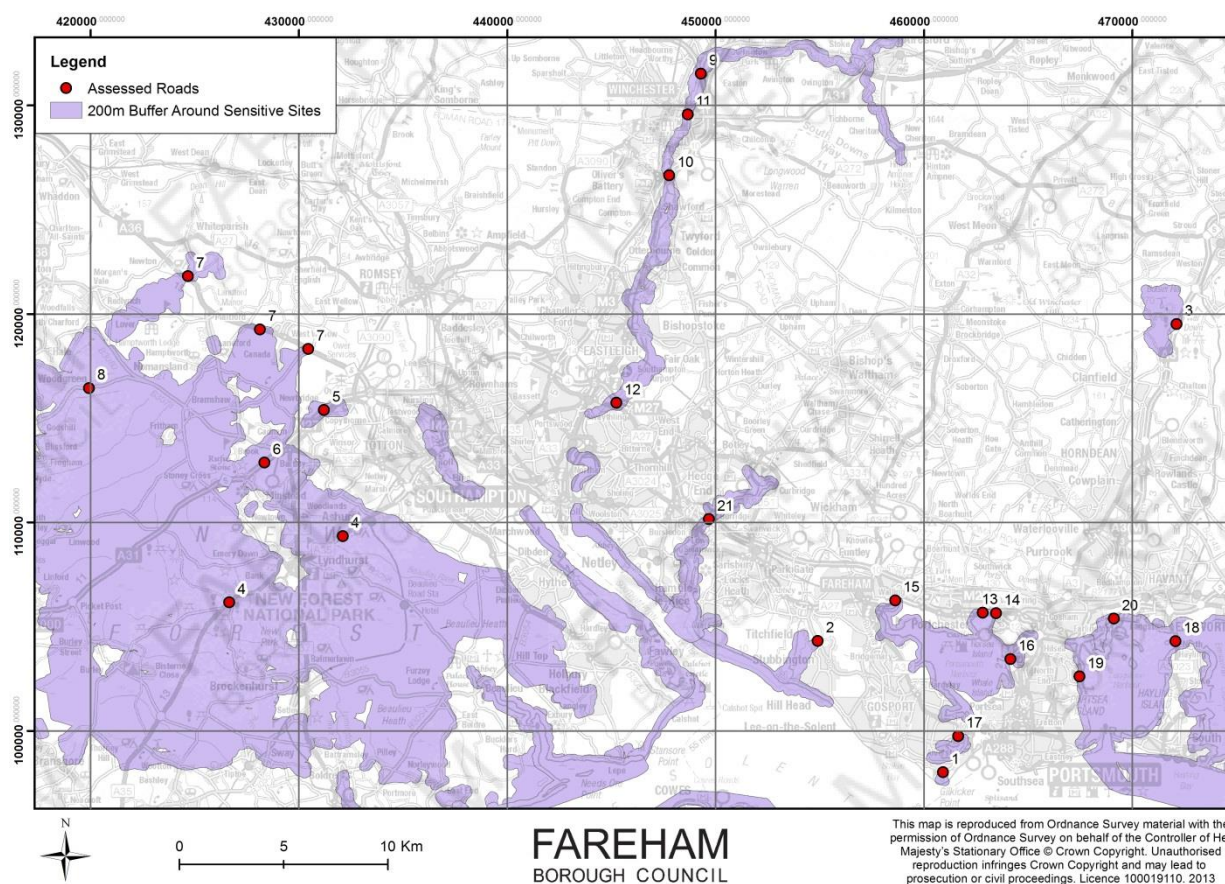


Figure 4.1: Locations of modelled links relative to European sites

4.2.9 A data request was submitted to Hampshire Biodiversity Information Centre to acquire mapped priority habitat extents in the vicinity of the M27 at the Hamble; see Figure 4.2. The map of the Hamble indicates that the majority of habitat in the area is intertidal mudflat with small patches of coastal saltmarsh, reedbed, and lowland mixed deciduous woodland. However, all of these habitats fall outside of the area designated as SAC which is limited to the channel of the River Hamble. It was considered prudent to repeat this analysis for Portsmouth Harbour SPA/Ramsar given the proximity of the site to strategic roads in the area. This shows that the majority of the SPA/Ramsar within 200m of major roads is also intertidal mudflat. Four fragments of coastal saltmarsh, together amounting to 110.6m², are also within the SPA and within 200m of a major road, in this case the A27 Eastern Way south-west of Delme roundabout; see Figure 4.3.

4.2.10 The Air Pollution Information System³ discusses the risk of atmospheric pollution impacts to a group of habitats it notes as coastal saltmarsh, which includes littoral sediment, coastal saltmarsh, intertidal mudflats, seagrass beds, sheltered muddy gravels, peat and clay exposures. It concludes that:

³ APIS website [accessed 3/12/13]: <http://www.apis.ac.uk/node/968>

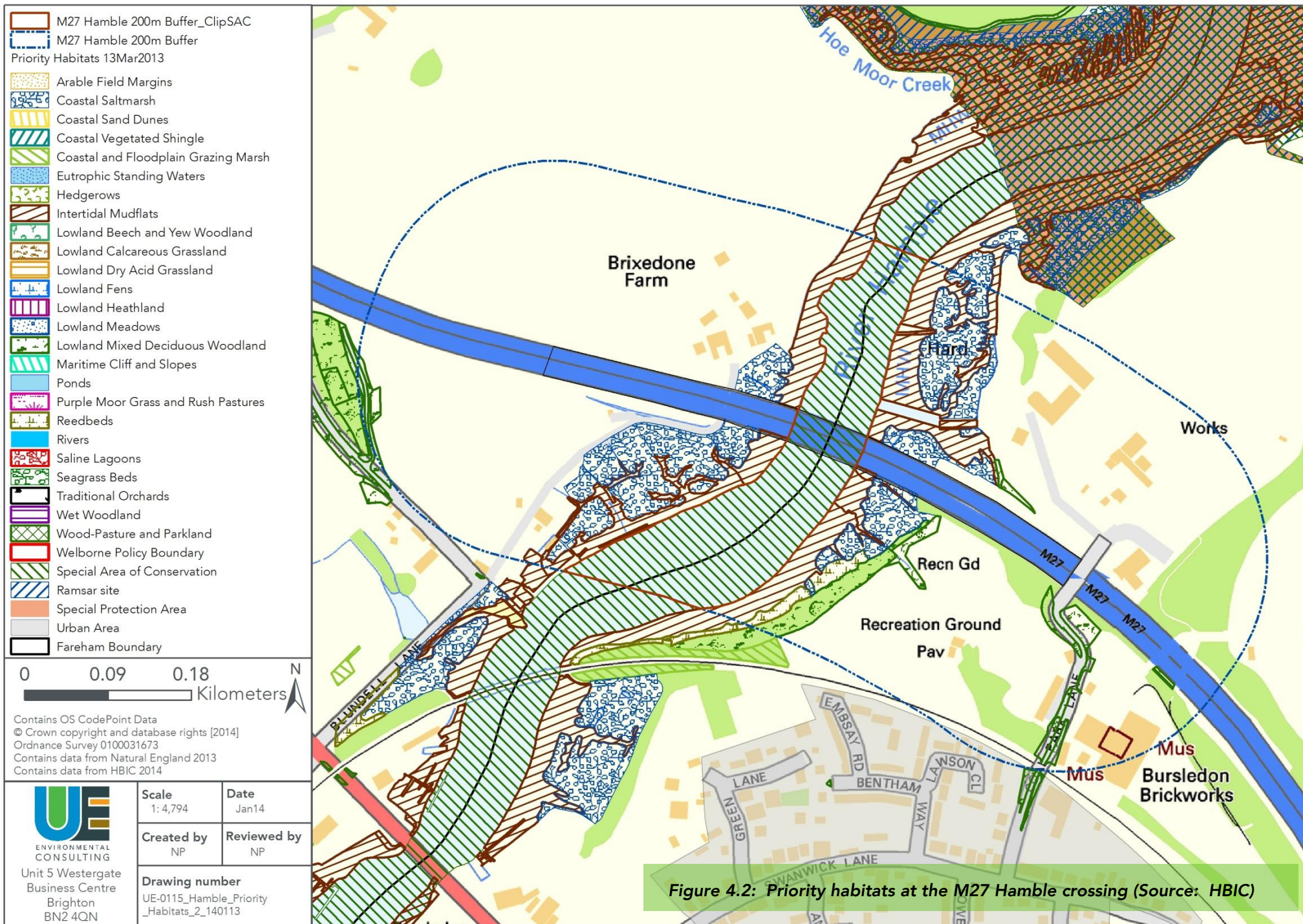


Figure 4.2: Priority habitats at the M27 Hamble crossing (Source: HBIC)

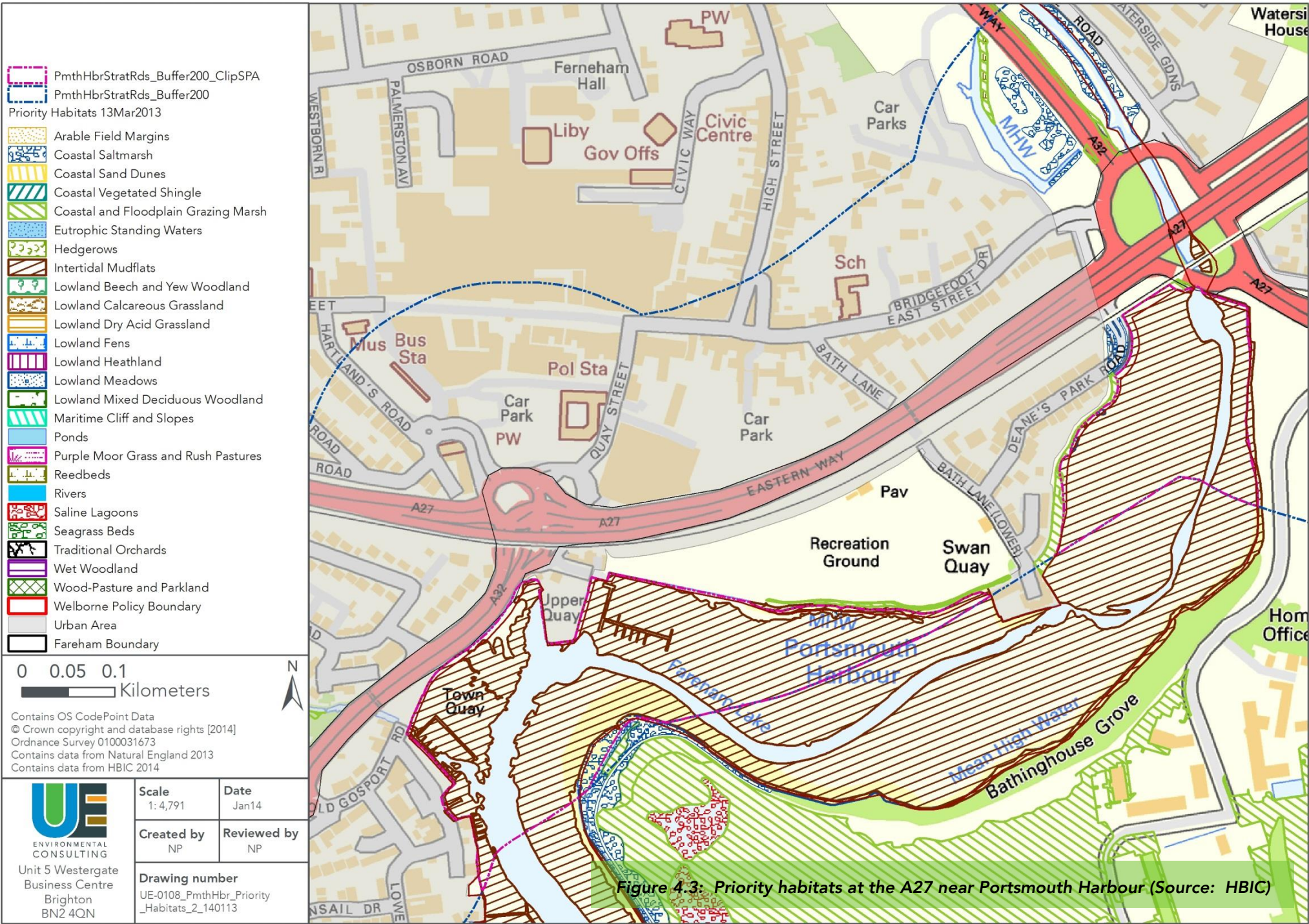


Figure 4.3: Priority habitats at the A27 near Portsmouth Harbour (Source: HBIC)

“There are very few studies of N deposition effects on these systems, but work undertaken in the Netherlands suggest salt marsh vegetation is N limited..., which would make it vulnerable to eutrophication effects from atmospheric N deposition. However, the N addition experiments that have been undertaken have neither used very realistic N doses nor input methods i.e. they have relied on a single large application more representative of agricultural discharge.

“These studies have shown that the age of the marsh will influence the N response. This is because as marshes age i.e. during succession, N availability changes, increases as organic matter that has accumulated in the sediments is released through mineralization. They also demonstrate that N eutrophication will accelerate successional change and the speed at which some forbs decline.

“These systems are typically inter-tidal, ie subject to continual, daily, periodic flooding with saline water. The degree and frequency of flooding and the salinity vary, decline from the coast moving inland up the estuary and similarly species richness increases. They are considered to be among the most productive natural ecosystems because of the continuous flushing with nutrient rich waters. Also vegetation breakdown is quite rapid.

“In the absence of experimental studies of N deposition effects no quantified effects of potential modifiers are available. Overall N deposition is likely to be of low importance for these systems as the inputs are probably significantly below the large nutrient loadings from river and tidal inputs. Recent review by Boorman & Hazelden (2012) suggests that the pioneer low – mid saltmarsh areas are more resilient to N deposition than the mature upper areas. Any effects of N deposition are likely to be found in the tall vegetation of the closed upper marsh communities where interspecific competition is greatest. These more mature areas may also be subject to direct run-off from the surrounding catchment. Biogeochemical cycling of nutrients through microbial activity is quite rapid in this open system and N losses via denitrification may be considerable.

“There may be some localized effects of ammonia from wintering wildfowl, especially large geese flocks. Since P availability affects N responses in this habitat and wildfowl provide an additional source of P and K this factor should be considered. Most likely impacts would be loss of N sensitive species and increases in tall grass and graminoid biomass.”

- 4.2.11 Given the low sensitivity of costal saltmarsh habitats to atmospheric nitrogen inputs, and their location relative to relevant roads and the SAC/SPA/Ramsar boundaries in the Hamble estuary and Portsmouth Harbour, it is concluded that adverse effects on the integrity of the SAC/SPA/Ramsar are unlikely to result from increasing traffic flows at these locations. The impact is screened out of the Appropriate Assessment stage of this HRA. The twice daily washing of mudflats within and adjacent to the SAC, as well as at Portsmouth Harbour SPA/Ramsar, further reduces the likelihood of significant adverse effects on this habitat type, particularly given that the Environment Agency estimates that approximately 64% of nitrogen as a whole comes from background marine sources in Solent marine sites such as Portsmouth Harbour (see section 4.7).

4.3 Disturbance

- 4.3.1 The Core Strategy HRA could not rule out the potential adverse effects from disturbance, resulting from increased recreational activity at the Solent. Since the Core Strategy was Adopted work has continued the Solent Disturbance and Mitigation Project to examine how these impacts operate in greater detail, and to allow consideration of a suitable response.

Solent Disturbance and Mitigation Project

- 4.3.2 The first three phases of the Solent Disturbance and Mitigation (SDMP) Project are now complete. Following the initial desk-study and literature review, the project involved an extensive series of research studies into how waders and wildfowl around the Solent respond different types of disturbance and the degree of visitor pressure at different sections of coastline.
- 4.3.3 The final phase two report (Stillman *et al*, 2012) combines the data and modelling exercises from the earlier research activities to predict impacts on bird survival over the winter within different parts of the Solent. Bird survey fieldwork gave an indication of how birds respond to disturbance (e.g. taking flight, stopping feeding or avoiding disturbed areas) and the distance over which these responses were elicited from different types of human activity. Models of Southampton Water and Chichester Harbour were prepared, within which the relationship between a number of factors was examined: intertidal invertebrate food supply, the exposure and re-covering of this food during the tidal cycle, disturbance from human activities, and the energy requirements and behaviour of birds as they avoid human activity and search for food. Additional scenarios were run inside the Southampton Water model to explore hypothetical situations regarding the available area of intertidal habitats (e.g. to account for sea level rise) and variations in the energy requirements of the birds (such as might be the case during cold winters or particularly high energy expenditure while avoiding disturbance).
- 4.3.4 In the absence of disturbance all wader species modelled in the Southampton Water model were predicted to have 100% survival through the winter. Disturbance resulting from current levels of housing was predicted to reduce the survival of Dunlin, Ringer Plover, Oystercatcher and Curlew to approximately 88%, 89%, 95% and 94% respectively. Anticipated future levels of housing were predicted to further reduce survival rates in Dunlin and Ringed Plover to 85% and 84% respectively.
- 4.3.5 The model provides some evidence that survival rates among some species of waders are being negatively influenced by disturbance, particularly when visitor densities are greater than 30 visitors per hectare of intertidal per day. It also found that visitor numbers are expected to increase (and survival rates to further decrease) as a result of future housing development when considered in combination.
- 4.3.6 The Phase 3 report (Liley & Tyldesley, 2013) considers the available options for avoiding and mitigating impacts to the overwintering bird assemblage of the Solent European sites, in the context of current planning policy and regulation. It outlines a strategy of projects including 'quick wins' and longer term behavioural change initiatives for reducing the overall adverse effect such that planned new developments can be accommodated. It concludes that the

strategy, once implemented, would be sufficient to address the impacts of a multitude of smaller scale residential proposals, but that larger scale schemes and those very close to the designated coast will still require individual project-level HRA and site-specific mitigation. The main aspects of the strategy include:

- ▶ A delivery officer to coordinate implementation of the strategy;
- ▶ A team of wardens or rangers to provide on-site presence and talk to visitors;
- ▶ A coastal dog project to provide information and promote suitable sites for dog walking;
- ▶ A review of parking and access points to provide a baseline from which future changes (additional/reduced parking in certain locations) can be planned and monitored;
- ▶ A review of watersports zones and access;
- ▶ Codes of Conduct packs relating to the above;
- ▶ A series of site-specific projects such as path re-routing, path creation, dedicated areas for dogs or watersports, enhanced facilities for watersports, changes to car parking and so on;
- ▶ Watersports permits and enforcement; and
- ▶ SANGs, green infrastructure projects and alternative roost sites.

4.3.7 The site-specific projects which are discussed for coastal sections within Fareham borough are presented below, but the report points out that these should be informed by monitoring of the success of, and feedback from the initiatives defined above:

- ▶ 29: Bursledon to Hollyhill Woodland Park: Car Park used by watersport users; Promote the circular walk from Holy Hill Woodland with signs and maps also links with public foot paths to Warsash;
- ▶ 30: Hollyhill Woodland Park to Warsash: Possibility to prevent dogs entering the water from the path across the shingle by wardening/signage. Potential for artificial roosts;
- ▶ 31: Warsash to Newton Farm: none;
- ▶ 32: Newton Farm to Solent Breezes Caravan Site: Educate walkers, dog walkers, cyclists; Warden/Monitoring - Shingle spit signs during nesting season often ignored by walkers and people fishing;
- ▶ 33: Solent Breezes Caravan Site to Hill Head: Strong need for engagement with kitesurfers and jetskiers - launch location for jet skiers; Farmland to north of section that could provide additional open space owned by HCC;
- ▶ 34: Hill Head to Lee-on-the-Solent: Strong need for engagement with kitesurfers and jetskiers - launch location for jet skiers; Educate walkers and dog walkers and consider dog management measures (the beach at Hill Head already has dog restrictions in the summer months); Potential for the proposed Alver Valley Country Park to deflect pressure from dog walkers;
- ▶ 35: Lee-on-the-Solent to Car Park near Angling Club: Educate walkers and dog walkers; Links with Alver Valley Country Park (via HCC owned site Browndown Coastal Area) has

potential to create a coast and countryside attraction away from an SPA stretch of coastline

- ▶ 36: Car Park near Angling Club to Browndown: MOD owned so less access - wildlife trust and MOD managing together;
- ▶ 43: Fort Elson to Fleetlands: Habitat restoration – Brent goose site stops suddenly which could be due to change in habitat; alternative roost site;
- ▶ 44: Fleetlands to s. side of Golf Course: Screening of coastal path; Byelaw for bait digging; Cluster pontoons - make this area free from disturbance for birds; Habitat creation; Screening coastal defences; Circular walk around Cams Hall;
- ▶ 45: Golf Course to Boat Yard: Wardening;
- ▶ 46: Boat Yard to Porchester East: Wardening; Pewitt Island code of conduct to reduce disturbance;
- ▶ 47: Porchester East to M275: Screening for potential new development; Port Solent access greenspace mitigation, especially through new development; Possible need for new car park as current car park often full; Possible dog control order in winter.

4.3.8 In its response to the Phase III report, Natural England discusses a three-stage approach to defining a full package of avoidance and mitigation measures for disturbance impacts, and concludes that funding contributions from new residential development proposals will be required from the outset while interim and long-term funding arrangements are being finalised. Assuming that is the case, it concludes that disturbance impacts on the Solent European sites' overwintering bird interest should not be a reason for refusing planning permission for residential developments which are making a funding contribution to avoidance and mitigation.

4.3.9 Within this HRA it is assumed that residential proposals will be required to make a funding contribution towards the avoidance and mitigation measures outlined in the SDMP Phase III report, as outlined by the justification text for policy DSP15 (Recreational Disturbance on the Solent Special Protection Areas). They do not therefore require assessment in relation to disturbance impacts, unless their scale or proximity to an SPA/Ramsar is such that site-specific disturbance impacts cannot be ruled out. At the screening stage, a number of proposed residential allocations were assessed as being of sufficient size/proximity to generate site-specific disturbance impacts and have since been deleted from the plan:

- ▶ Gosport Road Bus Depot;
- ▶ Seaeye House and adjoining commercial properties, Lower Quay Road; and
- ▶ Windmill Grove.

4.4 Displacement from Wind Turbines

4.4.1 Policy DSP56 is a criteria-based policy which defines how renewable energy proposals will be determined. It does not allocate any sites for renewable energy proposals and its list of criteria for determining planning applications include the need to avoid significant negative impacts on ecology, including the habitats or flight paths of birds and bats, and the designated biodiversity

sites, species and ancient woodland in and around the borough. It is screened out of the Appropriate Assessment stage of this HRA.

4.5 Habitat Loss/Degradation

4.5.1 The potential for actual or functional loss of habitat was considered during the screening assessment of the Development Sites and Policies for likely significant effects (Appendix I). Impacts can be subdivided into impacts during the construction phase, and operational impacts. These are further defined in the following sections.

Construction impacts

- ▶ Habitat loss due to the location/footprint of development;
- ▶ Construction noise;
- ▶ Construction activity; and
- ▶ Aquatic/atmospheric pollution during remediation, demolition or construction.

Operation impacts

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

Construction phase

Habitat loss

4.5.2 Impacts from development which, due to its location and size (i.e. footprint), changes the extent or distribution of qualifying habitats within a European site, or the habitats of qualifying features.

4.5.3 This includes development which would result in the loss of habitats which support the ecological functions of a European site, such as those classified as being Important for waders or Dark-bellied Brent Goose⁴.

Construction noise

4.5.4 Impacts from development whose construction processes emit a level of noise which could change the distribution of qualifying species within a European site or important supporting area. This could be due to the proximity of the allocation site to the European site / supporting area, or the absence of existing topographic features, structures or vegetation which may serve to sufficiently attenuate the noise, or a combination of both.

4.5.5 Very loud (defined as greater than 70dB) and percussive noises have the potential to disturb birds, increasing time spent alert and in flight, reducing the time available to feed. Peak levels

⁴ These sites are identified in the *Solent Waders and Brent Goose Strategy* (King, 2010).

of sound are most likely to occur from the impact of pneumatic drilling and concrete breaking during site preparation and piling during construction. These activities can have an impact on bird species at a distance of up to 300m. This figure has been used as a worst-case scenario and is based on published research and studies by the Environment Agency for the Humber Estuary Tidal Defences scheme, the Environmental Statement for which states that: “*Sudden noise in the region of 80dB appears to elicit a flight response in waders to 250m from the source, with levels below this to approximately 70dB causing flight or anxiety behaviour in some species.*” (Environmental Statement for the Humber Estuary Tidal Defences: Urgent works, Paull to Kilnsea and Whitton to Pyewipe, cited in Biodiversity by Design, 2008, p.79).

Construction activity

- 4.5.6 Impacts from development whose construction processes involve a heightened level of activity which could change the distribution of qualifying species within a European site or important supporting area. This could be due to the proximity of the allocation site to the European site / supporting area, or the absence of existing topographic features, structures or vegetation which may serve to sufficiently screen the activity, or a combination of both.
- 4.5.7 Stillman *et al* (2012; Table 6.1, p.61) identify median distances for Brent Goose and some waders within which the birds commonly respond to human activity, thereby causing disturbance. This response distance, which is around 80-100m for most species analysed in the Solent area, provides some context for sites which are particularly close to a European site or Important wader or Brent goose site.

Pollution

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

Operational phase

Disturbance

- 4.5.10 Development (of any type) which results in heightened activity or increased operational noise within the development site, thereby causing changes in the distribution of qualifying species within a European site or important supporting area due to its proximity and/or the absence of existing topographic features, structures or vegetation which may serve to sufficiently screen the activity or attenuate the noise. The response distance of around 80-100m referred to above provides some context for sites which are particularly close to a European site or Important wader or Brent goose site.

- 4.5.11 Residential development within around 500m which changes the distribution of a qualifying species within an Important site for waders or Brent geese, by increasing recreational or other activities within that area. Important sites for waders or Brent geese may be subject to affects from multiple allocations, which requires specific consideration (see section 5.6).

Displacement

- 4.5.12 Development (of any type) which changes the distribution of a qualifying species within a European site or important supporting area by reducing view lines available to birds using the habitats within the site.
- 4.5.13 Several bird species can be displaced as a result of their specific line-of-sight requirements while foraging or roosting, whereby obstruction to view lines (necessary for early warning of perceived predation risk) will render areas of habitat unsuitable for use by birds. For example, terns and gulls prefer open nest sites and unrestricted views while roosting and feeding. Waders, including Ringed Plover, Black-tailed and Bar-tailed Godwits, Redshank, Curlew, Turnstone, Dunlin and Sanderling, require views of greater than 200m when roosting or feeding. Brent Goose requires views of at least 500m (English Nature, 2001) in order to feel sufficiently free of predation risk to feed. Additionally, King (2010) highlights a number of factors which significantly correlate with the suitability of sites for waders and Brent geese, and buildings within 500m have a negative effect on the suitability of sites for both waders and Brent geese.

4.6 Water Abstraction

- 4.6.1 Fareham borough falls within the supply zones of both Portsmouth Water and Southern Water. Most Portsmouth Water abstractions are linked to river flows, either directly at the Itchen via Gaters Mill, or indirectly through groundwater abstractions affecting the Hamble, Meon, Wallington, Ems and Lavant which have all (except for the Meon) been subject to Water Framework Directive (WFD) investigations during the AMP5 period (2010 – 2015). Southern Water draws its supply from both surface and groundwater sources. Surface water is drawn from abstractions at Testwood on the River Test, and Otterbourne on the Itchen. Groundwater is drawn from the Chalk aquifer.
- 4.6.2 The Environment Agency’s Review of Consents (RoC) under the Habitats Directive, completed in late 2007, determined sustainable levels of water abstraction and waste water discharge that can be met without adverse effects on the ecological integrity of European sites, including the marine habitats of the Solent system and freshwater habitats of its rivers. The chalk Rivers Test and Itchen, fed by groundwater, supply substantial quantities of potable water, and abstractions from these systems alter the surface water regime, in turn impacting on important ecological receptors. There is a further freshwater requirement in maintaining ecological integrity of the intertidal zones of coastal sites.
- 4.6.3 In response to the RoC findings, the water companies accepted ‘Sustainability Reductions’ changes to their licenced abstractions from the River Itchen SAC to protect European sites. These reductions are due to commence in 2015 and be introduced progressively over the

following five years in accordance with a Memorandum of Understanding between Portsmouth Water, Southern Water, the Environment Agency and Ofwat.

4.6.4 In its Final Draft Water Resource Management Plan (WRMP) for 2014 Portsmouth Water has concluded that the Havant Thicket reservoir is no longer required. Revisions to demand forecasting indicate that, whilst the Company’s supply area will see an increase in both properties and population over the planning period, the growth is not as high as estimated in the WRMP. As a result of this and other factors, Portsmouth Water calculates that the Baseline Supply/Demand Balance under Average Conditions offers a surplus of supply over demand throughout the planning period. A surplus also exists for the Baseline Peak Week (see Figure 4.4) and the Baseline Minimum Deployable Output scenarios.

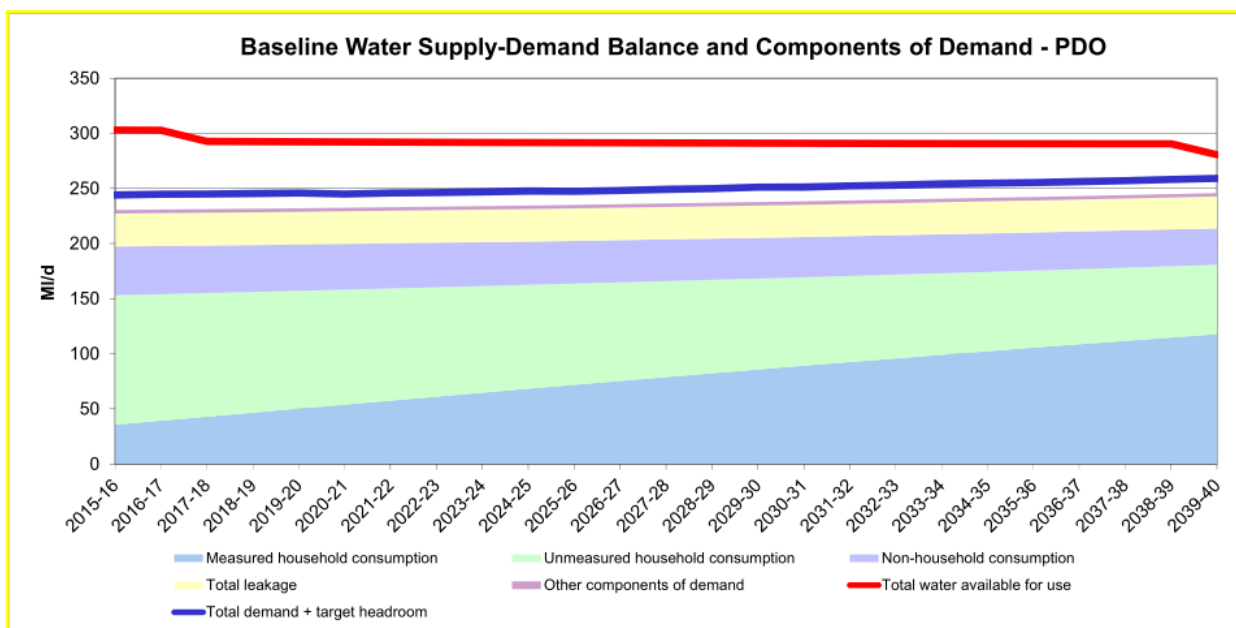


Figure 4.4: Portsmouth Waters’ Peak Week Water Supply-Demand Balance (Source: Portsmouth Water, 2013)

4.6.5 As Portsmouth Water’s baseline supply-demand balance does not forecast a deficit over the planning period for Average, Peak and Minimum Deployable Output scenarios, the company is not seeking to promote any options for new supply or demand management. Its existing abstractions will continue within agreed parameters that were designed to protect the integrity of European sites in the region.

4.6.6 The situation with Southern Water is more complex because, in order to maintain sufficient water supply whilst reducing abstractions from the River Itchen, it proposes to increase water abstractions from the River Test, which is a national protected Site of Special Scientific Interest. However, in the Statement of Response (Southern Water, November 2013) to its consultation on a Draft Water Resources Management Plan for 2015-2040, it states the following (pp.42-49):

“The potential environmental effect of abstraction on these rivers has been reviewed and changes are being implemented to our existing abstraction licences on the River Itchen by the Environment Agency in order to reduce the potential risk to the environment under low flows. Our abstraction licence on the River Test has also been subject of a review, and we are now

proposing to voluntarily reduce the quantities that we can abstract under the current licence. These changes will increase the protection afforded to flows and river quality of Hampshire's chalk streams...

"The effect of the notified Sustainability Reductions reduces our available supplies to such a significant extent under that defined scenario, that we cannot meet our legal obligations to maintain supplies to customers. As a result, the Water Industry Act and WRMP Regulations require us to undertake demand management measures and to promote, secure licences/consents, and build and operate new water resource schemes to maintain the supply demand balance. This is what our strategy for the Western Area has to achieve.

"There is also a significant timing factor that must be met as the Environment Agency has notified us that the Sustainability Reductions are to be implemented by 2015. The Environment Agency has confirmed that it is a legislative requirement to meet this date for implementation.

"Since signing the Memorandum of Understanding with the Environment Agency and Portsmouth Water (whose abstractions are also affected by the Sustainability Reductions)..., we have undertaken various actions to enable the implementation of Sustainability Reductions. This includes our programme of metering of domestic customers, being implemented between 2010 and 2015, and various studies and investigations of water resource options in Hampshire South.

"We have been working closely with the Environment Agency, Natural England and other stakeholders to promote applications for necessary consents to implement new water resource development that would allow the 2015 date to be met. However, the nature of the sensitive environments of the Rivers Test and Itchen, and the complexity of the environmental issues that must be addressed before those consents can be issued, means that this work is still ongoing at the time of this Statement of Response. We are continuing to work with the EA and NE in anticipation that applications for consents could be made during 2014.

"It will therefore not now be possible for the full extent of the Sustainability Reductions to be implemented by 2015, and we are discussing with the Environment Agency how a phased implementation can be delivered instead. This will require the Environment Agency to agree a change to the legislative date of 2015 that it has previously notified to us. However, the Environment Agency has made clear to us that if not by 2015, the Sustainability Reductions must be fully implemented as soon as possible. This is a key driver for the Western Area strategy and Southern Water is committed to implementing these sustainability reductions as quickly as it can, within the statutory duties imposed on the company.

"The combination of the requirement to deliver the quantity of water to replace that would be lost under the Sustainability Reductions, to the fastest possible timescale, is a principal driver of our strategy for the Western Area which includes schemes that will enable us to do this. As a fundamental requirement of this Strategy, we have to urgently promote, secure consent for, and build and operate three major schemes - the Testwood Scheme, the Augmentation Scheme (J03a), and the Portsmouth Water Transfer Scheme in the short term, together with other smaller scale options, and a longer term desalination plant...

“These 3 major schemes were included in the DWRMP and remain in the Revised DWRMP, but with important amendments as explained in the individual sections below [refer to Appendix III]. The Revised DWRMP also now includes schemes to improve water efficiency and reduce demand for water amongst both domestic and business customers.

“We will build and operate its 3 major schemes on a conjunctive basis – this means that we will not build and operate them in isolation, rather they will operate and balance the existing and new sources of water in combination, in order to provide a secure supply to customers under projected environmental conditions...

“We recognise that there are alternative strategies that might achieve the Sustainability Reductions over a longer timescale than our strategy does, however the Environment Agency’s stated legislative requirements do not allow us to adopt such an approach. Those alternative strategies could involve a different phased implementation of schemes, and even alternative schemes being promoted. We have explored these alternatives in our Revised DWRMP document, clearly identifying alternative strategies that could be adopted to bring the supply and demand into balance.

“We consider that the Western Area Strategy identified in the Revised DWRMP is the most appropriate strategy for meeting the requirements of the Sustainability Reductions, and the requirements of the Habitats Regulations, Water Industry Act and WRMP Regulations.”

4.6.7 In its Revised Draft Water Resources Management Plan for the period it evaluates the Dry Year Critical Period planning scenario (DYCP), also known as the Peak-period Deployable Output (PDO) for the Hampshire South water resource zone. It concludes that with the three major schemes for the zone being implemented, together with a phased introduction of the Sustainability Reductions, there is sufficient water available for use in peak demand conditions throughout the plan period; see Figure 4.5.

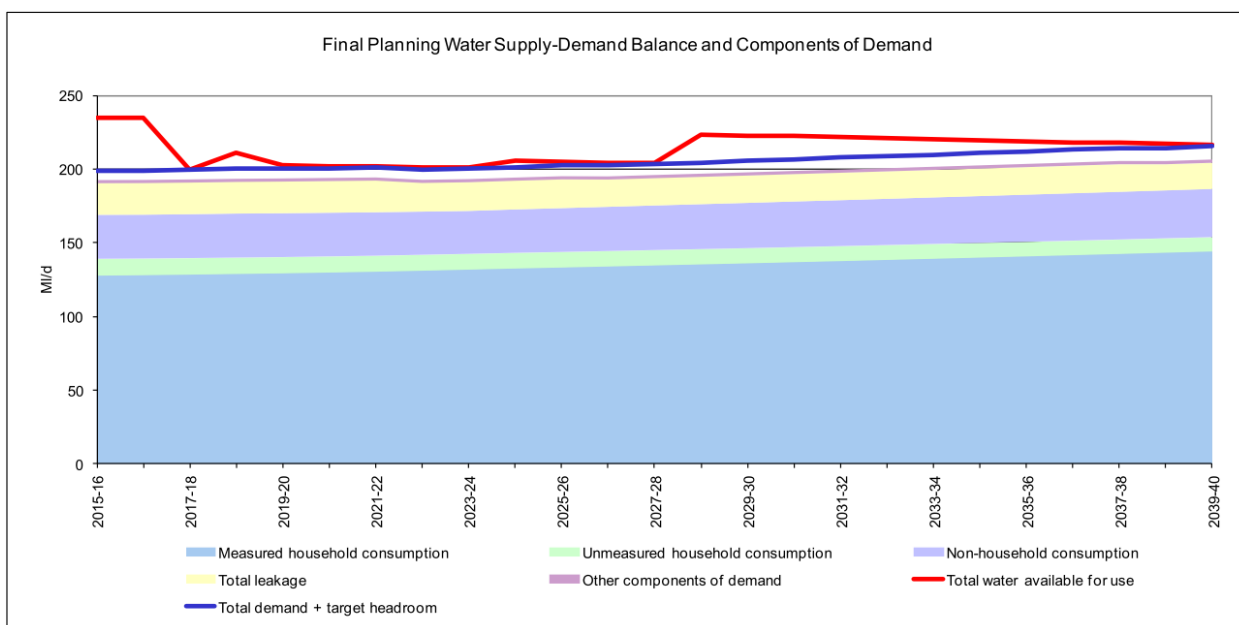


Figure 4.5: Hampshire South Final Planning supply demand balance – DYCP

4.6.8 The impacts of water supply and abstraction have been assessed by the Environment Agency as part of its RoC, and water companies either have or are adjusting their resource planning to ensure Sustainability Reductions can be delivered.

4.6.9 The impact pathway is screened out of the Appropriate Assessment stage of this HRA.

4.7 Wastewater Discharge

4.7.1 The ability of wastewater treatment works (WTW) to receive foul water is limited both by conveyance infrastructure capacity and technological capability to treat waste water to the quality standard required for safe discharge into aquatic and marine environments. Nutrient enrichment and in particular nitrogen (N) arising from wastewater discharges has been implicated in the development of dense macroalgal mats occurring in the intertidal zone, which reduces dissolved oxygen content and impacts on food availability. The major sources of nitrogen to the Solent European marine sites are from:

- ▶ Coastal background seawater from the English Channel;
- ▶ Direct rivers and streams discharging into the sites;
- ▶ Indirect rivers and streams discharging elsewhere in the Solent;
- ▶ Effluent discharges permitted by the EA.

4.7.2 The Environment Agency states that nitrogen is the most important constraint affecting WTWs in South Hampshire which discharge into the marine environment. Discharge consent limits are set by the Environment Agency, address both volume and pollutant load, and have been adjusted under the Review of Consents process to avoid adverse effects on European sites including Solent and Southampton Water SPA/Ramsar and Portsmouth Harbour SPA/Ramsar.

4.7.3 Environmental capacity relates to the nature of the receiving water and its ability to accept the biological, solids, nutrient and metal loads contained within WTW effluents. Effluent discharges are strictly regulated and acceptable loads are determined and consented by the Environment Agency. For all parameters monitored, the allowable discharge load is calculated and concentration limits set as a function of 'dry weather flow' (DWF). Hence effluent outflows that do not exceed their DWF consents can be taken as having no adverse effect on the ecological integrity of European sites. Taking into account the EA's no deterioration policy, the consented N concentration of Peel Common WWTW's effluent outfall is understood to be 9.74mg/l. This is within the 9-10mg/l N concentration that the Integrated Water Management Strategy for South Hampshire (Atkins, 2009) expected could reasonably be achievable.

4.7.4 Natural England⁵ recently met the Environment Agency (EA) to discuss water quality issues in Portsmouth Harbour and the wider Solent, and EA has shared preliminary results of investigations it has undertaken into the source of nutrients and macroalgal density. EA's preliminary results indicate that approximately 64% of nitrogen in Portsmouth Harbour as a

⁵ Letter dated 9 December 2013 to Chris Payne, Head of Planning Policy, Gosport Borough Council, from Charles Routh, Lead Adviser, Winchester Land Use Operations Team, Natural England

whole comes from background marine sources, and 30% from rivers and diffuse sources. Only 6% is estimated to come from sewage treatment works within and outside of the harbour.

- 4.7.5 EA confirmed that macroalgal density across Portsmouth Harbour as a whole is below or close to targets for achieving favourable conservation status and good ecological potential under the Water Framework Directive. However, there are some parts of the harbour (for example in the River Wallington arm) where dense algal mats remain, and where reducing the impact and meeting targets will be challenging. In addition other related targets such as the extent of algal mats are not being met. However, it is believed that improvements in these measures will be achieved in the long term as a result of continued action to tackle pollution sources including planned (2015) improvements in sewage treatment works which have a small but nonetheless important influence on water quality of Portsmouth Harbour.
- 4.7.6 Action to reduce nutrient inputs to the Solent, including from diffuse sources, is ongoing, and EA's investigations will help to target effort in the right places. The 2015 River Basin Management Plan will chart the path to good ecological potential, which includes restoring the European designated sites to favourable conservation status. In light of this, and the relatively small contribution that sewage treatment works make to total nitrogen loads in Portsmouth Harbour, Natural England's view is that projected household growth within the existing sewage discharge licences will not compromise the actions which are being taken forward to reduce nitrogen loads in Portsmouth Harbour and the Solent.
- 4.7.7 Southern Water is the water company with responsibility for wastewater treatment in South Hampshire. Fareham borough falls within the catchment area of Southern Water's Peel Common WTW near Stubbington, which has a long sea outfall to the Solent. The evidence suggests that sufficient capacity for waste water treatment is likely to exist at Peel Common works, despite the constraints placed on the works in relation to both volume and nitrogen loading. But it is accepted that there is a limit to the headroom available at Peel Common and, while other developments in the sub-region may seek to connect to the works, the available capacity will reduce over time.
- 4.7.8 The Environment Agency⁶ has recently re-confirmed that the Review of Consents work carried out for Peel Common WTW took into account the full scale of residential growth planned for in the South East Plan (80,000 dwellings in South Hampshire). Around a third of the population growth associated with this was expected to come forward within Peel Common's catchment area (Atkins, 2009), including the two Strategic Development Areas at Hedge End and Welborne. Following revocation of the South East Plan, Hedge End is no longer being pursued and meanwhile the scale of residential growth at Welborne has reduced from up to 10,000 to around 6,000 dwellings. The RoC concluded that further measures would be required alongside the licenced discharge consent changes, to protect and restore European sites in Portsmouth Harbour and the Solent, as described by Natural England above.
- 4.7.9 Hence proposed growth in the Peel Common catchment area within these limits will be acceptable so long as Southern Water confirms that sufficient capacity is available within its consent. Southern Water has collected certified flow measurement data at Peel Common

⁶ Email dated 20 December 2013 from Laura Lax, Environment Agency, Solent and South Downs Team.

WWTW since 2008, and has reassessed the capacity available in the environmental permit. There is now evidence to demonstrate that nitrogen removal can be achieved to lower concentrations than previously estimated (i.e. lower than 9-10mg/l). On this basis, and assuming that the Agency would apply the no deterioration principle in the event that a new or amended permit is required, Southern Water considers that the environmental constraint identified in the PUSH IWMS (Atkins, 2009) at Peel Common has been removed.

- 4.7.10 The impact pathway is screened out of the Appropriate Assessment stage of this HRA.

5 Impact Assessment

5.1 Introduction

5.1.1 The following sections assess the proposed site allocations for construction and operation phase impacts (as defined in section 4.3) in relation to each of the European sites screened into the appropriate assessment (Table 3.2).

5.2 Solent Maritime SAC

Construction phase

5.2.1 None of the proposed site allocations are within the SAC. No impacts to the SAC from habitat loss are predicted. However, proposals under Policy DSP54 New Moorings could take place within the SAC even though the policy does not require this. Adverse effects are possible during the development of such proposals, unless mitigation is applied.

5.2.2 The qualifying habitats of the SAC are not at risk of impacts from construction noise and activity.

5.2.3 Two proposed residential allocations are within 50m of a tributary which drains into Hook Lake, part of the SAC. Adverse effects are possible during development of these sites, resulting from aquatic pollution during remediation, demolition or construction, unless mitigation is applied:

- ▶ Residential allocation H8: Land off Church Road, Warsash. The site is potentially contaminated and will require investigation and possibly remediation prior to development; and
- ▶ Residential allocation H7: Land at Fleet End Road, Warsash. The site is potentially contaminated and will require investigation and possibly remediation prior to development.

Operation phase

5.2.4 The qualifying habitats of the SAC are not at risk of impacts from operational disturbance or displacement.

5.3 Portsmouth Harbour SPA/Ramsar

Construction phase

5.3.1 None of the proposed site allocations are within the SPA/Ramsar. No impacts to the SPA/Ramsar from habitat loss are predicted. However, proposals under Policy DSP54 New Moorings could take place within the SPA/Ramsar even though the policy does not require this.

Adverse effects are possible during the development of such proposals, unless mitigation is applied.

5.3.2 Six proposed allocations are within 300m of the SPA/Ramsar and could potentially change the distribution of qualifying species within the SPA/Ramsar as a result of construction noise:

- ▶ Employment allocation E5: The Walled Garden, Cams Hall is c.180m from the SPA/Ramsar. The site is within relatively open land, situated within the Cams Hall Estate and golf club business park. Adverse effects are possible unless mitigation is applied.
- ▶ Extant residential permission: 45-47 West Street Fareham is c.280m from the SPA/Ramsar. It is a small site within town centre, separated from the SPA by the busy A27 and built-up areas. No adverse effect from construction noise is likely.
- ▶ Residential allocation H4: Land between 335 and 357 Gosport Road, Fareham is c.100m from the SPA/Ramsar. It is a small site separated from the SPA by the A32 and trade warehouses. These existing warehouses adjacent to SPA may have current noise impacts, but nonetheless adverse effects are possible unless mitigation is applied.
- ▶ Residential allocation H15: Land to rear of Red Lion, East St and Bath Lane is c.150m from the SPA/Ramsar. A large site at the edge of the town centre, it is separated from the SPA by the busy A27 and railway line, but has a relatively open aspect towards the waterfront. Adverse effects are possible unless mitigation is applied.
- ▶ Town centre allocation TC3: Market Quay is c.120m from the SPA/Ramsar. A large site within the town centre, it is separated from SPA by the busy A27 and railway bridge, but has a relatively open aspect towards the waterfront. Adverse effects are possible unless mitigation is applied.
- ▶ Town centre allocation TC2: Fareham Shopping Centre is c.290m from the SPA/Ramsar. A large site within town centre, it is separated from the SPA by the busy A27 and screened from it by a range of built structures. No adverse effect from construction noise is likely.

5.3.3 None of the proposed site allocations are within 100m of the SPA/Ramsar. No impacts to the SPA/Ramsar from construction activity are predicted.

5.3.4 Two proposed allocations are close to a tributary which drains into the SPA/Ramsar. Adverse effects are possible during development of these sites, resulting from aquatic pollution during remediation, demolition or construction, unless mitigation is applied:

- ▶ Residential allocation H16: Fareham Station West. The site is potentially contaminated and will require investigation and possibly remediation prior to development; and
- ▶ Town centre allocation TC4: Fareham Station East. The site is potentially contaminated and will require investigation and possibly remediation prior to development.

Operation phase

5.3.5 None of the proposed site allocations are within 100m of the SPA/Ramsar. No impacts to the SPA/Ramsar from operational activity are predicted.

5.3.6 Four proposed allocations are within 200m of the SPA/Ramsar, and ten are within 500m, and could potentially change the distribution of qualifying species within the SPA/Ramsar or important supporting areas as a result of displacement (line-of-sight requirements):

Sites within 200m

- ▶ Employment allocation E5: The Walled Garden, Cams Hall is c.180m from the SPA/Ramsar. The site is within relatively open land, situated within the Cams Hall Estate and golf club business park. Given the scale of development (c.1,840m² B1), buildings to its north and distance from SPA, no adverse effect from displacement is likely.
- ▶ Residential allocation H4: Land between 335 and 357 Gosport Road is c.100m from the SPA/Ramsar. It is a small site separated from the SPA by the A32 and trade warehouses, and expected to yield around 10 dwellings. Given the scale of development, distance from SPA, and presence of intervening structures, no adverse effect from displacement is likely.
- ▶ Town centre allocation H15: Land to rear of Red Lion, East St and Bath Lane is c.150m from the SPA/Ramsar and expected to yield around 50-55 dwellings. A large site at the edge of the town centre, it is separated from the SPA by the busy A27 and railway line, but has a relatively open aspect. Adverse effects are possible unless mitigation is applied.
- ▶ Town centre allocation TC3: Market Quay is c.120m from the SPA/Ramsar. A large site within the town centre proposed for mixed-use development including around 60 dwellings, it is separated from SPA by the busy A27 and railway bridge, but nonetheless adverse effects are possible unless mitigation is applied.

Additional sites within 500m

- ▶ Extant residential permission: 157 White Hart Lane and land to rear is a small site 410m from the SPA/Ramsar in Portchester town centre, and expected to yield around 5 dwellings. Given the scale of development, distance from SPA, and presence of intervening structures, no adverse effect from displacement is likely.
- ▶ Extant residential permission: 45-47 West Street Fareham is a small site c.290m from the SPA/Ramsar in the heart of Fareham town centre, and expected to yield around 9 dwellings. Given the scale of development, distance from SPA, and presence of intervening structures, no adverse effect from displacement is likely.
- ▶ Extant residential permission: Catholic Church of Our Lady, Porchester is a small site c.330m from the SPA/Ramsar, and expected to yield around 7 dwellings. Given the scale of development, distance from SPA, and presence of intervening structures, no adverse effect from displacement is likely.
- ▶ Extant residential permission: Land south of Palmerstone Avenue, Fareham, is a small site c.410m from the SPA/Ramsar in the heart of Fareham town centre, and expected to yield around 16 dwellings. Given the scale of development, distance from SPA, and presence of intervening structures, no adverse effect from displacement is likely.
- ▶ Town centre allocation TC1: Civic Area is c.410m from the SPA/Ramsar. A large site within the town centre proposed for mixed-use development including around 90

dwelling, it is separated from SPA by the busy A27 and railway bridge, and a range of intervening structures. No adverse effect from displacement is likely.

- ▶ Town centre allocation TC2: Fareham Shopping Centre is c.290m from the SPA/Ramsar. A large site within the town centre proposed for mixed-use development, it is separated from SPA by the busy A27 and railway bridge, and a range of intervening structures. No adverse effect from displacement is likely.

5.4 Solent and Southampton Water SPA/Ramsar

Construction phase

- 5.4.1 None of the proposed site allocations are within the SPA/Ramsar. No impacts to the SPA/Ramsar from habitat loss are predicted. However, proposals under Policy DSP54 could take place within the SAC even though the policy does not require this. Adverse effects are possible during the development of such proposals, unless mitigation is applied.
- 5.4.2 Two proposed allocations are within 300m of the SPA/Ramsar and could potentially change the distribution of qualifying species within the SPA/Ramsar or important supporting areas as a result of construction noise:
- ▶ Residential allocation H12: Land at Stubbington Lane, Stubbington is c.280m from the SPA/Ramsar. It is a small undeveloped site separated from the SPA by residential properties with large gardens. No adverse effect from construction noise is likely.
 - ▶ Residential allocation H13: Land at Sea Lane, Stubbington is c.180m from the SPA/Ramsar. It is a small undeveloped site, separated from the SPA by residential properties with large gardens. No adverse effect from construction noise is likely.
- 5.4.3 None of the proposed site allocations are within 100m of the SPA/Ramsar. No impacts to the SPA/Ramsar from construction activity are predicted.
- 5.4.4 Four proposed allocations are within 50m of a tributary which drains into the SPA/Ramsar. Adverse effects are possible during development of these sites, resulting from aquatic pollution during remediation, demolition or construction, unless mitigation is applied:
- ▶ Employment allocation E3: Kites Croft is c.51m from a tributary which drains into the SPA near Brownwich Farm;
 - ▶ Residential allocation H7: Land at Fleet End Road, Warsash is c.50m from a tributary which drains into Hook Lake, part of the SPA. The site is potentially contaminated and will require investigation and possibly remediation prior to development;
 - ▶ Residential allocation H8: Land off Church Road, Warsash is adjacent to a tributary which drains into Hook Lake, part of the SPA. The site is potentially contaminated and will require investigation and possibly remediation prior to development; and
 - ▶ Residential allocation H9: Land r/o 347-411 Hunts Pond Road is adjacent to a tributary which drains into the SPA near Brownwich Farm. The site is potentially contaminated and will require investigation and possibly remediation prior to development.

Operation phase

- 5.4.5 None of the proposed site allocations are within 100m of the SPA/Ramsar. No impacts to the SPA/Ramsar from operational activity are predicted.
- 5.4.6 One proposed allocation is within 200m of the SPA/Ramsar, and two are within 500m, and could potentially change the distribution of qualifying species within the SPA/Ramsar or important supporting areas as a result of displacement (line-of-sight requirements):
- ▶ Residential allocation H12: Land at Stubbington Lane, Stubbington is c.280m from the SPA/Ramsar. It is a small undeveloped site expected to yield around 10 dwellings, and is separated from the SPA by residential properties with large gardens. Given the scale of development, distance from SPA, and presence of intervening structures, no adverse effect from displacement is likely.
 - ▶ Residential allocation H13: Land at Sea Lane, Stubbington is c.180m from the SPA/Ramsar. It is a small undeveloped site expected to yield around 5 dwellings, and is separated from the SPA by residential properties with large gardens. Given the scale of development, distance from SPA, and presence of intervening structures, no adverse effect from displacement is likely.

5.5 Chichester and Langstone Harbours SPA/Ramsar

- 5.5.1 None of the proposed allocations are within 500m of the SPA/Ramsar, which is the maximum distance over which the habitat loss/degradation impacts are expected to operate.

5.6 Important/Uncertain Sites for Waders and Brent Goose

- 5.6.1 Sites which have an Important or Uncertain role in supporting waders and Dark-bellied Brent goose at high-water are identified in King, 2010. These birds are qualifying features of SPA/Ramsar designations at Portsmouth, Chichester and Langstone Harbours, the Solent and Southampton Water. Residential development within around 500m of Important/Uncertain sites need to be defined, to assess the potential for changes to the distribution of qualifying species as a result of increasing recreational or other activities within these areas.
- 5.6.2 None of the proposed residential allocations are within 500m of an Important site for Brent goose or waders, although two sites within the housing trajectory with extant planning consent are within this distance⁷. Eighteen allocations are within 500m of an Uncertain wader site, and six are within 500m of an Uncertain Brent goose site, as listed at Table 5.1. In combination effects could affect sites with more than one proposed residential allocation within 500m. There are nine wader sites of Uncertain importance, and one Brent goose site of Uncertain importance that fall into this category; see Table 5.2.

⁷ 157 White Hart Lane and land to rear (6 dwellings) is within 500m of Important Brent goose site F04; Catholic Church of our Lady, Portchester (7 dwellings) is within 500m of Important wader sites P64 and P98, and Important Brent goose sites F16 and P93.

Table 5.1: Uncertain wader or Brent goose sites within 500m of residential allocations

Site	Proposed use	Wader sites	Brent goose sites
157 White Hart Lane and Land r/o	Residential *	1	1
Land south of Palmerston Ave, Fareham	Residential *	1	0
45-47 West Street, Fareham	Residential *	2	1
26 Titchfield Road, Stubbington	Residential *	2	0
Catholic Church of our Lady,	Residential *	1	3
Croft House, Redlands Lane	Residential	3	0
Land at Stubbington Lane, Stubbington	Residential	4	0
Land at Sea Lane, Stubbington	Residential	4	0
Land Between 335 & 357 Gosport Road	Residential	1	1
Land r/o 347-417 Hunts Pond Road	Residential	1	0
Land adjacent to Maytree Road	Residential	2	0
Land at Fareham Railway Station (East)	Mixed	2	0
Land at Fareham Railway Station (West)	Mixed	2	0
Market Quay	Mixed	2	1
Land r/o Red Lion, East St & Bath Lane	Residential	2	1
Civic Area	Mixed	1	0
Fareham Shopping Centre	Mixed	2	0
Fareham College	Mixed	5	0
The Retreat', Newgate Lane	Gypsy/traveller	8	0

* These sites have extant planning permission

Table 5.2: Uncertain sites with one or more proposed allocation within 500m

Type	Site reference (and no. allocations within 500m)
Wader Uncertain	One allocation within 500m: F07, F11, F12, F15, F17P, F17Q, F17R, F17S, F25, F34, F49, F77, F91, G13, G17, P93 More than one allocation within 500m: F02 (5), F06 (2), F13 (2), F18 (6), F19A (4), F26 (5), F27 (2), F36 (2), F82 (2)
Brent goose Uncertain	One allocation within 500m: G13, P64, P91, P98, P102 More than one allocation within 500m: F19A (3)

6 Avoidance and Mitigation

6.1 Recommended Avoidance and Mitigation Measures

6.1.1 Mitigation for the site-specific construction and operational impacts of proposed allocations will need to be drawn up in detail at the planning application stage, and accompanied where necessary by a project-level HRA. However, the DSP Plan and its HRA need to demonstrate that predicted impacts are capable of being avoided or mitigated prior to the plan being adopted, while retaining sufficient flexibility for site proponents to devise their own measures. Table 6.1 proposes a list of avoidance and mitigation measures for each impact type. Relevant measures should be incorporated within the development briefs for each individual allocation.

6.2 Measures now included within the Proposed Submission DSP Plan

6.2.1 Certain measures have now been incorporated within the DSP Plan to help avoid and reduce adverse effects, including:

- ▶ DSP7: New Residential Development Outside of the Defined Urban Settlement Boundaries – proposes restrictions to residential development in the countryside unless exceptional circumstance exist;
- ▶ DSP13: Nature Conservation and Enhancement – protects designated sites, and protected/priority habitats and species, and promotes ecological enhancement;
- ▶ DSP14: Sites for Brent Geese and Waders – protects sites of Importance to Brent geese and waders, and requires collection of additional survey data prior to development of Uncertain sites;
- ▶ DSP15: Recreational Disturbance on the Solent Special Protection Areas – requires the in-combination and direct impacts of development proposals to be mitigated;
- ▶ DSP54: New Moorings – wording amended to highlight the potential risk to European sites and that this should be avoided;
- ▶ Amended development site briefs: For each of the sites listed in Table 6.1, amendments have been made to the corresponding development brief to make it clear that mitigation and both required and available to ensure that adverse effects on ecological integrity can be avoided.

Table 6.1: Proposed avoidance and mitigation measures

Proposed allocation	Avoidance / mitigation
Construction impacts	
Habitat loss (within SAC/SPA/Ramsar)	
<ul style="list-style-type: none"> ▪ DSP54 New Moorings 	<p>Policy wording / supporting text should be amended to identify location of, and potential risks to, designated sites (<i>NOTE: this has now been largely incorporated</i>). Proposals should be required to demonstrate suitable site selection, designs and construction methods (including pollution prevention measures) to avoid/reduce risk of impacts.</p>
Construction noise	
<ul style="list-style-type: none"> ▪ Land between 335 & 357 Gosport Road ▪ The Walled Garden, Cams Hall ▪ Market Quay ▪ Land r/o Red Lion, East St and Bath Lane 	<p>The timing (seasonal and/or tidal state) of construction works should be adjusted to avoid periods when qualifying species are present. Construction methods should adopt technologies with lower noise emissions (e.g. vibro-piling). Screening and sound barriers should be installed around development sites to dissipate noise.</p>
Construction activity	
<p>No allocations within 100m</p>	<p>None required</p>
Pollution during remediation, demolition or construction	
<ul style="list-style-type: none"> ▪ Land off Church Road, Warsash ▪ Land at Fleet End Road, Warsash ▪ Land r/o 347-411 Hunts Pond Road ▪ Kites Croft ▪ Fareham Station West ▪ Fareham Station East 	<p>Potentially contaminated sites will require desk-study and possibly site investigation/remediation before development. A Construction Environment Management Plan should be prepared to enable risks to be managed, including measures such as: use of interceptors/bunds; sealing of disused drain connections; temporary drainage and dewatering systems; best practice techniques for storage of fuels/chemicals/materials.</p>
Operation impacts	
Operational activity	
<p>No allocations within 100m</p>	<p>None required</p>
Displacement (line-of-sight requirements)	
<ul style="list-style-type: none"> ▪ Market Quay ▪ Land r/o Red Lion, East St and Bath Lane 	<p>If tall buildings are proposed, building heights should be stepped-down in height towards the waterfront. Gaps between buildings should be maintained or designed into developments, or planted buffer zones created, to break-up continuous facades when viewed from the water.</p>

Proposed allocation	Avoidance / mitigation
Protection of Brent goose / wader sites	
<ul style="list-style-type: none"> ▪ Croft House, Redlands Lane ▪ Land at Stubbington Lane ▪ Land at Sea Lane, Stubbington ▪ Land Between 335 & 357 Gosport Road ▪ Land r/o 347-417 Hunts Pond Road ▪ Land adjacent to Maytree Road ▪ Land at Fareham Station (East) ▪ Land at Fareham Station (West) ▪ Market Quay ▪ Land r/o Red Lion, East St & Bath Lane ▪ Civic Area ▪ Fareham Shopping Centre ▪ Fareham College ▪ The Retreat', Newgate Lane 	<p>No Important Brent goose / wader sites are likely to be affected by newly proposed allocations, but the following sites of Uncertain importance could be cumulatively affected by more than one allocation:</p> <ul style="list-style-type: none"> ▪ Waders: F02, F06, F13, F18, F19A, F26, F27, F36, F82 ▪ Brent goose: F19A <p>Overwintering bird surveys for three seasons should be completed for all Uncertain sites, to establish their importance in supporting qualifying species. Development sites listed left which potentially contribute to cumulative impacts have been pushed back in the housing trajectory to allow surveys to be completed. For Uncertain sites confirmed as Important, s.106 (<6 proposals) or CIL contributions could be collected towards site improvements to prevent disturbance impacts, such as: changes to more favourable management, installation of signage / interpretation, creation of seasonal refuge zones, screening of active areas (dog-walking, cycling, etc).</p>

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7 Determining Effects on Site Integrity

7.1 Introduction

7.1.1 Table 7.1 to Table 7.4 take each European site considered during the impact assessment in turn, and provides a statement as to whether the DSP Plan will lead to adverse effects on site integrity, in view of the site’s conservation objectives.

Table 7.1: Adverse effects on integrity: Solent Maritime SAC

Has the Appropriate Assessment shown that there will be no negative impact on...?	Y/N
The extent and distribution of qualifying natural habitats and habitats of qualifying species	Yes
The extent and distribution of qualifying natural habitats and habitats of qualifying species are unlikely to be affected as a result of habitat loss or degradation, following implementation of mitigation measures with the plan	
The structure and function of qualifying natural habitats and habitats of qualifying species	Yes
The structure and function of qualifying natural habitats and habitats of qualifying species are unlikely to be affected	
The supporting processes on which qualifying natural habitats and habitats of qualifying species rely	Yes
The supporting processes underpinning the integrity of the site are unlikely to be affected by the plan	
The populations of the qualifying species	Yes
The populations of the qualifying species are unlikely to be affected by the plan	
The distribution of the qualifying species within the site	Yes
The distribution of the qualifying species are unlikely to be affected by the plan	

Table 7.2: Adverse effects on integrity: Chichester and Langstone Harbours SPA/Ramsar

Has the Appropriate Assessment shown that there will be no negative impact on...?	Y/N
The extent and distribution of the habitats of the qualifying features	Yes
The extent and distribution of the habitats used by the waders and wildfowl of the SPA/Ramsars are unlikely to be affected as a result of habitat loss or degradation, following implementation of mitigation measures with the plan	
The structure and function of the habitats of the qualifying features	Yes
The structure and function of the habitats of the qualifying features are unlikely to be affected	
The supporting processes on which the habitats of the qualifying features rely	Yes
The supporting processes underpinning the habitats are unlikely to be affected by the plan	

Has the Appropriate Assessment shown that there will be no negative impact on...?	Y/N
The populations of the qualifying features	Yes
The population of waders and wildfowl that the SPA/Ramsars are unlikely to be affected by the plan	
The distribution of the qualifying features within the site	Yes
The distribution of waders and wildfowl within the SPA/Ramsars are unlikely to be affected by the plan	

Table 7.3: Adverse effects on integrity: Portsmouth Harbour SPA/Ramsar

Has the Appropriate Assessment shown that there will be no negative impact on...?	Y/N
The extent and distribution of the habitats of the qualifying features	Yes
The extent and distribution of the habitats used by the waders and wildfowl of the SPA/Ramsars are unlikely to be affected as a result of habitat loss or degradation, following implementation of mitigation measures with the plan	
The structure and function of the habitats of the qualifying features	Yes
The structure and function of the habitats of the qualifying features are unlikely to be affected	
The supporting processes on which the habitats of the qualifying features rely	Yes
The supporting processes underpinning the habitats are unlikely to be affected by the plan	
The populations of the qualifying features	Yes
The population of waders and wildfowl that the SPA/Ramsars are unlikely to be affected by the plan	
The distribution of the qualifying features within the site	Yes
The distribution of waders and wildfowl within the SPA/Ramsars are unlikely to be affected by the plan	

Table 7.4: Adverse effects on integrity: Solent and Southampton Water SPA/Ramsar

Has the Appropriate Assessment shown that there will be no negative impact on...?	Y/N
The extent and distribution of the habitats of the qualifying features	Yes
The extent and distribution of the habitats used by the waders and wildfowl of the SPA/Ramsars are unlikely to be affected as a result of habitat loss or degradation, following implementation of mitigation measures with the plan	
The structure and function of the habitats of the qualifying features	Yes
The structure and function of the habitats of the qualifying features are unlikely to be affected	
The supporting processes on which the habitats of the qualifying features rely	Yes
The supporting processes underpinning the habitats are unlikely to be affected by the plan	
The populations of the qualifying features	Yes
The population of waders and wildfowl that the SPA/Ramsars are unlikely to be affected by the plan	
The distribution of the qualifying features within the site	Yes
The distribution of waders and wildfowl within the SPA/Ramsars are unlikely to be affected by the plan	

8 Conclusion

8.1 Summary

8.1.1 This report presents the Habitats Regulations Assessment of the Development Sites and Policies Plan for Fareham borough. It presents an updated screening assessment to determine which aspects of the plan are likely to lead to significant effects, and an Appropriate Assessment to determine whether there will be adverse effects on the integrity of:

- ▶ Solent Maritime SAC;
- ▶ Chichester & Langstone Harbours SPA;
- ▶ Portsmouth Harbour SPA;
- ▶ Solent and Southampton Water SPA;
- ▶ Chichester & Langstone Harbours Ramsar;
- ▶ Portsmouth Harbour Ramsar; and
- ▶ Solent & Southampton Water Ramsar.

8.1.2 The report establishes the pathways of impacts which could negatively affect European sites and assesses the avoidance and mitigation measures put forward within the DSP Plan. It provides recommendations for additional avoidance and mitigation measures, which have also now been incorporated into the Plan to help ensure that adverse effects on the European sites can be avoided. The report concludes that adverse effects on the ecological integrity of European sites in and around the borough are capable of being mitigated.

8.2 Conclusions

8.2.1 It can be concluded that the DSP Plan will not adversely affect the ecological integrity of any of the sites included within the HRA. The Plan can be considered to be compliant with the Habitats Regulations in this respect.

8.2.2 Following the publication of the DSP Plan, the HRA will be revisited to assess any policy changes which are considered necessary in response to representations.

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Appendix I: Revised Screening Matrix

Please see insert.

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Fareham Borough Development Sites and Policies Plan

ID	Proposed Site Allocations	SAC						SPA				Ramsar			
		Butser Hill	Emer Bog	River Itchen	Solent and Isle of Wight Lagoons	Solent Maritime	The New Forest	Chichester and Langstone Harbours	Portsmouth Harbour	Solent and Southampton Water	The New Forest	Chichester and Langstone Harbours	Portsmouth Harbour	Solent and Southampton Water	The New Forest
E1	Solent Business Park - Phase 2, Whiteley	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
E2	Little Park Farm, Park Gate	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
E3	Kites Croft	A4	A4	A4	A4	A4	A4	A4	A4	C2	A4	A4	A4	C2	A4
E4	Midpoint 27, Cartwright Drive	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
E5	The Walled Garden, Cams Hall	A4	A4	A4	A4	A4	A4	D1/D2	C2	D1/D2	A4	D1/D2	C2	D1/D2	A4
H1	Croft House, Redlands Lane	A4	A4	A4	A4	A4	A4	D1/D2	D1/D2	D1/D2	A4	D1/D2	D1/D2	D1/D2	A4
H2	Hope Lodge, Fareham Park Road	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
H3	Former Community Facilities, Wynton Way	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
H4	Land Between 335-357 Gosport Road, Fareham	A4	A4	A4	A4	A4	A4	D1/D2	C2	D1/D2	A4	D1/D2	C2	D1/D2	A4
H5	Peters Road, Sarisbury	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
H6	East of Raley Road, Locks Heath	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
H7	Land at Fleet End Road, Warsash	A4	A4	A4	A4	C2	A4	A4	A4	C2	A4	A4	A4	C2	A4
H8	Land off Church Road, Warsash	A4	A4	A4	A4	C2	A4	A4	A4	C2	A4	A4	A4	C2	A4
H9	Land to rear 347-417 Hunts Pond Road	A4	A4	A4	A4	A4	A4	D1/D2	D1/D2	C2	A4	D1/D2	D1/D2	C2	A4
H10	33 Lodge Road, Locks Heath	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
H11	Land at Heath Road, Locks Heath	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
H12	Land at Stubbington Lane, Stubbington	A4	A4	A4	A4	A4	A4	D1/D2	D1/D2	D1/D2	A4	D1/D2	D1/D2	D1/D2	A4
H13	Land at Sea Lane, Stubbington	A4	A4	A4	A4	A4	A4	D1/D2	D1/D2	D1/D2	A4	D1/D2	D1/D2	D1/D2	A4
H14	Maytree Road	A4	A4	A4	A4	A4	A4	D1/D2	D1/D2	D1/D2	A4	D1/D2	D1/D2	D1/D2	A4
H15	Land r/o Red Lion Hotel, East Street & Bath Lane	A4	A4	A4	A4	A4	A4	D1/D2	C2	D1/D2	A4	D1/D2	C2	D1/D2	A4
H16	Fareham Station West	A4	A4	A4	A4	A4	A4	D1/D2	C2	D1/D2	A4	D1/D2	C2	D1/D2	A4
H17	Genesis Centre Housing Allocation	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
H18	Rear of Coldeast Close	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4

		SAC						SPA				Ramsar			
		Butser Hill	Emer Bog	River Itchen	Solent and Isle of Wight Lagoons	Solent Maritime	The New Forest	Chichester and Langstone Harbours	Portsmouth Harbour	Solent and Southampton Water	The New Forest	Chichester and Langstone Harbours	Portsmouth Harbour	Solent and Southampton Water	The New Forest
Fareham Borough Development Sites and Policies Plan															
H19	Land r/o 123 Bridge Road	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
GT1	The Retreat, Newgate Lane	A4	A4	A4	A4	A4	A4	D1/2	D1/2	D1/2	A4	D1/2	D1/2	D1/2	A4
GT2	302A Southampton Road	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
TC1	Civic Area	A4	A4	A4	A4	A4	A4	D1/2	D1/2	D1/2	A4	D1/2	D1/2	D1/2	A4
TC2	Fareham Shopping Centre	A4	A4	A4	A4	A4	A4	D1/2	D1/2	D1/2	A4	D1/2	D1/2	D1/2	A4
TC3	Market Quay	A4	A4	A4	A4	A4	A4	D1/D2	C2	D1/D2	A4	D1/D2	C2	D1/D2	A4
TC4	Fareham Station East	A4	A4	A4	A4	A4	A4	D1/D2	C2	D1/D2	A4	D1/D2	C2	D1/D2	A4
TC5	Russell Place	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
TC6	Corner of Trinity Street and Osborn Road	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
MU1	Fareham College	A4	A4	A4	A4	A4	A4	D1/D2	D1/D2	D1/D2	A4	D1/D2	D1/D2	D1/D2	A4
ID	Development Management Policies														
DSP1	Sustainable Development	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP2	Design	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP3	Environmental Impact	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2
DSP4	Impact on Living Conditions	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP5	Ransom Strips	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP6	Protecting & Enhancing the Historic Environment	A3	A3	A3	A3	A3	A3	A3	A3	A3	A3	A3	A3	A3	A3
DSP7	New Residential Development Outside of Defined Urban Settlement Boundaries	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP8	Leisure and Recreation Development Outside of Defined Urban Settlement Boundaries	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP9	Economic Development Outside of Defined Urban Settlement Boundaries	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP10	Educational Facilities Outside of Defined Urban Settlement Boundaries	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP11	Development Proposals within Solent Breezes Holiday Park	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP12	Public Open Space Allocations	A3	A3	A3	A3	A3	A3	A3	A3	A3	A3	A3	A3	A3	A3
DSP13	Nature Conservation	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2

		SAC						SPA				Ramsar			
		Butser Hill	Emer Bog	River Itchen	Solent and Isle of Wight Lagoons	Solent Maritime	The New Forest	Chichester and Langstone Harbours	Portsmouth Harbour	Solent and Southampton Water	The New Forest	Chichester and Langstone Harbours	Portsmouth Harbour	Solent and Southampton Water	The New Forest
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DSP14	Supporting Sites for Brent Geese and Waders	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2
DSP15	Recreational Disturbance on the Solent Special Protection Areas	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2
DSP16	Coastal Change Management Areas	A1/2	A1/2	A1/2	A1/2	A1/2	A1/2	A1/2	A1/2	A1/2	A1/2	A1/2	A1/2	A1/2	A1/2
DSP17	Existing Employment Sites and Areas	A1/4	A1/4	A1/4	A1/4	A1/4	A1/4	A1/4	A1/4	A1/4	A1/4	A1/4	A1/4	A1/4	A1/4
DSP18	Employment Allocations (see site assessments)	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
DSP19	Boatyards	A3/4	A3/4	A3/4	A3/4	A3/4	A3/4	A3/4	A3/4	A3/4	A3/4	A3/4	A3/4	A3/4	A3/4
DSP20	New Retail Development in Fareham Town Centre	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP21	Primary Shopping Area	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP22	Secondary Shopping Area	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP23	Making the Most Effective Use of Upper Floors	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP24	Mix of Uses in Fareham High Street	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP25	Fareham Waterfront	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP26	Civic Area	A4	A4	A4	A4	A4	A4	D1/2	D1/2	D1/2	A4	D1/2	D1/2	D1/2	A4
DSP27	Market Quay	A4	A4	A4	A4	A4	A4	D1/D2	C2	D1/D2	A4	D1/D2	C2	D1/D2	A4
DSP28	Fareham Shopping Centre Upper Floors	A4	A4	A4	A4	A4	A4	D1/2	D1/2	D1/2	A4	D1/2	D1/2	D1/2	A4
DSP29	Fareham Shopping Centre Improved Link	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP30	Fareham Station East	A4	A4	A4	A4	A4	A4	D1/D2	C2	D1/D2	A4	D1/D2	C2	D1/D2	A4
DSP31	Russell Place	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
DSP32	Corner of Trinity Street and Osborn Road	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
DSP33	Fareham College	A4	A4	A4	A4	A4	A4	D1/D2	D1/D2	D1/D2	A4	D1/D2	D1/D2	D1/D2	A4
DSP34	Development in District Centres, Local Centres and Local Parades	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP35	Locks Heath District Centre	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
DSP36	Portchester District Centre	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1

Fareham Borough Development Sites and Policies Plan		SAC						SPA				Ramsar			
		Butser Hill	Emer Bog	River Itchen	Solent and Isle of Wight Lagoons	Solent Maritime	The New Forest	Chichester and Langstone Harbours	Portsmouth Harbour	Solent and Southampton Water	The New Forest	Chichester and Langstone Harbours	Portsmouth Harbour	Solent and Southampton Water	The New Forest
DSP37	Out of Town Shopping	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP38	Local Shops	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP39	Hot Food Shops	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP40	Housing Allocations (see site assessments)	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP41	Subdivision of Residential Dwellings	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP42	New Housing for Older People	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP43	Improvements to Existing Older People's Housing	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP44	Change of Use or Redevelopment of Older People's Housing	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP45	Houses in Multiple Occupation	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP46	Self Contained Annexes and Extensions	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP47	Gypsies, Travellers and Travelling Showpeople	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP48	Bus Rapid Transit	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	
DSP49	Improvements to the Strategic Road Network	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	
DSP50	Access to Whiteley	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	
DSP51	Parking	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP52	Community Facilities	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP53	Sports Provision	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP54	New Moorings	A1	A1	A1	A1	C1	A1	C1	C1	A1	A1	C1	C1	A1	
DSP55	Telecommunications	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	
DSP56	Renewable Energy	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	

Fareham Borough Development Sites and Policies Plan

SAC						SPA				Ramsar			
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Assessment Key

Category A: No negative effect

- A1 Options / policies that will not themselves lead to development e.g. because they relate to design or other qualitative criteria for development, or they are not a land use planning policy.
- A2 Options / policies intended to protect the natural environment, including biodiversity.
- A3 Options / policies intended to conserve or enhance the natural, built or historic environment, where enhancement measures will not be likely to have any negative effect on a European Site.
- A4 Options / policies that positively steer development away from European sites and associated sensitive areas.
- A5 Options / policies that would have no effect because development is implemented through later policies in the same plan, which are more specific and therefore more appropriate to assess for their effects on European Sites.

Category B: No significant effect

- B Options / policies that could have an effect, but the likelihood is there would be no significant negative effect on a European site either alone or in combination with other elements of the same plan, or other plans or projects.

Category C: Likely significant effect alone

- C1 The option, policy or proposal could directly affect a European site because it provides for, or steers, a quantity or type of development onto a European site, or adjacent to it.
- C2 The option / policy could indirectly affect a European site e.g. because it provides for, or steers, a quantity or type of development that may be ecologically, hydrologically or physically connected to it or increase disturbance.
- C3 Proposals for a magnitude of development that, no matter where it was located, the development would be likely to have a significant effect on a European site.
- C4 An option / policy that makes provision for a quantity / type of development but the effects are uncertain because its detailed location is to be selected following consideration of options in a later, more specific plan.
- C5 Options / policies for developments or infrastructure projects that could block alternatives for the provision of other development in the future, that may lead to adverse effects on European sites, which would otherwise be avoided.
- C6 Options, policies or proposals which are to be implemented in due course - if implemented in one or more particular ways, the proposal could possibly have a significant effect on a European site.
- C7 Any other options, policies or proposals that would be vulnerable to failure under the Habitats Regulations at project assessment stage; to include them in the plan would be regarded by the EC as 'faulty planning'.
- C8 Any other proposal that may have an adverse effect on a European site, which might try to pass the tests of HRA at project level by arguing that the plan provides IROPI to justify its consent despite a negative assessment.

Category D: Likely significant effects in combination

- D1 The option, policy or proposal alone would not be likely to have significant effects but if its effects are combined with the effects of other policies within the same plan the cumulative effects would be likely to be significant.
- D2 Options, policies or proposals that alone would not be likely to have significant effects but if their effects are combined with the effects of other plans or projects, the combined effects would be likely to be significant.
- D3 Options or proposals that are, or could be, part of a programme or sequence of development delivered over a period, where the implementation of the later stages could have a significant effect on European sites.
- ? Uncertain effects because the issue/option currently lacks detail. The screening assessment will be re-visited as more detail becomes available.

Fareham Borough Development Sites and Policies Plan

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SAC						SPA				Ramsar			
Butser Hill	Emer Bog	River Itchen	Solent and Isle of Wight Lagoons	Solent Maritime	The New Forest	Chichester and Langstone Harbours	Portsmouth Harbour	Solent and Southampton Water	The New Forest	Chichester and Langstone Harbours	Portsmouth Harbour	Solent and Southampton Water	The New Forest

Appendix II: SRTM Welborne Run 8b AADT Traffic Flows

Please see insert.

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Appendix III: Southern Water's Revised Draft WRMP Proposed Supply Projects

The Testwood Scheme

The DWRMP included the scheme to increase the treatment capacity of the River Test WSW to the full existing abstraction licence limit of 136Ml/d, and to construct a new pipeline to link the River Test WSW to the Lower Itchen WSW. This scheme was, and remains, a fundamental component of our Western Area strategy.

Both during the drafting of the DWRMP, and throughout the consultation period on the draft plan, we have been continuing to undertake technical assessments of the proposed scheme, and to discuss the details of these assessments with the Environment Agency, Natural England and other stakeholders. The consultation responses on the DWRMP have identified that a wide range of stakeholders have concerns over the proposed operation of the Testwood Scheme either in principle or as described in the DWRMP.

For the reasons described above, we have to promote the Testwood Scheme in order to enable the Sustainability Reductions to be implemented as rapidly as possible. Whilst there are many individuals and organisations who object to the principle of the scheme, we maintain that we are required to enable the Habitats Regulations, Water Industry Act and WRMP Regulation requirements to be met.

However, the ongoing technical assessments have enabled us to agree, in discussions with the EA and NE, that the Testwood Scheme should not be operated under the terms of the existing abstraction licence at River Test WSW, but under an amended licence. The licence changes would enable us to continue to meet our water resource responsibilities, whilst providing additional protection to the environment. This additional environmental protection will be afforded through reducing the annual quantity of water that can be abstracted at River Test WSW. Other potential conditions and restrictions, such as monthly limits on abstraction under different levels of flow in the river, are currently being discussed with the Environment Agency and Natural England. Any new licence would also include an increase to the level of river flow below which we would need to cease abstracting water altogether.

We are proposing to voluntarily apply for these changes to the licence, once we have completed additional technical assessment work that the Environment Agency and Natural England have asked us to undertake. It is anticipated that the licence application would be made in early 2014. Once the licence changes have been agreed by the Environment Agency, we would then submit applications to seek planning permission for the construction of the scheme.

Once the licence has been amended and planning permissions granted, we will construct the scheme and then operate the scheme under the terms of the amended licence. For the majority of the time, the River Test WSW abstraction would be operated in a similar manner to its recent operation. However, on the very rare occasions when our abstractions on the River Itchen sources are affected by the Sustainability Reductions, or at times when those sources are otherwise unavailable (e.g. pollution events

or unplanned maintenance), this licence will need to allow us to abstract, treat and pump additional water through the new pipeline to Lower Itchen WSW.

The details of the licence are being discussed with the Environment Agency and Natural England at the current time, and the Environment Agency will have to agree the changes to the licence before we can develop this scheme. It is also important to note, that the changed licence would have a time limit attached to it (anticipated to be 15 years), and that a further review of the licence would need to be undertaken before the licence could be extended. The Environment Agency and Natural England also have statutory powers they can use to seek to modify the licence earlier than that should they have concerns over the environmental effects of abstraction.

We are confident that changes to the licence will be approved that allow us to both benefit the environment, and to rely on the scheme as a core component of the Western Area Strategy in the WRMP.

The Augmentation Scheme (J03a)

The DWRMP included the scheme to modify and utilise the existing Environment Agency Augmentation Scheme for water resource purposes. This scheme was, and remains, a fundamental component of our Western Area strategy.

Both during the drafting of the DWRMP, and throughout the consultation period on the draft plan, we have been continuing to undertake technical assessments of the proposed scheme, and to discuss the details of these assessments with the Environment Agency, Natural England and other stakeholders. The consultation responses on the DWRMP have identified that a number of stakeholders have concerns about the scheme being used for water resource purposes, and also on the potential transfer of ownership of the scheme from the Environment Agency to us.

The Environment Agency's augmentation scheme was implemented over 30 years ago, as a series of boreholes that enable water to be abstracted from the ground and pumped into the Candover Stream, to increase flows in the stream and downstream in the River Itchen, in periods when flows would otherwise be low. The effect of this augmentation scheme is to increase flows in the River Itchen which maintains environmental conditions in the river during periods when the river would otherwise be under environmental stress due to low flows.

Our Augmentation Scheme (J03a) would involve us taking ownership of the Environment Agency scheme but operating it in a similar way, to increase flows in the River Itchen when flows would otherwise be low. By increasing flows in the River Itchen, we would be able to continue to abstract water from our Lower Itchen sources, which would otherwise have start to become restricted due to the Sustainability Reductions notified by the Environment Agency.

We will need to modify the Environment Agency's scheme as a result of technical assessment work that we have undertaken in close liaison with the Environment Agency and Natural England. Due to concerns that discharging water from the scheme into the Candover Stream at the current Environment Agency discharge location could adversely affect the native Crayfish population in the stream, a new pipeline and discharge location will need to be designed, consented and built much further downstream, potentially into the very lower reaches of the Candover Stream or into the River Itchen.

An operating agreement will also need to be reached to control the detail of how, when and for what duration the scheme can be run. The agreement will need to ensure that not only are flows discharged through the new pipeline and discharge location, but also that sufficient water continues to flow in the Candover Stream to protect the native Crayfish, and to protect other abstractors in the area, including watercress farms, fish farms and angling interests.

The details of this agreement will need to be negotiated and agreed with the Environment Agency and Natural England. As part of this process, the potential implications of the modified scheme will need to be assessed under the Habitats Regulations. The current Environment Agency augmentation scheme at its full licence has already been through that process and confirmed as being acceptable, however our modified version of that scheme will need to be assessed in the same way.

We are confident that an appropriate and acceptable operating agreement will be reached, and that necessary consents for the new pipeline and discharge location will be secured. This enables us to rely on the scheme as a core component of the Western Area Strategy in the WRMP.

Transfers of water from Portsmouth Water Company

The DWRMP included a scheme to transfer 10MI/d (10 million litres of water a day) from Portsmouth Water's existing abstraction on the lower River Itchen. This is water that Portsmouth Water can abstract within the terms of its existing licence but does not do so, as it does not need the water to meet its own supply demand balance. This scheme was, and remains, a fundamental component of our Western Area strategy.

During the consultation period on the DWRMP, and the drafting of this Statement of Response, we have continued to discuss potential water transfers with Portsmouth Water. Consultation responses on the DWRMP identified a number of stakeholders wished Southern Water to go further in taking a greater volume of water from it. We have explicitly addressed this issue in direct discussions with Portsmouth Water.

The outcome of these discussions is that we have now included additional volumes of water to be transferred from Portsmouth Water in the Revised DWRMP. Initially, 10MI/d will be transferred from Portsmouth Water, as proposed in the DWRMP. This will subsequently be increased to a 15MI/d transfer, with the potential for it subsequently to be increased again to a 30MI/d transfer. The infrastructure for the full 30MI/d transfer is proposed to be implemented from the outset, with the volumes transferred being increased as the supply demand balance requires it, and as Portsmouth Water is able to guarantee the provision of the water.

The Portsmouth Water Transfer Scheme will require the construction of additional infrastructure and a new pipeline. We will need to enter into agreements with Portsmouth Water to secure the water for transfer, and will need to submit applications for planning and other consents for the provision of the new infrastructure and pipeline.

We are confident that we will reach an acceptable agreement with Portsmouth Water, and that necessary consents for the new infrastructure and pipeline will be secured. This enables us to rely on the scheme as a core component of the Western Area Strategy in the WRMP.

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