

## Habitats Directive – Appendix N

Information to the Secretary of State/National Assembly for Wales according to Regulations 49(5) and 51(2) of the Habitats Regulations

### A: Administration details

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Plan/Project Reference: CPW 1878

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### B: Site details

Name of European Sites adversely affected:

- Solent and Southampton Water Special Protection Area
- Solent Maritime Special Area of Conservation
- Dorset Heathlands Special Protection Area
- Dorset Heaths Special Area of Conservation
- Dorset Heathlands Special Protection Area
- Poole Harbour Special Protection Area
- Dorset Heaths Special Area of Conservation
- Dorset Heaths (Purbeck & Wareham) & Studland Dunes Special Area of Conservation
- Isle of Portland to Studland Cliffs Special Area of Conservation

## C: Summary of the plan or project having an effect on the sites

A Shoreline Management Plan (SMP) has been prepared in 2009 for the coastline between Hurst Spit in Hampshire and Durlston Head in Dorset, as shown in **Annex 1**.

An SMP is a non-statutory policy document for coastal flood and erosion risk management planning. The main objective of an SMP is to identify sustainable long-term management policies for the coast. The plan enables social, environmental and economic assets affected by coastal flood and erosion to be managed in the best way over the long term. The shoreline management policies considered are those defined in the Defra guidance, namely: Hold the [defence] Line, Advance the line, Managed Realignment, and No Active Intervention.

SMPs are high level, strategic plans. The policies they set are further developed and appraised prior to implementation of any new flood defence and coastal erosion works – this can be through undertaking flood and coastal erosion risk management strategies, which are further informed by technical and environmental studies.

Based on the precautionary principle of the Habitats Regulations, we are unable to conclude that this SMP alone and in combination will not adversely effect the integrity of the European sites named in **Box B**. The conditions attached to this approval to ensure that the least damaging plan is implemented are set out in **Box F**.

This SMP is scheduled to be approved in 2010.

## D: Summary of the assessment of the negative effects on the sites

In the SMP there are three Policy Development Zones (PDZs) where it cannot be shown that the proposed policies will not have an adverse effect on the Special Protection Areas and Special Areas of Conservation listed in **Box B**.

For PDZ 1 (Central and Eastern Sections of Christchurch Bay), the preferred policy is to Hold The Line at Hurst Spit to maintain the overall integrity of the geomorphological feature, and to maintain the shelter the spit provides to the intertidal and hinterland habitats to the north.

The intertidal habitats are recorded as being adversely affected by coastal squeeze and this will be exacerbated by continued sea level rise. However, the current line of defence landward of the intertidal habitats is also a dominating factor in the cause of the coastal squeeze. Consequently, the adverse effects of this PDZ preferred policy arise from the in-combination effects of sea level rise and the coastal defences along the Keyhaven frontage within the North Solent SMP. The contribution of the Spit and HTL policy is anticipated to be a small proportion of that resulting from the policies of the neighbouring SMP. The sites that are identified as having an adverse effect on their integrity based on the qualitative data available at this strategy level are the Solent and Southampton Water SPA, and the Solent Maritime SAC.

For PDZ 2 (Christchurch Harbour and Central Poole Bay) the preferred policy entails HTL at the eastern end of Hengistbury Head to maintain its position and function in controlling sediment transport within and outside the Bay forming a keystone in the defensive function of other defences away from the Bay. In addition, along the west of Hengistbury Head the policy is to undertake Managed Realignment to allow for a more natural development of the spit to the west of Hengistbury Head, whilst within the Bay the policy is No Active Intervention on the inner face of Hengistbury Head.

Some 3ha of grassland and heathland habitat would be lost as a result of MR, the majority of the functional site unit would be protected by the HTL policy and resulting managed coastline. The sites affected are the Dorset Heathlands SPA and the Dorset Heaths SAC.

For PDZ 3 – Poole Harbour and associated coastline is a large shallow estuary (Poole Harbour) with two shingle and sand spits that virtually enclose the estuary mouth). The estuary is surrounded by a mix of natural and built environments. The preferred policy entails HTL from Poole Bay moving south and around the northern spit (Sandbanks) into the Harbour and all around the Northern Harbour to Lower Hamworthy to protect significant infrastructure and settlement. HTL then becomes sporadic where it protects key infrastructure such as at Holton Railway Line, Brownsea Quay, South Haven Point, and the Training Bank. Managed Realignment policy for some or all the epochs is identified at Ham Common, Wareham, Lytchett Bay, Brownsea Lagoon, South Haven Point to Redend, and Redend to The Warren, in order to minimise coastal squeeze and allow for retreat as a result of sea level rise in order for infrastructure and settlements to adapt appropriately to the future sea levels. In some cases, MR is to be undertaken in the 1st epoch to enable habitats to respond rapidly and as part of future compensatory habitat (such as Wareham, Lytchett Bay, and Ham Common). Some of these MR sites end with or commence with No Active Intervention depending on the infrastructure or interests that may be affected. Large areas of the South Shore of Poole Harbour then have the policy of No Active Intervention

The intertidal habitats are recorded as being adversely affected by coastal squeeze and this is likely to be exacerbated by continued sea level rise. However, no definitive 'forecast' of how the Harbour and its hydrodynamic processes will respond to sea level rise is available with the current strategic level of this study. Consequently, if the processes allow for the sediment regime that would enable the upper estuary, western estuary and southern estuary areas of the Harbour to respond to sea level rise, the preferred policies enable this adaptation to occur. However, this comes at a price. The land behind the intertidal habitats is also designated for its habitats or species that occur within those habitats and the decision over one or the other has been made. The intention is to enable intertidal habitats to respond and roll landward. This natural process of response will force the terrestrial habitats to also respond, though it is evident that response of terrestrial habitats is likely to be constrained by other land uses. In addition, it is anticipated (though quantitative information is not available) that given the landform of the estuary, there may be much less opportunity for intertidal habitats to adapt to the same quantity as they would be lost, as the land rises fairly sharply in most areas, or where there are current defences (e.g. Wareham Tidal Banks) that prevent adaptation. Consequently, the crux of the adverse affects on integrity are the lack of available adaptation area for intertidal and subsequent terrestrial habitats, thus there would be a net loss with an adverse affect on the integrity of:

- Poole Harbour SPA - The loss of supporting intertidal habitats including the saltmarsh zone of **5ha** by 2025, **34ha** by 2055, and **310ha** by 2105, a loss of transitional high intertidal habitat of **3ha** by 2025, **15ha** by 2055, and **4ha** by 2105, and the loss of supporting grazing marsh habitat due to MR (to prevent the loss of the intertidal habitats) of **353ha** by 2025, **368ha** by 2055, and **383ha** by 2105;
- Dorset Heaths SAC - The loss of dry heathland and Atlantic wet heath qualifying habitat features of **9.3ha**).
- Dorset Heaths (Purbeck and Wareham) and Studland Dunes SAC (A significant loss of lowland heathland and Atlantic wet heath qualifying habitat features of **8.5ha**, and the loss of *Cladium* or *Rhynchosporium* not expected due to the mitigation measure of ensuring MR would retain protection of this habitat from sea level rise.
- Dorset Heathlands SPA - The loss of dry heathland and Atlantic wet heath supporting habitat of **14.7ha**). However, these losses are already included in the losses described below for Dorset Heaths SAC and Dorset Heaths (Purbeck and Wareham) and Studland Dunes SAC;

Full details are presented in the Habitats Regulations Assessment Report in Appendix J to the SMP.

No priority habitats are affected as a result of the SMP policies.

## E: Modifications or restrictions considered

Possible modifications or restrictions were assessed to mitigate the potential adverse effects of this SMP on the site integrity of the designated site. Preventative measures and mitigation measures that have been identified and must be undertaken in order to ensure no adverse effects arise for some elements are stated within the SMP2 Action Plan and are:

1. PDZ1 - At Hurst Spit, measures within the next (Strategy) stage should consider the feasibility of no intervention of the North Point spit to enable the spit to develop naturally as well as providing a source of material for recycling of the western spit;
2. PDZ1 - In the intertidal habitat to the north of the Hurst Spit (within the *Natura 2000* Sites' boundaries) the next stage (Strategy) should consider possible measures to increase the rate of deposition and thus maintain intertidal mudflat and saltmarsh elevations;
3. PDZ2 - Appropriate realignment and realignment works and materials should be used in and around Hengistbury Head to minimise the significance of the impact of MR on any primary habitats within the Sites;
4. PDZ3 – Identify and implement appropriate measures to encourage/enhance deposition of sediment on the tidal flats within Poole Harbour.
5. PDZ3 – Encourage saltmarsh and other intertidal habitat development within Poole Harbour, from the western side of Sandbanks to Luscombe Valley;
6. PDZ3 - Following closure of oil wells (such as Wytch Heath, Rempstone Heath, and Green Island) in the future (e.g. 2nd or 3rd epoch), managed realignment could then be implemented at any localised HTL locations;
7. PDZ3 - Ensure that any structures to prevent tidal flooding from the rivers (Frome, Piddle, and Sherford) provide appropriate and successful design features to ensure no obstruction to the migration of aquatic species, and minimal obstruction to the movement of sediment;
8. PDZ3 – Managed realignment design should ensure that the *Cladium* fen lies inland of realigned defences (The Moors SSSI unit 8 and Wareham Meadows SSSI unit 8) in order to maintain the habitat;
9. PDZ4 - Ensure that any consideration of HTL actions preclude coastal management works within the Site footprint on Peveril Point; and
10. All PDZs - Ensure MR actions take place prior to the loss of designated habitats.

In addition, during the SMP2 development, the importance of avoiding and minimising potential effects on the *Natura 2000* Sites was central to policy development. Where significant economic and social infrastructure was present, the Policy Unit boundaries were selected so as to ensure that the minimum frontages were identified for HTL policies, in order to minimise effects on the Sites. This also ensured that the widest extent of frontage for the natural development of the coastline was identified in order provide area for the habitats to respond to sea level rise.

## F: Alternative Solutions considered

The test for no alternative solutions must be based on the alternatives that may be more expensive, more difficult to achieve, less convenient to implement, but must not be unrealistic alternatives that are clearly not technically feasible. Alternative policies available are the four potential strategic policy options with respect to coastal management measures as mentioned in **Box C**.

For the **Solent and Southampton Water SPA** in **PDZ1**, the HTL option is the only option that prevents potentially significant changes to hydrodynamic processes and thence effects on the supporting habitats, whilst also avoiding any exacerbation of habitat loss from coastal squeeze. HTL is therefore considered to be the most appropriate solution that minimises adverse effects on the Site.

For **Solent Maritime SAC** in **PDZ1**, the HTL option is the only option that prevents potentially significant changes to hydrodynamic processes and thence effects on qualifying intertidal and subtidal habitats, whilst also avoiding any exacerbation of habitat loss from coastal squeeze. HTL is therefore considered to be the most appropriate solution that minimises adverse effects on the Site.

For the **Dorset Heathlands SPA** in **PDZ2**, ATL and HTL policies would prevent any loss of the Site's supporting habitats, but would result in significant to severe disturbance to the natural coastal processes of the surrounding and wider area, and with the potential for unpredictable consequences. MR would reduce the loss of supporting habitat within the Site that would arise from NAI. However, given the nature of the geomorphological processes, it is understood that HTL east of Long Groyne would not result in deleterious effects to natural processes that would occur if this policy was implemented across the Site. Consequently, the preferred policy is a mixed HTL/MR policy across the Site frontage, which balances the protection of the Site and its supporting habitats, whilst not adversely effecting coastal processes.

For **Dorset Heaths SAC** in **PDZ2**, ATL and HTL policies would prevent any loss of the Site's qualifying habitat features, but would result in significant to severe disturbance to the natural coastal processes of the surrounding and wider area, and with the potential for unpredictable consequences. MR would reduce the loss of qualifying habitat features within the Site that would arise from NAI. However, given the nature of the geomorphological processes, it is understood that HTL east of Long Groyne would not result in deleterious effects to natural processes that would occur if this policy was implemented across the Site. Consequently, the preferred policy is a mixed HTL/MR policy across the Site frontage, which balances the protection of the Site and its qualifying habitat features, whilst not adversely effecting coastal processes.

For **Poole Harbour SPA** in **PDZ3**, a NAI policy across the entire site would have significant effects on nationally important economic and social infrastructure. The combined approach of the preferred HTL/MR/NAI policy provides a balance whereby the Site is allowed or even helped (with MR) to migrate its intertidal habitats in line with sea level rise, whilst maintaining the economic infrastructure and assets essential for the region.

For **Dorset Heaths SAC** in **PDZ3**, the predominant objective of the SMP has been to ensure that there are no adverse effects on the Poole Harbour SPA supporting wetland habitat that would arise as a result of coastal squeeze, as well as ensuring wherever possible that natural

processes dominate the Harbour. Consequently, the mix of NAI or MR is appropriate where either no current coastal defence exist, or where a lack of management could in the long term result in significant loss or damage to the social or economic infrastructure. However, some SAC features are identified that should be protected from loss due to their rarity and the low probability of success for re-creating them elsewhere, namely Cladium fen habitat, and mitigation measures have been identified for this.

For **Dorset Heathlands SPA** in **PDZ3**, the predominant objective is to ensure that there are no adverse effects on the Poole Harbour SPA supporting wetland habitat that would arise as a result of coastal squeeze, as well as ensuring wherever possible that natural processes dominate the Harbour. Consequently, the mix of NAI or MR is appropriate where either no current coastal defence exist, or where a lack of management could in the long term result in significant loss or damage to the social or economic infrastructure. However, some features are identified that should be protected from loss due to their rarity and the low probability of success for re-creating them elsewhere, namely Cladium fen habitat, and mitigation measures have been identified for this.

For **Dorset Heaths (Purbeck and Wareham) and Studland Dunes SAC** in **PDZ3**, the predominant objective is to ensure that there are no adverse effects on the Poole Harbour SPA supporting wetland habitat that would arise as a result of coastal squeeze, as well as ensuring wherever possible that natural processes dominate the Harbour. Consequently, the NAI along the Site's frontage is appropriate where no current coastal defence exist.

We believe that the proposed solutions are consistent with meeting the purpose of the SMP, which seeks to achieve a balance between potentially competing interests and sustainability, i.e. it considers people, nature, historic and economics. The recommended present-day policies for the SMP provide a high degree of compliance with objectives to protect existing communities against flooding and erosion.

## G: Imperative reasons of Overriding Public Interest

In 1998, the Government issued an Outline Position Statement on the Birds and Habitats Directives (placed in the libraries of the Houses of Parliament). It set out 'guiding principles' against which imperative reasons of over-riding public interest may be judged in circumstances such as prevailing in this case. Amongst other matters it stated that such cases should demonstrate the following benefits:

- A need to address a serious risk to public safety;
- The interests of national defence;
- The provision of a clear and demonstrable direct environmental benefit on a national or international scale; and
- Where failure to proceed would have unacceptable social and / or economic consequences.

The consequences must be:

- Imperative, that it is both necessary and urgent;
- Overriding, that it is of such a scale of importance that the reasons outweigh the scale of harm to the integrity of the site(s);
- Of public, not private interest; and
- Of a social or economic nature unless a priority habitat or species may be affected.

Consideration of imperative reasons of over-riding public interest should include an understanding of what may happen if the Shoreline Management Plan were not implemented, as doing nothing rather than commencing with an active policy could have more detrimental consequences to a Natura 2000 Site and its interest features.

For **PDZ1** covering the effects on the **Solent and Southampton Water SPA** and **Solent Maritime SAC**, the preferred policy of HTL provides protection to the structure of Hurst Spit, which acts as a barrier to waves and tides from the southwest, which if left unhindered would breach the Spit and commence erosion of wide swathes of the intertidal habitats (that are qualifying features or supporting habitat to qualifying species) for both Sites. The scale of the importance is clear, widespread loss of habitats would occur in a short period of time if a breach occurred, whilst the in-combination loss of habitats resulting from coastal squeeze (predominantly influenced by the North Solent coastline and policies along various frontages) would be a 'creeping' and barely noticeable occurrence in the short term. The size of the area protected is larger than the size of the area that would indirectly be affected over a very long timescale. The protection of the site interests is in the public (national) interest, and would maintain the shelter afforded by the Spit to the settlement of Keyhaven as well as the designated intertidal areas to the north (and within the SAC), and is considered to be of primary importance for the environment given the large scale adverse effects it prevents.

For **PDZ2** covering the effects on the **Dorset Heathlands SPA** and **Dorset Heaths SAC**, the preferred policy of HTL/MR aims to maintain the position and function of Hengistbury Head in controlling sediment transport within and outside the Bay forming a keystone in the defensive function of other defences away from the Bay. In addition, along the west of Hengistbury Head the policy is to undertake Managed Realignment to allow for a more natural development of the spit to the west of Hengistbury Head. The policies here are led more by the social economic consequences and risk to human health by helping with the defence of the whole of

Poole Bay and the large settlement here. Without HTL and protection afforded by it and the controlled loss of Sites' interests from MR, the Sites' would experience greater loss if completely unmanaged, or result in significant disruption to wide scale coastal processes. A larger area of qualifying and supporting habitats would be lost without these policies, particularly the HTL elements, than with other options. The protection of the Site interests is in the public (national) interest, and would maintain protection to as much of the SPA and SAC features as possible whilst minimising the potential long-term disturbance to the regional hydrodynamic regime with far reaching consequences (including social and economic), and is considered to be of primary importance for the environment given the large scale adverse effects it prevents.

For **PDZ3** covering the effects on **Poole Harbour SPA, Dorset Heathlands SPA, Dorset Heaths SAC, and Dorset Heaths (Purbeck and Wareham) and Studland Dunes SAC**, the preferred policy of HTL/MR/NAI provides protection to social and economic infrastructure whilst providing controlled movement of the defence line (MR) in locations where NAI would in the long term result in the loss of further social and economic infrastructure, coupled with allowing the shoreline to respond to sea level rise and intertidal habitats to migrate. HTL is required to prevent any loss occurring to the social and economic infrastructure in the Poole area and outlying areas. In protecting Sandbanks this will prevent a potentially catastrophic breaching, which could have severe effects on the Harbour and its habitats as a whole. MR is necessary to provide the space for intertidal habitats to migrate; otherwise there would be a loss of these supporting habitats within the Site. Given the very large urban and social infrastructure HTL is necessary along some frontages, whilst MR would result in the loss of some supporting grazing marsh. The protection of the economic and social infrastructure is in the nations interest, and maintain the long term conservation objectives of the SPA, whilst protecting nationally important social and economic infrastructure, such as the settlement of Poole, including the core of the town, harbour area and Hamworthy and the associated local communities of Lower Parkstone, Lilliput and Canford Cliffs, running to the east to the open coast, with the development of Sandbanks along the shoreline. Linked to these are Poole Harbour which contains a conventional freight and Ro-Ro Ferry Port, and the main A35 runs to the north of the Harbour area with the A350 running down to Poole centre and the A351 running through to Wareham. In addition a national rail link runs through from Bournemouth to Poole, after Poole it cuts across the northern bays and along the western edge of the Harbour passing to the northwest of Wareham and then continues west to Dorchester. Finally, there are also schools at Turlin Moor, Lower Hamworthy and Poole along with two sewage works and several pump stations, and several electricity sub stations are situated in the Poole Quays area of Lower Hamworthy.

## H. Compensatory measures

Our conclusion of adverse effect in this assessment of the 2009/10 SMP2 is precautionary and conservative in its quantities. Information used for the assessment is not considered to be wholly accurate to accord the appropriate quantities to the year 2105, and short-, medium-, and long-term changes to the hydrodynamic processes within Poole Harbour are not quantified. Consequently, the compensatory habitat measures specified below will be subject to review following ongoing and more detailed work on the Poole Harbour Strategy and subsequent revisions to the SMP.

The determination of which habitats will be lost and which would develop landward of their existing locations as a result of sea level rise does not (and at this stage and with the current level of information available cannot) take into account a number of site-specific factors. These factors are: the future extent and continuation of *Spartina* die-back and the subsequent colonisation by other saltmarsh communities, future erosion and accretion, and success of managed realignment schemes. Consequently, it has been recommended within the SMP that continued monitoring of habitats and topography/bathymetry is undertaken at constant intervals to continue to inform the future SMPs and effects on the *Natura 2000* Sites. This monitoring should also entail co-ordination and focussed monitoring of roosting and feeding bird sites, nesting sites, as well as collation of the ongoing WeBS counts.

In relation to the compensatory habitat requirements for the effects of policy in **PDZ1 on Solent and Southampton Water SPA and Solent Maritime SAC**, no quantification is identified within this SMP given the majority of the contribution arising from the policies of the North Solent SMP. Furthermore, the quantified impact within the North Solent SMP includes any element arising from the HTL of Hurst Spit. Consequently, the compensatory habitat identified and agreed in the North Solent SMP, which is to be implemented through the Environment Agency's Regional Habitat Creation Programme (RHCP), effectively completes the compensatory habitat requirement that may arise as a result of the policy of the Poole and Christchurch Bays SMP within or along Hurst Spit.

In relation to the compensatory habitat requirements for the effects of policy in **PDZ2 and PDZ3 on Poole Harbour SPA, Dorset Heathlands SPA, Dorset Heaths SAC, and Dorset Heaths (Purbeck and Wareham) and Studland Dunes SAC**, that the intertidal habitats required would arise from the MR policies within the following locations which indicate the rounded up areas of potential intertidal habitat created: The Moors (The Moors Wood to Arne Moors Heath), 22ha; The Moors (Moors NW to The Moors East), 137ha; Wareham Meadows (Bestwall Meadows East & West; Clarke), 57ha; Wareham Meadows (Redcliffe farm to Causeway West), 44ha; Wareham Meadows (South Piddle Fen; Town Walls; South Piddle), 38ha; Wareham Meadows (Northport Reed - Stockley Meadows), 20ha; Wareham Meadows, 22ha; Poole Harbour, 7ha; Arne, 31ha; Keyworth Marsh, 66ha; as well as areas in Lytchett Bay. These total in excess of 442ha. In relation to the coastal and floodplain grazing marsh (up to 353ha by 2025 and a total of 383ha by 2105) and the dry heathland and wet heathland habitat (1ha by 2025, 5ha by 2025, to a total of 18ha by 2105) compensation requirements, due to the strategic nature of the SMPs, site-specific assessment has not been undertaken, but these will be secured through the Environment Agency South West Regional Habitat Creation Programme with support from the SMP2 Coastal Authorities for Poole and Christchurch Bays. Furthermore, the Environment Agency has already purchased land within

the Frome catchment in order for the creation of coastal and floodplain grazing marsh which is a key requirement for Epoch 1 compensatory habitat. In addition, the current Poole Harbour Strategy is tasked with identifying the required compensatory habitat from this SMP2, as well as clarifying with more detailed modelling the quantity of habitats affected and requiring compensation.

Habitat Creation programmes are Government's recommended vehicle for delivering strategic habitat compensation and are funded in advance of engineering works that cause damage. The South West Region RHCP is a dedicated, resourced plan for delivering compensatory habitat.

## I: Supporting Documentation

List of attached technical supporting documents:

Annex 1 – Map of SMP area.

# ANNEX 1

## SMP Coastline from Hurst Spit to Durlston Head



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