



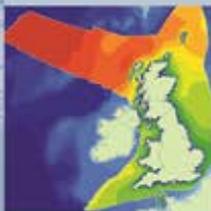
Port of Southampton Draft Master Plan 2015-2035

Draft Shadow Habitats Regulations Assessment

ABP Southampton

October 2016

Creating sustainable solutions for the marine environment



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Elena San Martin	Stephen C Hull	Natalie Frost
		

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ABP Marine Environmental Research Ltd

Quayside Suite, Medina Chambers, Town Quay, Southampton, Hampshire SO14 2AQ
T: +44 (0) 2380 711844 W: <http://www.abpmer.co.uk/>

Port of Southampton Draft Master Plan 2015-2035

Draft Shadow Habitats Regulations Assessment

October 2016



Summary

Associated British Ports (ABP) has published its Draft Port Master Plan 2015 – 2035 for the Port of Southampton 2016-2035 ('the Draft Master Plan') for consultation (ABP, 2016). The Draft Master Plan sets out ABP's strategy for planning the land use, infrastructure and development requirements of the Port of Southampton for the period to 2035. The Master Plan builds upon and will replace the previous Port of Southampton Master Plan 2009 – 2030.

Under Article 6(3) of the Habitats Directive, as enforced in the UK through the Conservation of Habitats and Species Regulations 2010 (as amended) ("the Habitats Regulations"), an Appropriate Assessment (AA) is required where a plan or project is not directly connected with, or necessary for the management of Natura 2000 sites (also known as 'European sites') and where the possibility of a likely significant effect (LSE) on these sites cannot be excluded, either alone or in-combination with other plans or projects.

ABP has commissioned ABP Marine Environmental Research Ltd (ABPmer) to prepare a 'Shadow' Habitats Regulations Assessment (HRA) which considers the potential environmental implications of the Draft Master Plan on European/Ramsar sites in terms of the requirements of the Habitats Regulations. The scope of the information provided in the Draft Shadow HRA (this report) is based on the requirements set out in the relevant guidance for undertaking plan-level HRAs.

This Draft Shadow HRA has demonstrated that the full implementation of the development proposals and aspirations identified in the Master Plan is considered to have a potential LSE on one or more European/Ramsar sites both alone and in-combination with other plans and projects.

At this stage, there is not sufficient detail on the scale and nature of the development proposals and aspirations to determine with any certainty whether an adverse effect on integrity (AEOI) will occur, but it is recognised that this is a possibility, particularly in relation to any future port expansion on the strategic land reserve. This Draft Shadow HRA has therefore provided evidence that there are no feasible alternative solutions and that matters constituting imperative reasons of overriding public interest (IROPI) exist or may exist in the future.

Each individual development proposal within the Master Plan will be required to undergo a project-level HRA as necessary, wherever the possibility of a LSE on a European/Ramsar site cannot be excluded. In these cases, ABP will need to provide the necessary information for a project-level AA to be undertaken by the competent authority. The requirement for project-level HRAs to be undertaken where relevant is considered to provide the necessary assurance that the Master Plan will not result in an AEOI, or if it does, only in the context of development which meets the subsequent required tests.

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1 Introduction

Associated British Ports (ABP) has published its Draft Port Master Plan for the Port of Southampton 2016 – 2035 ('the Draft Master Plan') for consultation (ABP, 2016). The Draft Master Plan sets out ABP's strategy for planning the land use, infrastructure and development requirements of the Port of Southampton for the period to 2035. The Master Plan builds upon and will replace the previous Port of Southampton Master Plan 2009 – 2030.

Under Article 6(3) of the Habitats Directive, as enforced in the UK through the Conservation of Habitats and Species Regulations 2010 (as amended) ("the Habitats Regulations"), an Appropriate Assessment (AA) is required where a plan or project is not directly connected with, or necessary for the management of Natura 2000 sites (also known as 'European sites') and where the possibility of a likely significant effect (LSE) on these sites cannot be excluded, either alone or in-combination with other plans or projects.

ABP has commissioned ABP Marine Environmental Research Ltd (ABPmer) to prepare a Draft Shadow Habitats Regulations Assessment (HRA) which considers the potential environmental implications of the Master Plan on European/Ramsar sites in terms of the requirements of the Habitats Regulations. The scope of the information provided in the Shadow HRA (this report) is based on the requirements set out in the relevant guidance for undertaking plan-level HRAs (EC, 2001; David Tyldesley Associates, 2009a; 2009b; 2012).

2 Appropriate Assessment of Plans and Projects

The Habitats Regulations implement the Habitats Directive¹ in Great Britain and require plans to be considered in a similar manner to projects.

Regulation 61 of the Habitats Regulations states that:

- (1) *A competent authority, before deciding to undertake, or give any consent, permission, or other authorisation for a plan or project which -
 - (a) is likely to have significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and
 - (b) is not directly connected with or necessary to the management of the site,must make an appropriate assessment of the implications for the site in view of that site's conservation objectives".*
- (2) *A person applying for any such consent, permission or other authorisation must provide such information as the competent authority may reasonably require for the purposes of the assessment or to enable them to determine whether an appropriate assessment is required.*
- (3) *The competent authority must for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority specify.*
- (4) *They must also, if they consider it appropriate, take the opinion of the general public, and if they do so, they must take such steps for that purpose as they consider appropriate.*
- (5) *In the light of the conclusions of the assessment, and subject to regulation 62 (considerations of overriding public interest), the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).*

Regulation 102 re-states the above requirement for Regulation 61 but for plan-making authorities in relation to land use plans.

European sites are defined in Regulation 8 of the Habitats Regulations, and include the following:

- Special Areas of Conservation (SACs) designated under the Habitats Directive;
- Special Protection Areas (SPAs) sites classified under the EC Directive on the Conservation of Wild Birds (the Birds Directive); and
- Sites that are proposed for designation and inclusion in the Natura 2000 network, namely candidate SACs (cSACs) and Sites of Community Importance (SCIs²).

¹ EC Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna.

² Sites that have been adopted by the European Commission but not yet formally designated by the government of each country.

In addition, it is policy in England³ that the following sites be given the same protection as European sites:

- Sites that are currently in the process of being classified such as potential SPAs (pSPAs) and possible SACs (pSACs);
- Listed and proposed Ramsar Sites⁴ under the 1971 Ramsar Convention on Wetlands of International Importance; and
- Sites identified, or required, as compensatory measures for adverse effects on designated or proposed European and/or Ramsar sites.

All the above designated, proposed and compensation sites are referred to hereafter as European/Ramsar sites.

Regulation 62 of the Habitats Regulations establishes a process by which a plan or project can be carried out within or near to European/Ramsar sites. This is re-iterated in Regulation 103 for land use plans. If it is concluded that the plan will have an adverse effect on integrity (AEOI) on a European/Ramsar site (either alone or in combination with other plans or projects), the plan can only be given effect if it has been ascertained that there are no alternative solutions and it is necessary for Imperative Reasons of Overriding Public Interest (IROPI), including those of a social or economic nature. In these circumstances, before such a plan can proceed, compensatory measures must be secured to ensure that the overall coherence of the network of European/Ramsar sites is maintained.

2.1 Need and scope of shadow HRA

A formal AA of the Master Plan is not actually required, in that the Port Master Plan does not constitute a land-use plan as defined in the Regulations and ABP is not a plan-making authority⁵. In addition, when, at some future date, applications for consent for the development proposals and aspirations within the Master Plan are submitted as necessary, ABP will at that time provide the information necessary for the decision-making authority to carry out an AA of those proposals.

Given the importance of the Port Master Plan, ABP has decided, however, as part of the master planning process, to commission ABPmer to prepare this "shadow" HRA which is designed to assess, insofar as is both practicable and meaningful, the environmental implications of the Draft Master Plan in terms of the requirements of the Habitats Regulations.

Guidance on the methods for undertaking plan-level HRAs has been followed where relevant (EC, 2001; David Tyldesley Associates, 2009a; 2009b; 2012). This guidance provides clear advice on the steps and process to be followed in undertaking plan-level HRAs. This process has been effectively applied to a large number of plan-level HRAs in English waters, including for the South Inshore and Offshore Marine Plans (MMO, 2015), the Irish-Scottish Links on Energy (ISLES) Spatial Plan (Aecom and ABPmer, 2015), and The Crown Estate's Wave and Tidal Further Leasing Plan (ABPmer, 2014).

This Draft Shadow HRA document is published alongside both the Draft Master Plan and an accompanying Draft Shadow Appraisal and Assessment (SAA) report for consultation (Adams Hendry Consulting, 2016).

³ Paragraph 118 of the National Planning Policy Framework (DCLG, 2012).

⁴ pSPAs, pSACs and proposed Ramsar sites are sites on which Government has initiated public consultation on the scientific case for designation as a SPA, cSAC or Ramsar site.

⁵ Regulation 107 of the Habitats Regulations.

The scope of the information provided in this Draft Shadow HRA is based on the requirements set out in the relevant guidance and includes:

- Information on the need for the Master Plan (Section 3);
- Consultation that is being undertaken on the Master Plan (Section 4);
- Information on the European/Ramsar sites that could interact with the Master Plan (Section 5);
- Identifying the likely direct and indirect changes brought about by the Master Plan (Section 6);
- Identifying mitigation measures (Section 7);
- Consideration of In-combination effects with other plans and projects (Section 8);
- Review of alternative solutions to the Master Plan (Section 9);
- Consideration of IROPI (Section 10); and
- Consideration of compensatory measures (Section 11).

3 The Port Master Plan

The Government recommends that major ports produce Master Plans in order to help coordinate their future planning (DfT, 2008).

The guidance indicates that master plans should be produced to:

- Clarify the port's own strategic planning for the medium to long term;
- Assist regional and local planning bodies, and transport network providers, in preparing and developing their own development strategies; and
- Inform port users, employees and local communities as to how they can expect to see the port develop over the coming years.

The Port of Southampton published its first Master Plan in 2010, for the period to 2030. The first Master Plan set out ABP's intention to review and update the master plan to ensure that it remains relevant and appropriate. As part of that review process, ABP has published the Draft Master Plan for the period 2016 – 2035.

The Draft Master Plan sets out the Port's strategic planning for the short to long term and identifies, in broad terms, how land currently owned by the Port of Southampton may be developed in the future to handle the forecast growth in trade at the Port. The Draft Master Plan also identifies the approximate timescales for development and expansion requirements.

As with the first Port Master Plan, the Master Plan for the period 2016 – 2035 will inform planning and development plans, programmes, strategies and decisions on a local, sub-regional and national basis over that period. It is anticipated that the Master Plan, and accompanying SAA and Shadow HRA, will provide valuable assistance to sub-regional and local planning bodies as well as transport network providers in preparing and revising their development strategies.

The Master Plan is also intended to inform port users, employees and the local community on how the Port may develop over the coming years. Given the significance of the Port in terms of international flows of cargo, as well as its contribution to the local, regional and national economy, ABP recognises that the Master Plan needs to be shared with the Port's many stakeholders.

3.1 Objectives of the Master Plan

Having regard to the nature of the Port of Southampton and its operations and wider policy and guidance, the Draft Master Plan sets out a series of key objectives. Although specific, the objectives are nevertheless sufficiently flexible to allow evolution in tandem with emerging policy frameworks and to match the changing demands of the market, in accordance with the National Policy Statement for Ports (NPSfP).

The key objectives of the Draft Master Plan are to:

- Set out the Port's strategy for growth;
- Clarify ABP's strategic planning for the medium to long term and thereby assist planning bodies, transport network providers and other stakeholders in preparing their own development strategies and in the carrying out of their functions;

- Set out the future development and infrastructure requirements needed to both maintain and enhance the role of the Port as a major international deep-sea gateway and to meet the needs identified within Government policy; and
- Inform port users, employees and local communities as to how ABP envisage the Port developing over the coming years.

3.2 Geographical scope of the master plan

The Port of Southampton is located within a city region that is home to more than 1 million people. It lies on the central south coast of England, in close proximity to international shipping lanes and mainland Europe. The sub-region in which the Port is located is recognised as an area of critical importance for marine industries and related activities.

ABP is the Harbour Authority for the statutory Port of Southampton, an area that includes the tidal elements of the Rivers Test and Itchen, Southampton Water and parts of the East and West Solent. They are also the Competent Harbour Authority for the provision of pilotage services, the Vessel Traffic Services (VTS) Authority and Local Lighthouse Authority.

Although this wider statutory port area contains strategic port facilities such as the Exxon refinery and petrochemical complex at Fawley, the BP Terminal at Hamble and the military port at Marchwood (the Marchwood Seamounting Centre), the geographical area considered in detail and encompassed within the Master Plan comprises principally the commercial dock estate and other land owned by ABP.

ABP's land holding in the context of the Master Plan and accompanying SAA fall into four categories:

- The Eastern Docks - approximately 69 ha (170 acres);
- The Western Docks - approximately 237 ha (585 acres);
- Marchwood Industrial Park and Cracknore Industrial Park – approximately 48 ha (120 acres); and
- A strategic land reserve, totalling approximately 325 ha (800 acres), held for future port expansion, located between Marchwood Seamounting Centre and Hythe Village Marina.
- The locations of these land holdings are identified on figures within the Draft Port of Southampton Master Plan 2016 – 2035.

The Draft Master Plan also identifies the road, rail and marine connections to the Port, which are vital to its continued successful operation and development. The consideration of these connections in the Draft Master Plan has had due regard to their economic significance.

3.3 Temporal scope of the master plan

In accordance with Government guidance on the production of port master plans, the Draft Master Plan identifies a strategy for the future of the Port over the period to 2035.

3.4 Identified proposals and actions

The Draft Master Plan has identified the following likely infrastructure and development needs over both the medium and long term.

3.4.1 Infrastructure proposals and actions to 2020

The Draft Master Plan has identified the following potential developments, land use changes and actions by 2020:

- Construction of additional multi-deck facilities in the Eastern Docks and Western Docks for the storage of import and export trade cars and for the parking of vehicles belonging to cruise passengers;
- Marine (quay) infrastructure works for the benefit for the Automotive / Ro-Ro car trade and Container trade;
- Additional link span for Ro-Ro trade;
- Expansion of the bulks terminal with additional covered storage and the development of dedicated weighbridge and lorry queuing area;
- Refurbishment works at the Fruit Terminal;
- Improvements to rail infrastructure at the berth 109 rail terminal;
- Develop, redevelop and intensify employment uses at the Marchwood and Cracknore Industrial Parks; and
- Undertake necessary feasibility studies and research into how the Port can be expanded and bring forward proposals accordingly, which is likely to involve a feasibility assessment of how the Port may seek to expand onto the strategic land reserve.

3.4.2 Infrastructure proposals and actions between 2020 and 2035

The Draft Master Plan predicts that by 2035, aside from short-term, small scale capacity enhancements, the existing Port estate will not be fundamentally different to the position at 2020. The Draft Master Plan has, therefore, identified the following likely developments, land use changes and actions between 2020 and 2035:

- A small number of, currently unknown, short term capacity enhancements within the existing port estate;
- Continuation of the strategy to intensify and enhance, where possible port and port related development, at the Marchwood and Cracknore Industrial Estates; and
- Obtain consents, construct and commence operation of the expansion of the Port of Southampton onto the strategic land reserve.

3.4.3 Marine proposals and actions to 2035

In addition to land based developments and changes of use, the Draft Master Plan also gives consideration to possible marine proposals up to 2035. During the period of the Master Plan, it has been recognised that it is likely that average vessel sizes will continue to grow, reflecting a continuing trend of minimising the end-to-end unit cost of shipping goods.

The Draft Master Plan recognises that it is possible that additional navigational improvements to the Port may, therefore, be required during the period of the master plan. As with any terrestrial developments, any such proposals may require a full Environmental Impact Assessment (EIA) as well as addressing as necessary the requirements of the Habitats and Wild Birds Directives.

4 Consultation

ABP has published its Draft Port Master Plan to enable consultation to be undertaken with key stakeholders and the wider public. This Draft Shadow HRA has also been published to sit alongside the Draft Master Plan during the consultation period. Following consultation, any amendments to the Draft Master Plan will be considered and a final Shadow HRA will be published in support of the final Master Plan for the period to 2035. A Draft SAA Report has also been published alongside the Draft Master Plan for consultation (Adams Hendry Consulting, 2016).

5 Information on European/Ramsar Sites

The boundary of the statutory Port of Southampton covers Southampton Water, parts of the Solent and the tidal stretches of the Rivers Test and Itchen. A number of European/Ramsar sites overlap, adjoin or are close to this boundary (Figure 1).

The implementation of the development proposals of the Master Plan may have direct and/or indirect effects on some of these European/Ramsar sites. Experience and dialogue over the course of many years between ABP and the responsible statutory bodies (Natural England and the Environment Agency) and with non-governmental organisations (NGOs), such as the Royal Society for the Protection of Birds (RSPB) and the Hampshire and Isle of Wight Wildlife Trust, provide a good indication of the European/Ramsar sites that should be taken account of when proposals are drawn up for development within the Port boundary. These are as follows:

- Chichester and Langstone Harbours SPA and Ramsar site;
- New Forest SAC;
- New Forest SPA and Ramsar site;
- Portsmouth Harbour SPA and Ramsar site;
- River Itchen SAC;
- Solent and Southampton Water SPA and Ramsar site;
- Solent Maritime SAC; and
- South Wight Maritime SAC.

In addition, Natural England has recommended the proposal of a new SPA⁶ that extends from the Isle of Purbeck in the West to Bognor Regis in the East, the Solent and Dorset pSPA (Figure 1). Natural England is currently analysing consultation feedback on this proposed site⁷. The results from the consultation will be submitted to the Secretary of State for the Environment who will then decide if this site is suitable for designation as a European Marine Site and make a recommendation to the European Commission.

There are also three sites that have been created for compensatory purposes⁸ (Cobnor managed realignment, Lymington recharge and Medmerry managed realignment) in the wider area (Figure 1). Although the interest features of these sites are not known, it is considered that these will support features already designated by the other European/Ramsar sites, in particular coastal habitats and supporting species; and foraging and migratory birds.

⁶ pSPAs should be given the same protection as European sites (see Section 2).

⁷ <https://www.gov.uk/government/consultations/solent-and-dorset-coast-potential-special-protection-area-comment-on-proposals>

⁸ Compensatory sites should be given the same protection as European sites (see Section 2).

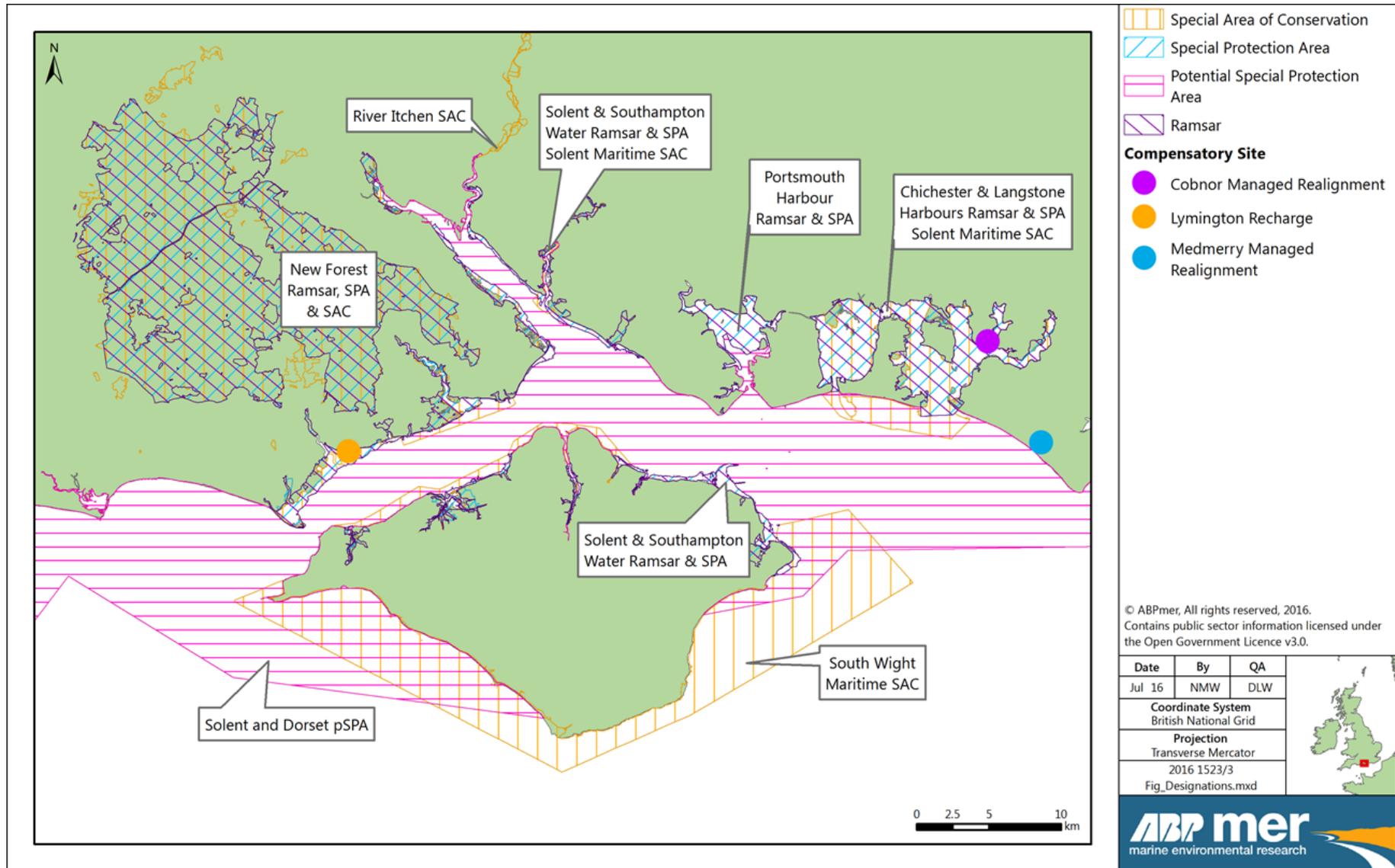


Figure 1. European/Ramsar sites that could potentially interact with the Master Plan

A European site that lies below highest astronomical tide i.e. it is either land covered (continuously or intermittently) by tidal waters, or any part of the sea, in or adjacent to Great Britain, up to the seaward limit of territorial waters, is known as a European marine site. The following European marine sites and corresponding international designations may potentially be affected, directly and/or indirectly, by the implementation of the development proposals of the Master Plan:

- Solent European Marine Site, comprising:
 - Solent Maritime SAC;
 - Solent and Southampton Water SPA and Ramsar site;
 - Chichester and Langstone Harbours SPA and Ramsar site; and
 - Portsmouth Harbour SPA and Ramsar site.
- South Wight Maritime European Marine Site, comprising:
 - South Wight Maritime SAC.

A summary of their features, sub-features and conservation objectives is provided in Appendix A. The starting point for compiling this information has been Natural England's advice given under Regulation 35(3) of the Habitats Regulations for the Solent European Marine Site (English Nature, 2001a) and South Wight Maritime European Marine Site (English Nature, 2001b), and more recent Conservation Objectives that have been published by Natural England where available (Natural England, 2014a-h; Natural England, 2016a).

Natural England is currently undertaking a Marine Protected Area (MPA) conservation advice project to provide conservation advice that is clear, easily understood and meets the needs of the organisations and individuals that use it. Draft advice for Portsmouth Harbour SPA was produced in March 2015 (Natural England, 2015b) and draft advice for Solent Maritime SAC, was produced in May 2016 (Natural England, 2016b). Draft advice packages for South Wight Maritime SAC, Solent and Southampton Water SPA, and Chichester and Langstone Harbour SPA are in the process of being produced but are not available at present (July 2016). The advice for these sites is therefore still contained in the existing Regulation 35 advice packages for the Solent European Marine Site and South Wight Maritime European Marine Site (English Nature, 2001a; 2001b).

The current favourable condition status has not yet been defined specifically for any of the European/Ramsar sites identified in this HRA. However, a condition assessment of the respective Sites of Special Scientific Interest (SSSIs) which cover virtually the same geographic extent as the European/Ramsar sites, has been undertaken by Natural England⁹. The majority of SSSI units are described as being in favourable condition and meet the Government's Public Service Agreement (PSA) target to have 95% of the SSSI area in favourable or recovering condition by 2010.

The target condition of interest features comprising European/Ramsar sites is intended to define the desired condition of an attribute, taking into account fluctuations due to natural change. Appendix B provides an overview of the target condition of interest features and sub-features of the above European/Ramsar sites that are included in the favourable condition tables published in the Regulation 35(3) advice documents (English Nature, 2001a; b). No target conditions have been published for the interest features of the New Forest SAC, SPA and Ramsar site, the River Itchen SAC and the Solent and Dorset pSPA.

⁹ <https://designatedsites.naturalengland.org.uk/>

6 Direct and Indirect Changes

There is no specific information on the scale and nature of the development proposals for the infrastructure requirements identified in the Master Plan for the Eastern and Western Docks nor is there a detailed design for the development of port facilities on the strategic land reserve held for future port expansion. There is also no information on how opportunities to develop, redevelop and intensify employment uses at the Marchwood and Cracknore Industrial Parks will be taken up. It is, therefore, not possible at this stage to definitively assess the direct and indirect effects of the proposed developments included in the Port Master Plan on European/Ramsar sites. Such an assessment will be undertaken as projects come forward, as appropriate.

In particular, it is not known how future port development on the strategic land reserve might be carried out. The site is sufficiently large to permit consideration of alternative development strategies. Once ABP has undertaken the necessary feasibility studies and research into how the Port can be expanded, ABP will discuss with stakeholders, including Natural England, the Environment Agency, nature conservation NGOs, local government at all levels, and local people, how the site might best be developed. The requirements of the Habitats Regulations, especially in respect of the need to avoid an adverse effect on European/Ramsar site integrity, for mitigation and compensatory measures (and the form those might take) and assessment of the cumulative effects, will be central to those discussions. ABP's previous scheme for the development of the strategic land reserve cannot be taken as being indicative of any future proposal.

Although it is not possible to undertake a detailed assessment of the effects of any of the developments that might come forward as a result of the Master Plan at this stage, it is possible to identify the key impacts pathways that are likely to be relevant and may need to be assessed as part of project-level HRAs when further details of proposals are available. These are considered to include (but not be limited to) the following:

- Physical loss/gain of habitat interest features;
- Changes in suspended sediments and effects on habitats and fish interest features;
- Deposition of disturbed sediments on habitat interest features;
- Changes in water quality as a result of the dispersal of any associated sediment bound contaminants and effects on habitats and fish interest features;
- Effects of underwater noise on fish interest features;
- Effects of construction and operational noise on bird interest features;
- Effects of changes in line of sight on bird interest features; and
- Physical loss/gain of foraging habitat and changes in prey availability on bird interest features.

The location, scale, nature (or method) and timing of the works will be important factors in determining whether any of the above are relevant and likely to result in a significant effect on European/Ramsar site interest features. For example, if any marine works that are likely to disturb sediments and/or generate underwater noise can be undertaken outside of the Atlantic salmon migration window then adverse effects on this SAC interest feature can be avoided.

In due course, if it is considered necessary to undertake a project-level HRA for a specific development proposal coming forward as a result of the Master Plan, the target condition table provided in Appendix B will be used to assess the potential impacts on the relevant interest features and sub-features. Assessing the predicted effects of a scheme in relation to the targets enables the potential effect on favourable condition and hence on the status of these sites to be determined.

Should the future port expansion identified in the Master Plan for the strategic land reserve be brought forward in the future, then it is recognised that such a development proposal may well have a LSE on one or more of the European/Ramsar sites and will, most likely, require an AA to be undertaken by the competent authority. The AA may conclude that the development proposal will have an AEOI or it may conclude that it is not able to exclude the possibility of an AEOI with the necessary level certainty required under the Habitats Regulations. In this event, ABP will need to provide sufficient evidence that there are no alternative solutions and that the development proposal is necessary for Imperative Reasons of Overriding Public Interest (IROPI), including those of a social or economic nature. In these circumstances, before such a plan can proceed, compensatory measures will need to be identified as part of the design process and brought forward for consideration with the application. ABP will seek to discuss with stakeholders, in particular Natural England, a methodology and process to achieve this objective as necessary.

7 Mitigation Measures

Mitigation measures provide for a system to reduce or avoid the potential adverse environmental impacts of development activities. Such mitigation measures can be in the form of preventative or corrective measures. Prevention means that the potential impact is prevented or reduced before it occurs. Corrective measures reduce the impact to a level which is acceptable.

Department for Transport (DfT) guidance on Port Master Plans acknowledges that it is not always possible to identify mitigation measures for the potential environmental impact of new development at the Master Plan stage (DfT, 2008). Preventative measures and mitigation will be investigated as part of any project-level assessments undertaken as development proposals in the Master Plan come forward, as appropriate.

8 In-Combination Effects with Other Plans and Projects

The Habitats Regulations require assessment of in-combination effects of plans and projects on European/Ramsar sites. These refer to effects, which may or may not interact with each other, but which could affect the same interest feature.

Plans and programmes that could potentially have in-combination effects with the Master Plan have been identified in the Draft Master Plan and the Draft SAA Report.

Assuming that the development proposals identified in the Master Plan are implemented in full, particularly the future port expansion of the strategic land reserve, the Master Plan is considered potentially to have a LSE on one or more European/Ramsar sites both alone and in-combination with other plans and projects.

A review of applicable plans and projects will be undertaken at the appropriate time when the individual infrastructure requirements are being advanced for application. The in-combination effects of the development with extant projects will then be assessed as part of project-level HRAs.

9 Consideration of Alternative Solutions

Where a plan is considered to fall under Regulations 62 or 103 of the Habitats Regulations and is concluded to have an AEOI on a European/Ramsar site (or the possibility of an AEOI cannot be excluded), the plan-making authority must be satisfied that there are no alternative solutions.

ABP has given careful consideration to alternatives to the strategy put forward in the Draft Master Plan. Three potential strategic alternatives to the strategy set out in the Draft Master Plan have been considered, as follows.

1. Restrict forecast investment so that the Port has to operate permanently within the physical limits of the existing docks

A decision would be required to the effect that the Port should not take up opportunities to grow its trade, meaning that it would cease to be in the first rank of UK and international ports. This scenario is not acceptable to ABP and would be contrary to national and local policies. It would result in significant adverse implications not only for the Port but also for the wider economy. This alternative strategy would have potentially severe adverse economic and social impacts on the Port and the economy of the local area and the South East region and limit the ability of the UK to participate in global trade. There would be no guarantee that the Port would secure a 'niche' role to replace its current status. Such a strategy would clearly not maintain and enhance the identified role of the Port, and would not make a positive contribution to a competitive, efficient and resilient port sector as set out in National Policy. For these reasons summarised above, this option is demonstrably unacceptable and is therefore not a reasonable or realistic alternative.

2. Implement the investment strategy set out in the Draft Master Plan to around 2020 and thereafter limit port operations to the existing commercial docks

This is a variation of the first alternative. The difference is that the point at which the role of the Port would decline would, at least in theory, be delayed. This option suffers from the same disadvantages as the first option. Moreover, it might prove to be an illusory option. The companies that constitute the Port's primary customer base might be reluctant to make significant investments in Port infrastructure if it was clear that the Port could not thereafter accommodate their future expansion plans. As the Master Plan makes clear, if a Port cannot accommodate all of a customer's needs, it generally does not get the chance to provide for just a part of those needs. This alternative might therefore turn out to be little different to the first option, in that it would be impossible to maintain and enhance the role of the Port beyond the short term. Like the first option, its adoption would have significant adverse effects on the Port, the people who work there or in related industries and the economic well being of the City, the sub-region and UK's global competitiveness.

Thus this option is also considered unacceptable. It should, however, be noted that it would effectively form the 'default strategy' for the Port in the absence of consent for port expansion, underlining the significance of port expansion if the policy objectives for the Port set out in local and sub-regional policy or the national policy requirement for a competitive, efficient and resilient port sector are to be achieved. For these reasons summarised above, this option is demonstrably unacceptable and is therefore not a reasonable or realistic alternative.

3. Implement the Draft Master Plan Strategy to 2020 but thereafter expand the Port in a form or location that would have fewer adverse environmental implications

Implementation of the Draft Master Plan strategy proposals to 2020 would take the Port to the point at which further significant overall growth would not be possible within the existing docks. The Port could maintain and enhance its role beyond this point only if permitted to expand elsewhere.

The question of where the Port might expand after the capacity of the existing docks has been reached has been researched on a number of occasions since the 1960s. The consistent conclusion of these analyses has been that the strategic land reserve is the only location where substantial port development can take place. This conclusion has strengthened over the years as other potential port development opportunities have been developed for other uses.

Historic studies carried out in 2000/2001 identified and investigated 16 other possible locations that, on paper, appeared at that time to have potential for Port expansion. They concluded that the strategic land reserve was the only one of these locations on to which the Port of Southampton could, in practice, expand. This conclusion was supported by an independent Public Inquiry Inspector and confirmed by the Secretary of State for Transport. Furthermore in the New Forest District Council's core strategy, the Council has acknowledged the national and regional importance of the Port and concluded that the strategic land reserve is the only site physically capable of accommodating significant expansion of the port.

The sixteen possible alternative locations considered were as follows:

- A. Redbridge
- B. Berths 201/202
- C. Western Docks
- D. Mayflower Park, Town Quay and Royal Pier
- E. Trafalgar Dry Dock
- F. Ocean Dock
- G. Empress Dock
- H. Eastern Docks
- I. Eastern Docks extension
- J. Weston Shore
- K. Warsash (Solent Breezes)
- L. Bramble Bank
- M. Fawley Power Station
- N. Fawley Oil Refinery
- O. Fawley Industrial Complex
- P. Site of former Marchwood Power Station

Nine of these possibilities were small or relatively small-scale seaward extensions to the existing docks (Alternatives A-I). Alternative B, the redevelopment of berths 201/202 was completed by ABP in 2014 and the additional capacity provided is now included within the Draft Master Plan as existing capacity. Mixed use development proposals at Alternative D, Mayflower Park and Royal Pier, is currently being brought forward. Alternative E will be the new home to the relocated Red Funnel ferry service, as the result of the development at Royal Pier and the rest of these nine suggestions are demonstrably impractical and/or would deliver very little benefit.

The six larger scale development possibilities: coastal locations at Woolston (Alternative J), in the Fawley area (Alternatives M-O) and at Hook (Alternatives K and L), are presently part intertidal or

permanently under water. ABP has no property interests in any of them and Fawley Power Station (Alternative M) has recently been purchased by a developer for residential and marina development.

The implementation of major port development in locations J, K, N and O would have significant direct and/or indirect effects on European and/or European Marine sites. Lack of sufficiently detailed information about proposals precludes a conclusive judgment that these effects would be greater than those associated with developing the strategic land reserve, but this is considered likely to be the case. None of the major possibilities considered currently exist as land suitable for port development. In several cases existing uses would have to be displaced to build a port.

Other marine and terrestrial infrastructure would also be required, that would have adverse impacts on the environment. There would be little or no realistic prospect of achieving a rail connection or a suitable road connection to port development at Alternatives J, K, and L, and this consideration alone would rule them out as locations for major port facilities for all the trades for which expansion land and berths might be sought. The Fawley locations could potentially be provided with a rail connection, but it is further from national transport networks than the strategic land reserve, and the required improvements to road as well as rail connections would have a correspondingly greater impact. Fundamentally, however, the importance of the Fawley refinery and associated complex has increased over recent years due to the removal of refinery capacity from elsewhere within the UK.

The former Marchwood Power Station site (Alternative P) has now been redeveloped as a power station and as an Energy Recovery Facility. Whilst ABP has now bought the freehold of the area around these sites, those areas are occupied on long term leases by a variety of employment uses that are themselves significant in terms of local and sub-regional employment provision. Furthermore, the Draft Master Plan strategy already seeks to intensify employment uses on these areas, particularly for vital port supporting and related uses.

The possibility of establishing a shipping facility at Bramble Bank (Alternative L), located out in the estuary, can be dismissed as impractical.

The Marchwood Sea Mounting Centre, located between the Cracknore Industrial Estate and the Port's strategic land reserve, has also previously been identified as a possible site for expansion of port operations. There is, however, no longer the possibility of the site being available to ABP in respect of the needs of the Port of Southampton as a long term concession agreement for the running of the site has been signed with third parties. The facility, therefore, cannot provide for the needs of the ABP Port of Southampton. Furthermore, although a concession for the site has been signed, ABP understands that the facility will remain first and foremost a port facility where the needs of the Ministry of Defence still take precedence.

In conclusion, the position is that the strategic land reserve is demonstrably the only area of land that is physically capable of accommodating significant expansion of the ABP Port of Southampton. There is thus no credible alternative to the strategy set out in the Draft Master Plan and the expansion of the Port onto the strategic land reserve.

Any future application for consent to develop the strategic land reserve would have to be supported by evidence, at the time the application is submitted, that there is no suitable alternative to the specific development proposals that either does not affect European/Ramsar sites or does them less harm. A judgment about alternatives will require detailed knowledge of the proposals, their effect on European/Ramsar sites, and the measures that are included in the application to avoid and reduce the effect of the proposals. The information required will not be available until detailed proposals have been drawn up. For the purposes of the Draft Master Plan and the Draft Shadow HRA, it is, however, reasonable to conclude that the evidence supporting such a conclusion is likely to be strong.

10 Imperative Reasons of Overriding Public Interest

In addition to consideration of alternative solutions, where a plan is concluded to have an AEOI on a European/Ramsar site (or the possibility of an AEOI cannot be excluded), the plan-making authority must be satisfied that it is necessary for IROPI, including those of a social or economic nature.

There is strong evidence to support the existence of an IROPI case now and in the future in respect of the needs of the Port of Southampton. The Port of Southampton is recognised as a key international gateway and a component of the nation's transport system that, along with the other identified components, is critical to the functioning of the transport system as a whole and to the economic success of the nation. Recent precedent – in respect of proposals to improve the marine access to and from the Port – has demonstrated that an IROPI case can be successfully made out in respect of the needs of the Port of Southampton. If any necessary future IROPI case is accepted by the Secretary of State then it will be necessary to bring forward such compensatory measures as are considered necessary (see Section 11).

11 Compensatory Measures

It is considered likely that compensatory measures will be required in respect of any proposals for future port expansion on the strategic land reserve. ABP will discuss the need for such measures, and the form they might take, with relevant bodies, including Natural England in particular, as early as possible in the process of bringing a proposal forward at the site.

There are a number of port development projects throughout the country where such compensation has been agreed and provided. Some of these projects relate to developments promoted by ABP at other ports, for example the creation of new intertidal habitats in compensation for developments at a number of European/Ramsar sites in the Humber Estuary. Although the precise nature and extent of compensatory measures would need to be determined at the time of any detailed proposal, ABP is confident that sufficient compensatory measures can be put in place in respect of any development of the strategic land reserve for port purposes.

12 Overall Plan Impact Evaluation

This Shadow HRA has demonstrated that the full implementation of the development proposals in the Draft Master Plan is considered to have a LSE on one or more European/Ramsar sites both alone and in-combination with other plans and projects.

At this stage, there is not sufficient detail on the scale and nature of the development proposals to determine with any certainty whether an AEOI will occur or not but it is recognised that this is a possibility, particularly in relation to any future port expansion on the strategic land reserve. The Draft Shadow HRA has therefore provided sufficient evidence at this stage to demonstrate that there are no feasible alternative solutions and that matters constituting IROPI exist or are very likely to exist in the future.

Each development proposal or aspiration within the Master Plan will be required to undergo a project-level HRA wherever the possibility of a LSE on a European/Ramsar site cannot be excluded. In these cases, ABP will need to provide the necessary information for a project-level AA to be undertaken by the competent authority. The requirement for project-level HRAs to be undertaken where relevant is considered to provide the necessary assurance that the Master Plan will not result in an AEOI, or if it does, that the subsequent required tests will be met.

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14 Abbreviations/Acronyms

AA	Appropriate Assessment
ABP	Associated British Ports
ABPmer	ABP Marine Environmental Research Ltd
AEOI	Adverse Effect on Site Integrity
cSAC	Candidate Special Area of Conservation
EC	European Commission
EU	European Union
GVA	Gross Value Added
HM	Her Majesty's
HRA	Habitats Regulations Assessment
IMU	Intertidal mudflat
IROPI	Imperative Reasons of Overriding Public Interest
ISLES	Irish-Scottish Links on Energy
LMS	Littoral mud sand
LMU	Littoral mud
LMX	Littoral mixed
LSE	Likely significant effect
MMO	Marine Management Organisation
MPA	Marine Protected Area
NGO	Non-governmental organisations
NPSfP	National Policy Statement for Ports
pSAC	Possible Special Area of Conservation
pSPA	Potential Special Protection Area
PSA	Public Service Agreement
Ramsar	Ramsar Convention on Wetlands of International Importance
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SCI	Sites of Community Importance
SM	Saltmarsh
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
UK	United Kingdom

Cardinal points/directions are used unless otherwise stated.

SI units are used unless otherwise stated.

Appendices



A Qualifying Features and Conservation Objectives

Table A1. Qualifying features and conservation objectives of the European/Ramsar Sites that could be affected by the Master Plan

Site	Qualifying Features	Conservation Objectives
Chichester and Langstone Harbours Ramsar Site	<p>Ramsar criterion 1 Two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes.</p> <p>Ramsar criterion 5 Waterfowl assemblages of international importance.</p> <p>Ramsar criterion 6 Species/populations occurring at levels of international importance. Qualifying Species/populations (as identified at designation): Species with peak counts in spring/autumn: Ringed plover <i>Charadrius hiaticula</i> Black-tailed godwit <i>Limosa limosa islandica</i> Common redshank <i>Tringa totanus totanus</i> Species with peak counts in winter: Dark-bellied brent goose <i>Branta bernicla bernicla</i> Common shelduck <i>Tadorna tadorna</i> Grey plover <i>Pluvialis squatarola</i> Dunlin <i>Calidris alpina alpina</i> Species/populations identified subsequent to designation for possible future consideration under criterion 6. Species regularly supported during the breeding season: Little tern <i>Sterna albifrons albifrons</i></p>	<p>English Nature (2001a)</p> <p>Subject to natural change, maintain the internationally important wetlands characteristic of the biogeographical region in favourable condition, in particular, estuaries, saltmarshes and intertidal mudflats and sandflats.</p> <p>Subject to natural change, maintain the wetland regularly supporting 20,000 waterfowl in favourable condition, in particular shingle, saltmarsh, intertidal mudflats and sandflats, mixed sediment shores, and shallow coastal waters.</p> <p>Subject to natural change, maintain the wetland supporting 1% or more of the individuals in a population of waterfowl species in favourable condition, in particular saltmarsh, intertidal mudflats and sandflats, mixed sediment shores, shingle, sand and shingle, shallow coastal waters.</p>
Chichester and Langstone Harbour SPA	<p>A046a <i>Branta bernicla bernicla</i>; Dark-bellied brent goose (Non-breeding)</p> <p>A048 <i>Tadorna tadorna</i>; Common shelduck (Non-breeding)</p> <p>A050 <i>Anas penelope</i>; Eurasian wigeon (Non-breeding)</p> <p>A052 <i>Anas crecca</i>; Eurasian teal (Non-breeding)</p> <p>A054 <i>Anas acuta</i>; Northern pintail (Non-breeding)</p> <p>A056 <i>Anas clypeata</i>; Northern shoveler (Non-breeding)</p> <p>A069 <i>Mergus serrator</i>; Red-breasted merganser (Non-breeding)</p> <p>A137 <i>Charadrius hiaticula</i>; Ringed plover (Non-breeding)</p> <p>A141 <i>Pluvialis squatarola</i>; Grey plover (Non-breeding)</p> <p>A144 <i>Calidris alba</i>; Sanderling (Non-breeding)</p> <p>A149 <i>Calidris alpina alpina</i>; Dunlin (Non-breeding)</p> <p>A157 <i>Limosa lapponica</i>; Bar-tailed godwit (Non-breeding)</p> <p>A160 <i>Numenius arquata</i>; Eurasian curlew (Non-breeding)</p>	<p>English Nature (2001a)</p> <p>Subject to natural change, maintain in favourable condition the habitats for the internationally important populations of the regularly occurring Annex I species, in particular, sand and shingle, and shallow coastal waters.</p> <p>Subject to natural change, maintain in favourable condition the habitats for the internationally important populations of the regularly occurring migratory species, in particular, shingle, saltmarsh and intertidal mudflats and sandflats, and mixed sediment shores.</p> <p>Subject to natural change, maintain in favourable condition the habitats for the internationally important assemblage of waterfowl, in particular, shingle, saltmarsh, intertidal mudflats and sandflats, mixed sediment shores, and shallow coastal waters.</p>

Site	Qualifying Features	Conservation Objectives
	A162 <i>Tringa totanus</i> ; Common redshank (Non-breeding) A169 <i>Arenaria interpres</i> ; Ruddy turnstone (Non-breeding) A191 <i>Sterna sandvicensis</i> ; Sandwich tern (Breeding) A193 <i>Sterna hirundo</i> ; Common tern (Breeding) A195 <i>Sterna albifrons</i> ; Little tern (Breeding) Waterbird assemblage	Natural England (2014a) With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features'), and subject to natural change; Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of the habitats of the qualifying features; ▪ The structure and function of the habitats of the qualifying features; ▪ The supporting processes on which the habitats of the qualifying features rely; ▪ The population of each of the qualifying features; and ▪ The distribution of the qualifying features within the site.
New Forest Ramsar Site	<p>Ramsar criterion 1 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 adverse ecological change. This is the largest concentration of intact valley mires of their type in Britain.</p> <p>Ramsar criterion 2 The site supports a 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>Ramsar criterion 3 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>	None listed for the Ramsar designation.
New Forest SAC	H3110. Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>); Nutrient-poor shallow waters with aquatic vegetation on sandy plains H3130. Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> ; Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels H4010. Northern Atlantic wet heaths with <i>Erica tetralix</i> ; Wet heathland with cross-leaved heath H4030. European dry heaths H6410. <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>); Purple moor-grass meadows H7140. Transition mires and quaking bogs; Very wet mires often identified by an unstable 'quaking' surface	Natural England (2014b) With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features'), and subject to natural change; Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species; ▪ The structure and function (including typical species) of qualifying natural habitats; ▪ The structure and function of the habitats of qualifying species; ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; ▪ The populations of qualifying species; and ▪ The distribution of qualifying species within the site.

Site	Qualifying Features	Conservation Objectives
	<p>H7150. Depressions on peat substrates of the <i>Rhynchosporion</i></p> <p>H7230. Alkaline fens; Calcium-rich springwater-fed fens</p> <p>H9120. Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Illici-Fagenion</i>); Beech forests on acid soils</p> <p>H9130. <i>Asperulo-Fagetum</i> beech forests; Beech forests on neutral to rich soils</p> <p>H9190. Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains</p> <p>H91D0. Bog woodland*</p> <p>H91E0. Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>); Alder woodland on floodplains*</p> <p>S1044. <i>Coenagrion mercuriale</i>; Southern damselfly</p> <p>S1083. <i>Lucanus cervus</i>; Stag beetle</p> <p>S1166. <i>Triturus cristatus</i>; Great crested newt</p>	
<p>New Forest SPA</p>	<p>A072 <i>Pernis apivorus</i>; European honey-buzzard (Breeding)</p> <p>A082 <i>Circus cyaneus</i>; Hen harrier (Non-breeding)</p> <p>A099 <i>Falco subbuteo</i>; Eurasian hobby (Breeding)</p> <p>A224 <i>Caprimulgus europaeus</i>; European nightjar (Breeding)</p> <p>A246 <i>Lullula arborea</i>; Woodlark (Breeding)</p> <p>A302 <i>Sylvia undata</i>; Dartford warbler (Breeding)</p> <p>A314 <i>Phylloscopus sibilatrix</i>; Wood warbler (Breeding)</p>	<p>Natural England (2014c)</p> <p>With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features'), and subject to natural change; Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of the habitats of the qualifying features; ▪ The structure and function of the habitats of the qualifying features; ▪ The supporting processes on which the habitats of the qualifying features rely; ▪ The population of each of the qualifying features; and ▪ The distribution of the qualifying features within the site.
<p>Portsmouth Harbour Ramsar</p>	<p>Ramsar criterion 3</p> <p>The intertidal mudflat areas possess extensive beds of eelgrass <i>Zostera angustifolia</i> and <i>Zostera noltei</i> which support the grazing dark-bellied brent geese populations. The mud-snail <i>Hydrobia ulvae</i> is found at extremely high densities, which helps to support the wading bird interest of the site. Common cord-grass <i>Spartina anglica</i> dominates large areas of the saltmarsh and there are also extensive areas of green algae <i>Enteromorpha</i> spp. and sea lettuce <i>Ulva lactuca</i>. More locally the saltmarsh is dominated by sea purslane <i>Halimione portulacoides</i> which gradates to more varied communities at the higher shore levels. The site also includes a number of saline lagoons hosting nationally important species.</p> <p>Ramsar criterion 6</p> <p>species/populations occurring at levels of international importance. Qualifying Species/populations (as identified at designation): Species</p>	<p>English Nature (2001a)</p> <p>Subject to natural change, maintain the internationally important wetland characteristic of the Atlantic biogeographical region in favourable condition, in particular:</p> <ul style="list-style-type: none"> ▪ Estuaries; ▪ Saltmarsh; and ▪ Intertidal mudflats and sandflats. <p>Subject to natural change, maintain the wetland supporting genetically and ecologically diverse flora and fauna in favourable condition, in particular:</p> <ul style="list-style-type: none"> ▪ Saltmarsh; ▪ Cordgrass swards; and ▪ Intertidal mudflats and sandflats.

Site	Qualifying Features	Conservation Objectives
	with peak counts in winter: Dark-bellied Brent goose, <i>Branta bernicla bernicla</i> .	Subject to natural change, maintain the wetland supporting 1% or more of the individuals in a population of waterfowl in favourable condition, in particular: <ul style="list-style-type: none"> ▪ Saltmarsh; ▪ Shallow coastal waters; and ▪ Intertidal mudflats and sandflats.
Portsmouth harbour SPA	A046a <i>Branta bernicla bernicla</i> ; Dark-bellied brent goose (Non-breeding) A069 <i>Mergus serrator</i> ; Red-breasted merganser (Non-breeding) A149 <i>Calidris alpina alpina</i> ; Dunlin (Non-breeding) A156 <i>Limosa limosa islandica</i> ; Black-tailed godwit (Non-breeding)	English Nature (2001a) Subject to natural change, maintain in favourable condition the habitats for the nationally and internationally important populations of the regularly occurring migratory species , in particular: <ul style="list-style-type: none"> ▪ Saltmarsh; ▪ Intertidal mudflats and sandflats; and ▪ Shallow coastal waters.
		Natural England (2014d) With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features'), and subject to natural change; Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of the habitats of the qualifying features; ▪ The structure and function of the habitats of the qualifying features; ▪ The supporting processes on which the habitats of the qualifying features rely; ▪ The population of each of the qualifying features; and ▪ The distribution of the qualifying features within the site.
River Itchen SAC	H3260. Water courses of plain to montane levels with the <i>Ranuncion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation; Rivers with floating vegetation often dominated by water-crowfoot S1044. <i>Coenagrion mercuriale</i> ; Southern damselfly S1092. <i>Austropotamobius pallipes</i> ; White-clawed (or Atlantic stream) crayfish S1096. <i>Lampetra planeri</i> ; Brook lamprey S1106. <i>Salmo salar</i> ; Atlantic salmon S1163. <i>Cottus gobio</i> ; Bullhead S1355. <i>Lutra lutra</i> ; Otter	Natural England (2014e) With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features'), and subject to natural change; Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species; ▪ The structure and function (including typical species) of qualifying natural habitats; ▪ The structure and function of the habitats of qualifying species; ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; ▪ The populations of qualifying species; and ▪ The distribution of qualifying species within the site.
Solent and Dorset pSPA	A191 <i>Sterna sandvicensis</i> ; Sandwich tern (Breeding) A193 <i>Sterna hirundo</i> ; Common tern (Breeding) A195 <i>Sterna albifrons</i> ; Little tern (Breeding)	Natural England (2016a) With regard to the potential SPA and the individual species and/or assemblage of species for which the site may be classified (the 'Qualifying Features'), and subject to natural change; Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site

Site	Qualifying Features	Conservation Objectives
		contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of the habitats of the qualifying features; ▪ The structure and function of the habitats of the qualifying features; ▪ The supporting processes on which the habitats of the qualifying features rely; ▪ The population of each of the qualifying features; and ▪ The distribution of the qualifying features within the site.
Solent and Southampton Water Ramsar	<p>Ramsar criterion 1 The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs.</p> <p>Ramsar criterion 2 The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site.</p> <p>Ramsar criterion 5 Assemblages of international importance: Species with peak counts in winter: 51343 waterfowl (5 year peak mean 1998/99-2002/2003)</p> <p>Ramsar criterion 6 Species/populations occurring at levels of international importance. Qualifying Species/populations (as identified at designation): Species with peak counts in spring/autumn: Ringed plover, <i>Charadrius hiaticula</i>. Species with peak counts in winter: Dark-bellied brent goose, <i>Branta bernicla bernicla</i>, Eurasian teal, <i>Anas crecca</i>, Black-tailed godwit, <i>Limosa limosa islandica</i>.</p>	English Nature (2001a) Subject to natural change, maintain the internationally important wetland characteristic of the Atlantic biogeographical region in favourable condition, in particular: <ul style="list-style-type: none"> ▪ Estuaries; ▪ Saline lagoons; ▪ Saltmarsh; and ▪ Intertidal reefs. Subject to natural change, maintain the wetland hosting an assemblage of rare, vulnerable or endangered species in favourable condition, in particular: <ul style="list-style-type: none"> ▪ Saline lagoons; ▪ Saltmarsh; and ▪ Cordgrass swards (<i>Spartinon</i> spp.). Subject to natural change, maintain the wetland regularly supporting 20,000 waterfowl species in favourable condition, in particular: <ul style="list-style-type: none"> ▪ Saltmarshes; ▪ Intertidal mudflats and sandflats; ▪ Boulder and cobble shores; and ▪ Mixed sediment shores. Subject to natural change, maintain the wetland regularly supporting 1% or more of the individuals in a population of waterfowl species in favourable condition, in particular: <ul style="list-style-type: none"> ▪ Saltmarshes; ▪ Sand and shingle; ▪ Shallow coastal waters; ▪ Intertidal mudflats and sandflats; ▪ Boulder and cobble shores; and ▪ Mixed sediment shores.
Solent and Southampton Water SPA	A046a <i>Branta bernicla bernicla</i> ; Dark-bellied brent goose (Non-breeding) A052 <i>Anas crecca</i> ; Eurasian teal (Non-breeding) A137 <i>Charadrius hiaticula</i> ; Ringed plover (Non-breeding) A156 <i>Limosa limosa islandica</i> ; Black-tailed godwit (Non-breeding) A176 <i>Larus melanocephalus</i> ; Mediterranean gull (Breeding)	English Nature (2001a) Subject to natural change, maintain in favourable condition the habitats for the internationally important populations of the regularly occurring Annex 1 species , in particular: <ul style="list-style-type: none"> ▪ Sand and shingle; ▪ Saltmarsh;

Site	Qualifying Features	Conservation Objectives
	<p>A191 <i>Sterna sandvicensis</i>; Sandwich tern (Breeding) A192 <i>Sterna dougallii</i>; Roseate tern (Breeding) A193 <i>Sterna hirundo</i>; Common tern (Breeding) A195 <i>Sterna albifrons</i>; Little tern (Breeding) Waterbird assemblage</p>	<ul style="list-style-type: none"> ▪ Intertidal mudflats and sandflats; and ▪ Shallow coastal waters. <p>Subject to natural change, maintain in favourable condition the habitats for the internationally important populations of the regularly occurring migratory species, in particular:</p> <ul style="list-style-type: none"> ▪ Saltmarsh; ▪ Intertidal mudflats and sandflats; ▪ Boulder and cobble shores; and ▪ Mixed sediment shores. <p>Subject to natural change, maintain in favourable condition the habitats for the internationally important assemblage of waterfowl, in particular:</p> <ul style="list-style-type: none"> ▪ Saltmarsh; ▪ Intertidal mudflats and sandflats; ▪ Boulder and cobble shores; and ▪ Mixed sediment shores. <p>Natural England (2014f)</p> <p>With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change; Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of the habitats of the qualifying features; ▪ The structure and function of the habitats of the qualifying features; ▪ The supporting processes on which the habitats of the qualifying features rely; ▪ The population of each of the qualifying features; and ▪ The distribution of the qualifying features within the site.
<p>Solent Maritime SAC</p>	<p>H1110. Sandbanks which are slightly covered by sea water all the time H1130. Estuaries H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats H1150. Coastal lagoons* H1210. Annual vegetation of drift lines H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves H1310. <i>Salicornia</i> and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand H1320. <i>Spartina</i> swards (<i>Spartinion maritimae</i>); Cord-grass swards H1330. Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) H2120. Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes"); Shifting dunes with marram S1016. <i>Vertigo moulinsiana</i>; Desmoulin's whorl snail</p>	<p>English Nature (2001a)</p> <p>Subject to natural change, maintain the sandbanks slightly covered by seawater all the time in favourable condition, in particular:</p> <ul style="list-style-type: none"> ▪ Subtidal gravelly sand and sand; ▪ Subtidal muddy sand; and ▪ Subtidal eelgrass <i>Zostera marina</i> beds. <p>Subject to natural change, maintain the estuaries in favourable condition, in particular:</p> <ul style="list-style-type: none"> ▪ Saltmarsh communities; ▪ Intertidal mudflat & sandflat communities; ▪ Intertidal mixed sediment communities; and ▪ Subtidal sediment communities.

Site	Qualifying Features	Conservation Objectives
		<p>Subject to natural change, maintain the mudflats and sandflats not covered by seawater at low tide in favourable condition, in particular:</p> <ul style="list-style-type: none"> ▪ Intertidal mud communities; ▪ Intertidal muddy sand communities; ▪ Intertidal sand communities; and ▪ Intertidal mixed sediment communities. <p>Subject to natural change, maintain the annual vegetation of drift lines in favourable condition.</p> <p>Subject to natural change, maintain the Salicornia and other annuals colonising mud and sand in favourable condition, in particular:</p> <ul style="list-style-type: none"> ▪ Annual <i>Salicornia</i> saltmarsh communities (SM8); and ▪ <i>Suaeda maritima</i> saltmarsh communities (SM9). <p>Subject to natural change, maintain the cordgrass swards (<i>Spartinion</i>) in favourable condition, in particular:</p> <ul style="list-style-type: none"> ▪ Small cordgrass (<i>Spartina maritima</i>) communities; ▪ Smooth cordgrass (<i>Spartina alterniflora</i>) communities; and ▪ Townsend's cordgrass (<i>Spartina x townsendii</i>) communities. <p>Subject to natural change, maintain the Atlantic salt meadows (<i>Glauco-Puccinellietalia</i>) in favourable condition, in particular:</p> <ul style="list-style-type: none"> ▪ Low marsh communities; ▪ Mid-marsh communities; ▪ Upper marsh communities; and ▪ Transitional high marsh communities. <p>Natural England (2014g)</p> <p>With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features'), and subject to natural change;</p> <p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species; ▪ The structure and function (including typical species) of qualifying natural habitats; ▪ The structure and function of the habitats of qualifying species; ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; ▪ The populations of qualifying species; and ▪ The distribution of qualifying species within the site.

Site	Qualifying Features	Conservation Objectives
<p>South Wight Maritime SAC</p>	<p>H1170. Reefs H1230. Vegetated sea cliffs of the Atlantic and Baltic coasts H8330. Submerged or partially submerged sea caves</p>	<p>English Nature (2001b)</p> <p>Subject to natural change, maintain the reefs in favourable condition in particular:</p> <ul style="list-style-type: none"> ▪ Rocky shore communities; ▪ Kelp forest communities; ▪ Subtidal red algae communities; ▪ Subtidal faunal turf communities; and ▪ Sea cave communities. <hr/> <p>Natural England (2014h)</p> <p>With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change; Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats; ▪ The structure and function (including typical species) of qualifying natural habitats; and ▪ The supporting processes on which qualifying natural habitats rely.
<p>* Denotes a priority natural habitat or species.</p>		

B Favourable Condition Tables

Table B1. Chichester and Langstone Harbours Ramsar site

Feature/ Criteria	Sub-feature	Attribute	Target
Criterion 1	Estuaries	For estuary favourable condition tables see Solent Maritime SAC favourable condition table (Atlantic saltmeadows, cordgrass swards and <i>Salicornia</i>).	
	Saltmarsh	For saltmarsh favourable condition tables see Solent Maritime SAC favourable condition table.	
	Intertidal mudflats and sandflats	For intertidal mudflat and sandflat favourable condition tables see condition tables see Chichester and Langstone Harbours SPA favourable condition table.	
Criteria 5	Shingle	For shingle favourable condition tables see Chichester and Langstone Harbours SPA favourable condition table.	
	Saltmarsh	For saltmarsh favourable condition tables see Chichester and Langstone Harbours SPA favourable condition table.	
	Intertidal mudflats and sandflats	For intertidal mudflats and sandflats favourable condition tables see Chichester and Langstone Harbours SPA favourable condition table.	
	Mixed sediment shores	For mixed sediment shores favourable condition tables see Chichester and Langstone Harbours SPA favourable condition table.	
	Shallow coastal waters	For saltmarsh favourable condition tables see Chichester and Langstone Harbours SPA favourable condition table.	
Criterion 6	Sand and shingle	For sand and shingle favourable condition tables see Chichester and Langstone Harbours SPA favourable condition table	

Table B2. Chichester and Langstone Harbours SPA

Feature/ Criteria	Sub-feature	Attribute	Target
Internationally important populations of regularly occurring Annex 1 species		Disturbance	No significant reduction in numbers or displacement of wintering birds from an established baseline, subject to natural change.
		Absence of obstructions to view lines	No increase in obstructions to existing bird view lines from an established baseline.
	Sand and Shingle	Extent and distribution of habitat	No decrease in extent from an established baseline, subject to natural change.
		Vegetation characteristics	Vegetation height and density throughout areas used for nesting should not deviate significantly from an established baseline, subject to natural change.
	Shallow coastal waters	Food availability	Presence and abundance of suitable prey species should not deviate significantly from an established baseline, subject to natural change.
Internationally important Waterfowl assemblage, including the internationally important regularly occurring migratory species		Disturbance	No significant reduction in numbers or displacement of wintering birds from an established baseline, subject to natural change.
		Absence of obstructions to view lines	No increase in obstructions to existing bird view lines from an established baseline.
	Shingle	Extent and distribution of habitat	No decrease in extent from an established baseline, subject to natural change.
	Saltmarsh	Extent and distribution of habitat	No decrease in extent from an established baseline, subject to natural change.
		Vegetation characteristics	Sward height and density throughout areas used for roosting should not deviate significantly from an established baseline, subject to natural change.
		Food availability	Presence and abundance of prey species and saltmarsh food plants should not deviate significantly from an established baseline, subject to natural change.
	Intertidal mudflats and sandflats	Extent and distribution of habitat	No decrease in extent from an established baseline, subject to natural change.
		Food availability	Presence and abundance of prey species and food plants should not deviate significantly from an established baseline, subject to natural change.
	Mixed sediment shores	Extent and distribution of habitat	No decrease in extent from an established baseline, subject to natural change.
		Food availability	Presence and abundance of prey species and algae should not deviate significantly from an established baseline, subject to natural change.
Internationally important Waterfowl assemblage (this subfeature is not included for the internationally important regularly occurring migratory species)	Shallow coastal waters	Food availability	Presence and abundance of prey species should not deviate significantly from an established baseline, subject to natural change.

Table B3. Portsmouth Harbour Ramsar

Feature/ Criteria	Sub-feature	Attribute	Target
Criterion 3	Estuaries	For estuary favourable condition tables see Solent Maritime SAC favourable condition table (Atlantic saltmeadows, cordgrass swards and <i>Salicornia</i>).	
	Saltmarsh	For saltmarsh favourable condition tables see Portsmouth Harbour SPA favourable condition table.	
	Intertidal mudflats and sandflats	For intertidal mudflat and sandflat favourable condition tables see condition tables see Chichester and Langstone Harbours SPA favourable condition table.	
Criterion 6	Intertidal mudflats and sandflats	For intertidal mudflat and sandflat favourable condition tables see condition tables see Portsmouth Harbour SPA favourable condition table.	
	Shallow coastal waters	For shallow coastal waters favourable condition tables see Portsmouth Harbour SPA favourable condition table.	

Table B4. Portsmouth Harbour SPA

Feature/ Criteria	Sub-feature	Attribute	Target
Internationally important regularly occurring migratory species (includes the nationally important regularly occurring migratory species)		Disturbance	No significant reduction in numbers or displacement of wintering birds from an established baseline, subject to natural change.
		Absence of obstructions to view lines	No increase in obstructions to existing bird view lines from an established baseline.
	Saltmarsh	Extent and distribution of habitat	No decrease in extent from an established baseline, subject to natural change.
		Vegetation characteristics	Sward height and density throughout areas used for roosting should not deviate significantly from an established baseline, subject to natural change.
		Food availability	Presence and abundance of prey species and saltmarsh food plants should not deviate significantly from an established baseline, subject to natural change.
	Intertidal mudflats and sandflats	Extent and distribution of habitat	No decrease in extent from an established baseline, subject to natural change.
		Food availability	Presence and abundance of prey species and eelgrass should not deviate significantly from an established baseline, subject to natural change.
	Shallow coastal waters	Food availability	Presence and abundance of prey species and algae should not deviate significantly from an established baseline, subject to natural change.

Table B5. Solent and Southampton Water Ramsar

Feature/ Criteria	Sub-feature	Attribute	Target
Criterion 1	Estuaries.	For estuary favourable condition tables see Solent Maritime SAC favourable condition table (estuaries).	
	Saline Lagoons	Extent	No decrease in extent from an established baseline, subject to natural change.
		Salinity	Average seasonal salinity and seasonal maxima and minima should not deviate significantly from an established baseline, subject to natural change.
		Water depth	Average water depth should not deviate significantly from an established baseline, subject to natural change.
		Isolating barrier – presence and nature	No change in measure from established baseline, subject to natural change.
		Species composition	Presence and abundance of composite species should not deviate significantly from the established baseline, subject to natural change.
		Water clarity	Average light attenuation should not deviate significantly from an established baseline, subject to natural change.
	Saltmarsh	For saltmarsh favourable condition tables see Solent & Southampton Water SPA favourable condition table.	
	Intertidal reefs	Extent	No decrease in extent of reef from an established baseline, subject to natural change.
		Water temperature and salinity	Average temperature and salinity should not deviate significantly from an established baseline, subject to natural change.
		Water clarity	Average light attenuation should not deviate significantly from an established baseline, subject to natural change.
Characteristic species e.g. rocky shore communities		Range and distribution of characteristic biotopes should not deviate significantly from an established baseline, subject to natural change.	
Criterion 2	Saline lagoons	See Criterion 1	
	Saltmarsh	For saltmarsh favourable condition tables see Solent & Southampton Water SPA favourable condition table.	
	Cordgrass swards	For cordgrass favourable condition tables see Solent Maritime SAC favourable condition table.	
Criterion 5 and Criterion 6	Saltmarsh	For saltmarsh favourable condition tables see Solent & Southampton Water SPA favourable condition table.	
	Intertidal mudflats and sandflats	For intertidal mudflats and sandflats favourable condition tables see Solent and Southampton Water SPA favourable condition table.	
	Boulder and cobble shores	For boulder and cobble shore favourable condition tables see Solent and Southampton Water SPA favourable condition table.	
	Mixed sediment shores	For boulder and cobble shore favourable condition tables see Solent and Southampton Water SPA favourable condition table.	
Criterion 6	Sand and shingle	For sand and shingle favourable condition tables see Solent and Southampton Water SPA favourable condition table.	
	Shallow coastal waters	For shallow coastal waters favourable condition tables see Solent and Southampton Water SPA favourable condition table.	

Table B6. Solent and Southampton Water SPA

Feature/ Criteria	Sub-feature	Attribute	Target
Internationally important populations of regularly occurring Annex I species		Disturbance.	No significant reduction in numbers or displacement of birds from an established baseline, subject to natural change.
		Absence of obstructions to view lines.	No increase in obstructions to existing bird view lines from an established baseline.
	Sand and shingle	Extent and distribution of habitat.	No decrease in extent from an established baseline, subject to natural change.
		Vegetation characteristics.	Vegetation height and density throughout areas used for nesting should not deviate significantly from an established baseline, subject to natural change.
	Saltmarsh	Extent and distribution of habitat.	No decrease in extent from an established baseline, subject to natural change.
		Vegetation characteristics.	Sward height and density throughout areas used for nesting should not deviate significantly from an established baseline, subject to natural change.
		Food availability.	Presence and abundance of suitable prey species should not deviate significantly from an established baseline, subject to natural change.
	Intertidal mudflats and sandflats	Extent and distribution of habitat.	No decrease in extent from an established baseline, subject to natural change.
		Food availability.	Presence and abundance of suitable prey species should not deviate significantly from an established baseline, subject to natural change.
	Shallow coastal waters	Food availability.	Presence and abundance of suitable prey species should not deviate significantly from an established baseline, subject to natural change.
Internationally important waterfowl assemblage, including the internationally important regularly occurring migratory species		Disturbance.	No significant reduction in numbers or displacement of wintering birds from an established baseline, subject to natural change.
		Absence of obstructions to view lines.	No increase in obstructions to existing bird view lines from an established baseline.
	Saltmarsh	Extent and distribution of habitat.	No decrease in extent from an established baseline, subject to natural change.
		Vegetation characteristics.	Sward height and density throughout areas used for nesting should not deviate significantly from an established baseline, subject to natural change.
		Food availability.	Presence and abundance of suitable prey species should not deviate significantly from an established baseline, subject to natural change.
	Intertidal mudflats and sandflats	Extent and distribution of habitat.	No decrease in extent from an established baseline, subject to natural change.
		Food availability.	Presence and abundance of suitable prey species should not deviate significantly from an established baseline, subject to natural change.
	Boulder and cobble shores	Extent and distribution of habitat.	No decrease in extent from an established baseline, subject to natural change.
		Food availability.	Presence and abundance of prey species and algae should not deviate significantly from an established baseline, subject to natural change.
	Mixed sediment shores	Extent and distribution of habitat.	No decrease in extent from an established baseline, subject to natural change.
		Food availability.	Presence and abundance of prey species and algae should not deviate significantly from an established baseline, subject to natural change.

Table B7. Solent Maritime SAC

Feature/ Criteria	Sub-feature	Attribute	Target
Estuaries		Extent.	No decrease in extent from an established baseline, subject to natural change.
		Morphological equilibrium.	The intra- and inter-estuarine tidal prism/ cross-section ratio (of a given cross-section at high water springs) relationship should not deviate significantly from an established baseline, subject to natural change.
		Water density-temperature and salinity.	Average temperature and salinity should not deviate significantly from an established baseline, subject to natural change.
		Nutrient status.	Average phytoplankton concentration should not deviate significantly from an established baseline, subject to natural change.
	Saltmarsh communities	For information on the attributes of the saltmarsh communities sub-feature see the sections of this table which relate to the following interest features: cordgrass swards and Atlantic salt meadows.	
	Intertidal mudflat and sandflat communities	For information on the attributes of the intertidal mudflat & sandflat communities sub-feature see the sections of this table which relate to the following interest features: intertidal mudflats and sandflats.	
	Intertidal mixed sediment communities	For information on the attributes of the intertidal mixed sediment communities sub-feature see the sections of this table which relate to the following interest features: intertidal mudflats and sandflats.	
	Subtidal sediment communities	Extent.	No decrease in extent from an established baseline, subject to natural change.
	Range and distribution of characteristic subtidal sediment biotopes, for example: IMU biotopes.	Range and distribution should not deviate significantly from an established baseline, subject to natural change.	
Annual vegetation of drift lines		Extent.	No decrease in linear extent of vegetation from an established baseline, subject to natural change. Extent must take account of natural variation of this habitat as a result of dynamic coastal processes (storm events etc.). Indicative target is for 10% of vegetation maintained seasonally over structure that could support it.
		Mobility.	No increase in extent constrained by introduced structures, landforms or operations. These areas to be identified whilst undertaking baseline monitoring.
		Coastal processes.	Maintain sediment supply to and within the site through coastal processes to allow a balance of accretion and erosion. A net balanced sediment budget should prevail, subject to natural variation.
		Substrate composition.	Maintain substrate composition with sufficiently low levels of human-induced disturbance to allow drift line vegetation to complete its vegetation cycle. As an indicative target, drift line organic materials should be present along at least 10% of length surveyed, with artificial (non-organic) debris not restricting or suppressing vegetation establishment and growth. Targets appropriate to site should not deviate significantly from an established baseline, subject to natural change.
		Characteristic species of annual vegetation of drift lines.	Maintain the presence and broad distribution of stands of <i>Atriplex prostrata</i> / <i>Beta vulgaris maritima</i> – dominated community and other local variants of drift line vegetation across the feature, allowing for natural variation. As these communities can be very variable, local baselines will need to be established, but should not be lower than 10% of the area that could be colonised. Targets appropriate to site should not deviate significantly from an established baseline, subject to natural change.

Feature/ Criteria	Sub-feature	Attribute	Target
Atlantic salt meadows	Low marsh communities	Distribution and extent of low marsh communities.	Distribution and extent of low marsh communities should not deviate significantly from an established baseline, subject to natural change.
		Species composition of characteristic low marsh communities, for example SM10 and SM11.	Presence and abundance of constant species of characteristic low marsh communities should not deviate significantly from established baseline, subject to natural change.
	Mid marsh communities	Distribution and extent of mid marsh communities.	Distribution and extent of mid marsh communities should not deviate significantly from an established baseline, subject to natural change.
		Species composition of characteristic mid marsh communities, for example SM10, SM13 and SM14.	Presence and abundance of constant species of characteristic mid marsh communities should not deviate significantly from established baseline, subject to natural change.
	Upper marsh	Distribution and extent of upper marsh communities.	Distribution and extent of upper marsh communities should not deviate significantly from an established baseline, subject to natural change.
		Species composition of characteristic upper marsh communities, for example SM15 and SM16.	Presence and abundance of constant species of characteristic upper marsh communities should not deviate significantly from established baseline, subject to natural change.
	Transitional high marsh communities	Distribution and extent of upper transitional marsh communities.	Distribution and extent of upper transitional marsh communities should not deviate significantly from an established baseline, subject to natural change.
		Species composition of characteristic transitional marsh communities	Presence and abundance of constant species of characteristic transitional marsh communities should not deviate significantly from an established baseline, subject to natural change.
<i>Salicornia</i> and other annuals colonising mud and sand	Annual <i>Salicornia/Suaeda maritima</i> saltmarsh communities (SM8 and SM9)	Algal mat cover.	No increase in algal mat cover from an established baseline.
		Common cordgrass (<i>Spartina anglica</i>) community.	No increase in extent from an established baseline, subject to natural change.
		Distribution and extent.	No change in distribution and extent of annual <i>Salicornia</i> saltmarsh communities from an established baseline, subject to natural change.
Cordgrass swards	Small cordgrass communities	Distribution and extent of small cordgrass communities, for example SM4.	Distribution and extent of small cordgrass communities should not deviate significantly from an established baseline, subject to natural change.
		Distribution and extent of smooth cordgrass communities, for example SM5.	Distribution and extent of smooth cordgrass communities should not deviate significantly from an established baseline, subject to natural change.
	Townsend's cordgrass communities	Distribution and extent of Townsend's cordgrass communities, for example SM6.	Distribution and extent of smooth cordgrass communities should not deviate significantly from an established baseline, subject to natural change.
Intertidal mudflats and sandflats		Extent.	No decrease in extent from an established baseline, subject to natural change.
		Topography.	Shore profile should not deviate significantly from an established baseline, subject to natural change.
		Nutrient enrichment – macroalgal mats.	Average abundance of macroalgal mats should not increase from an established baseline, subject to natural change.
		Sediment character.	Average particle size analysis parameters should not deviate significantly from the baseline, subject to natural change.

Feature/ Criteria	Sub-feature	Attribute	Target
			Average sediment penetrability (degree of sinking) measure should not deviate significantly from an established baseline, subject to natural change.
			Average organic carbon content should not deviate significantly from an established baseline, subject to natural change.
			Average black anoxic layer depth should not deviate significantly from an established baseline, subject to natural change.
	Intertidal mud communities	Range and distribution of characteristic mud biotopes, for example LMU biotopes.	Range and distribution should not deviate significantly from an established baseline, subject to natural change.
	Intertidal muddy sand communities	Range and distribution of characteristic sand and gravel biotopes, for example LMS biotopes.	Range and distribution should not deviate significantly from an established baseline, subject to natural change.
Extent of <i>Zostera</i> beds		No decrease in extent from an established baseline subject to natural change.	
	Intertidal mixed sediment communities	Range and distribution of characteristic intertidal mixed sediment biotopes, for example LMX biotopes.	Range and distribution should not deviate significantly from an established baseline, subject to natural change.
Sandbanks which are slightly covered by seawater all the time		Extent.	No decrease in extent from an established baseline, subject to natural change.
		Sediment character.	Average grain size parameters should not deviate significantly from an established baseline, subject to natural change.
		Topography.	Depth should not deviate significantly from an established baseline, subject to natural change.
	Subtidal muddy sand communities	Extent	No decrease in extent from an established baseline, subject to natural change.
		Range and distribution of characteristic subtidal muddy sand biotopes, for example IMU biotopes.	Range and distribution should not deviate significantly from an established baseline, subject to natural change.
	Subtidal gravelly sand and sand	Distribution and extent of characteristic range of biotopes.	Distribution and extent of characteristic biotopes should not deviate from an established baseline subject to natural change.
Subtidal eelgrass <i>Zostera marina</i> beds	Extent.	No decrease in extent from an established baseline, subject to natural change.	

Table B8. South Wight Maritime SAC

Feature/ Criteria*	Sub-feature	Attribute	Target
Reefs		Extent.	No decrease in extent of reef from an established baseline, subject to natural change.
		Absence of Coastal Defence.	No decrease in length of reef without coastal protection from an established baseline
		Water temperature & salinity.	Average temperature and salinity should not deviate significantly from an established baseline subject to natural change.
		Water clarity.	Average light attenuation should not decrease significantly from an established baseline, subject to natural change.
	Sea cave communities	Extent.	No decrease in the number and integrity of sea caves from an established baseline, subject to natural change.
		Range and distribution of characteristic sea cave biotope complexes.	Range and distribution of sea cave biotope should not deviate significantly from an established baseline, subject to natural change.
	Rocky shore communities	Range and distribution of characteristic biotopes.	Range and distribution of characteristic biotopes should not deviate significantly from an established baseline, subject to natural change.
	Kelp <i>forest communities</i>	Extent and distribution of characteristic biotopes.	Extent and distribution of characteristic biotopes should not deviate significantly from an established baseline, subject to natural change.
		Species composition of characteristic biotopes.	Presence and abundance of composite species should not deviate significantly from an established baseline, subject to natural change.
	Subtidal red algae communities	Extent and distribution of characteristic biotopes.	Extent and distribution of characteristic biotopes should not deviate significantly from an established baseline, subject to natural change.
		Species composition of characteristic biotope EIR.KFaR.FoR.	Presence and abundance of composite species should not deviate significantly from an established baseline, subject to natural change.
	Subtidal faunal turf communities	Extent and distribution of characteristic biotopes	Extent and distribution of characteristic biotopes should not deviate significantly from an established baseline, subject to natural change.
		Species composition of characteristic biotope.	Presence and abundance of composite species should not deviate significantly from an established baseline, subject to natural change.

* As the vegetated sea cliffs of the Atlantic and Baltic coasts are located above the high water mark, they are not listed as a feature in the South Wight Maritime European Marine Site Conservation Advice Package (English Nature, 2001b).



ABP Marine Environmental Research Ltd (ABPmer)
Quayside Suite, Medina Chambers, Town Quay, Southampton SO14 2AQ

T +44 (0)23 80 711840
F +44 (0)23 80 711841
E enquiries@abpmer.co.uk

www.abpmer.co.uk

Creating sustainable solutions for the marine environment