Executive Summary

The North Solent Shoreline Management Plan (SMP) is a non-statutory document that aims to:

- evaluate, at a high strategic level, the known risks to people, property and the built and natural environment from the sea and coastal processes over the next 100 years and present a policy framework to address these risks in a technically feasible, environmentally acceptable and economically sustainable manner
- balance the management of coastal flooding and erosion risks, with natural processes, and the consequences of climate change and assist local authorities in formulate planning strategies and control future development of the shoreline
- develop coastal policies of management intent for each section of coast over 3 epochs: present day (0-20 years); medium-term (20-50 years); long-term (50-100 years) and help government determination of future national funding requirements for flood and coastal erosion risk management.

The West Sussex coastline covered by this plan extends from West Street, Selsey to the western county boundary, although the SMP extends to Hurst Spit in Hampshire

A ‘Hold the Line’ policy is proposed for the majority of the 17 policy units affecting the county. This is the preferred management policy only and does not guarantee that funding will be available, though strategies and schemes whose outcomes align with the SMP are more likely to gain support

‘Managed Realignment’ (which allows the retreat of shoreline by owners, or relevant organisations, using management to control or limit movement) is recommended for the Medmerry policy unit. to align with the area identified in the agreed Pagham to East Head Coastal Defence Strategy. There are also a number of smaller localised sites, in areas behind private defences at Cakeham, Horse Pond (West Itchenor) and at East and West Chidham, where Managed Realignment opportunities have been identified over the next 100 years. An ‘Adaptive Management’ approach is proposed for East Head, which allows management of this complex coastal area.

Recommendations

1. The Cabinet Member for Environment and Economy is asked to endorse the final North Solent Shoreline Management Plan (SMP) on behalf of the County Council;

2. That the County Council work with the Environment Agency to identify, and
progress Habitat Creation schemes within their area that contribute to the Regional Habitat Creation Programme, and that Officers make representation to the Environment Agency to request that the compensatory habitat requirements identified in the Appropriate Assessment be secured and delivered through the Regional Habitat Creation Programme; and

3. That officers liaise with Elected Members and the relevant authorities and organisations continue to work in partnership to ensure the actions in the Action Plan are monitored and delivered in a cost-effective and timely manner and inform emerging and future studies and schemes.

1. **Background**

1.1 SMP’s are an important component of the Department for Environment, Food and Rural Affairs’ (Defra) strategic framework for the future management of coastal erosion and tidal flood risks to people, the developed and natural environments and require economic, environmental and technical assessments to demonstrate the viability of any proposed policy.

1.2 SMPs must take account of existing planning initiatives and legislative requirements, make use of the best available data and science, and inform, and be supported by, the statutory planning process. Policies will be set based on coastal processes and driven by planning, and not on availability of public funding. Policies are stated with a clear indication of availability and likelihood of public funding. No public funding is likely for any privately owned frontages.

1.3 A Shoreline Management Plan is a non-statutory document that aims to:

- balance the management of coastal flooding and erosion risks with natural processes and the consequences of climate change
- determine technically, economically and environmentally sustainable policies for management of the shoreline over 3 time periods (epochs):
  - present day (0-20 years);
  - medium-term (20-50 years);
  - long-term (50-100 years).

1.4 Discrete lengths of coastline have been defined as ‘Policy Units’ based on coastal processes and the assets and features potentially at risk of flooding and/or erosion within the coastal zone (See Appendix 2). A single policy has been applied per epoch per Policy Unit.

1.5 The SMP policies as defined by Defra are:

<table>
<thead>
<tr>
<th>Policy</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold the line</td>
<td>Maintain or upgrade level of protection provided by defences</td>
</tr>
<tr>
<td>Advance the line</td>
<td>Build new defences seaward of existing defences</td>
</tr>
<tr>
<td>Managed realignment</td>
<td>Allowing retreat of shoreline with management to control or limit movement</td>
</tr>
<tr>
<td>No active intervention</td>
<td>Not to invest in providing or maintaining defences</td>
</tr>
</tbody>
</table>

1.6 A policy of Adaptive Management has been proposed for East Head (Cakeham to Ella Nore policy unit), which means managing complex coastal areas by monitoring changes and acting on them in a planned but flexible
way, increasing our understanding over time. Adaptive Management was not an approved SMP policy, but was accepted by Defra, the Environment Agency and Natural England in recognition of a unique situation, as neither ‘Hold The Line’ or ‘No Active Intervention’ were acceptable to Chichester Harbour Conservancy or Chichester District Council.

1.7 Due to the current legislative and funding arrangements, climate change and environmental considerations, it may not be possible to protect, or continue to defend land or property from flooding or erosion.

2. Discussion

2.1 The North Solent SMP is the first revision to the Western Solent and Southampton Water SMP and the East Solent and Harbours SMP, completed in 1998 and 1997, respectively. The coastline covered by this Plan extends from Selsey Bill, in the east, to Hurst Spit, in the west, and includes Portsmouth, Langstone and Chichester Harbours.

2.2 The North Solent shoreline is atypical of much of the UK in that:
- Approx. 80% is defended or has active beach management
- Approx. 60% of the shoreline is privately owned
- Approx. 80% is covered by one or more International and/or European nature conservation designations.

2.3 These factors necessitate that there is a significant requirement for compensatory habitats to be created to offset set losses or damage to these designated sites. Compensatory habitat is required when European Designated Sites (Special Areas of Conservation (SAC) & Special Protection Areas (SPA), and also includes Ramsar Sites) are damaged or experience loss due to flood risk management works or coastal squeeze. (Coastal squeeze is the term for when coastal habitats are prevented from migrating landwards under rising sea levels by fixed defences). The North Solent SMP has been a key contributor to the development and continued evolution of the Environment Agency Regional Habitat Creation Programme (see section 3).

2.4 The Client Steering Group of the North Solent SMP is a partnership of local, regional and national authorities and agencies that have various responsibilities and powers for managing the coast; these are listed overleaf:

New Forest District Council (Lead Authority) Environment Agency (Solent & South Downs Area)
Test Valley Borough Council Hampshire County Council
Southampton City Council West Sussex County Council
Eastleigh Borough Council New Forest National Park Authority
Winchester City Council Chichester Harbour Conservancy
 Fareham Borough Council Natural England
Gosport Borough Council neighbouring SMP Groups
Portsmouth City Council Isle of Wight SMP;
Havant Borough Council Hurst Spit to Durlston Head SMP;
Chichester District Council & Beachy Head to Selsey Bill SMP

2.5 The Environment Agency has permissive powers to undertake works to protect low-lying land from flooding (flood defence) and to manage flood risk. Maritime Local Authorities have certain permissive powers to undertake
works to defend the coastline from erosion by the sea (coast protection). It should be noted that although Local Authorities and the Environment Agency have permissive powers to carry out works there is no duty for them to do so. A number of the Local Authorities within the Solent are unusual in that they are also responsible for many sea defences to protect low lying land against flooding by the sea.

3. **Proposals**

3.1 Table 1 presents the final proposed SMP policies for the policy units in West Sussex.

**Table 1 Proposed SMP Policies**

<table>
<thead>
<tr>
<th>Policy Unit*</th>
<th>Epoch 1 0-20yrs</th>
<th>Epoch 2 20-50yrs</th>
<th>Epoch 3 50-100yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>4D27 Selsey East Beach (Selsey Bill)</td>
<td>Selsey West Beach</td>
<td>HTL</td>
<td>HTL</td>
</tr>
<tr>
<td>5A01 Selsey West Beach</td>
<td>Bracklesham (incl Medmerry)</td>
<td>MR (localised HTL at Medmerry Cliffs)</td>
<td>HTL</td>
</tr>
<tr>
<td>5A02 Bracklesham</td>
<td>East Wittering</td>
<td>HTL</td>
<td>HTL</td>
</tr>
<tr>
<td>5A03 East Wittering</td>
<td>Cakeham</td>
<td>HTL</td>
<td>HTL (potential for minor MR at Cakeham)</td>
</tr>
<tr>
<td>5A04 Cakeham (incl East Head)</td>
<td>Ella Nore Lane</td>
<td>AM</td>
<td>AM</td>
</tr>
<tr>
<td>5A05 Ella Nore Lane</td>
<td>Fishbourne</td>
<td>HTL (NPFA)</td>
<td>HTL (NPFA)</td>
</tr>
<tr>
<td>5A06 Fishbourne</td>
<td>West of Cobnor Point</td>
<td>HTL (NPFA) (localised MR East Chidham)</td>
<td>HTL (NPFA)</td>
</tr>
<tr>
<td>5A07 Fishbourne</td>
<td>Chidham Point</td>
<td>MR</td>
<td>HTL (NPFA)</td>
</tr>
<tr>
<td>5A08 West of Cobnor Point</td>
<td>Nutbourne</td>
<td>HTL (NPFA)</td>
<td>HTL (NPFA)</td>
</tr>
<tr>
<td>5A09 Chidham Point</td>
<td>Nutbourne</td>
<td>HTL (NPFA)</td>
<td>HTL (NPFA)</td>
</tr>
<tr>
<td>5A10 Nutbourne</td>
<td>Prinsted</td>
<td>HTL</td>
<td>HTL</td>
</tr>
<tr>
<td>5A11 Prinsted</td>
<td>Stanbury Point</td>
<td>HTL</td>
<td>HTL</td>
</tr>
<tr>
<td>5A12 Stanbury Point</td>
<td>Marker Point</td>
<td>HTL</td>
<td>HTL</td>
</tr>
<tr>
<td>5A13 Marker Point</td>
<td>Wickor Point</td>
<td>HTL</td>
<td>HTL</td>
</tr>
<tr>
<td>5A14 Wickor Point</td>
<td>Emsworth Yacht Haven</td>
<td>HTL</td>
<td>HTL</td>
</tr>
<tr>
<td>5A15 Emsworth Yacht Haven</td>
<td>Maisemore Gardens</td>
<td>HTL</td>
<td>HTL</td>
</tr>
</tbody>
</table>

*4D27, 5A01, 5A02, 5A03, 5A04 – policies taken from the Pagham to East Head Coastal Defence Strategy

**Coastal Erosion Mapping**
3.2 At present, flood risk from rivers and the sea are mapped (by the Environment Agency) to inform the public and relevant authorities. However, limited information is available on the risk arising from coastal erosion. Coastal erosion risks are taken to include all mechanisms and processes that lead to recession of the shoreline including cliffs, beaches and estuaries.

3.3 The North Solent SMP has produced a visual presentation (see maps in Appendix 4) of the potential areas at risk of coastal erosion and impacts of climate change in the coastal zone. This is represented in a non-technical way, which it is hoped will be a valuable contribution in informing and raising awareness to the public, landowners, Officers and Elected Members, of the locations, scale and extent of the possible implications of coastal change and the potential impacts of climate change within the coastal zone. The SMP has mapped the areas of coastline within the North Solent that are susceptible to erosion and instability from natural processes, such as wave attack, whilst also considering the influence of exiting coastal protection and flood defence structures and management activities.

3.4 It is worth noting that the maps of potential erosion risk are based on publicly available datasets e.g. coastal monitoring programme reports, and national Environment Agency programmes. The publication of these maps does not introduce a new or increased risk to properties, land holdings or other assets potentially at risk from erosion. The aim of this information is to increase awareness of the potential risk of erosion, to identify those coastal frontages where erosion is a considerable threat, and to identify areas that are generally stable.

3.5 The existing defences were assessed to identify type of defence, condition, and estimates of their remaining or effective design life (termed residual life) and standard of protection they provide. The annual average erosion rates were applied to the shoreline baseline when the existing defences reached the end of their design life or natural defences (e.g. salt-marshes, barrier beaches) were predicted to have sufficiently or completely eroded to no longer provide protection to the mainland from wave attack. Where no defences occur or existing defences had already reached the end of their effective life, the erosion rates were applied from Year 1. Data sources included aerial photography, topographic surveys, geology and geomorphology, Coastal Defence Strategies and National Coastal Erosion Risk Mapping programme.

3.6 The Environment Agency are planning to roll out online erosion mapping on their website, with an associated education and awareness campaign, to coincide with the publication of the final SMP document, though the final decision on the publication of these maps lies with Defra.

**Regional Habitat Creation Programme**

3.7 The Regional Habitat Creation Programme (RHCP), which has been developed in close consultation with Natural England and Local Authorities, aims to provide a strategic and proactive approach for the provision and delivery of compensatory habitats, (Defra have also set the Environment Agency Outcome Measures for Biodiversity Action Plan (BAP) habitat creation and remedies for Sites of Special Scientific Interest (SSSI) in unfavourable condition). The processes by which new habitat can be created, funded and assessed are complex, therefore the programme will be updated as new information becomes available.
3.8 The benefits of taking a strategic approach by the Habitat Creation Programme:-

- provides a framework within which site acquisition can be undertaken proactively
- allows opportunities to be realised as they arise
- habitats will be created before they are lost
- land can be purchased at a fair price
- larger, more ecologically robust sites, can be created to offset a number of small scale losses
- provides a delivery mechanism for the habitat requirements of flood risk management plans and projects enabling timely approvals

3.9 Habitat Creation programmes are Government’s (Defra) recommended vehicle for delivering strategic habitat compensation and are funded in advance of engineering works that cause damage. The Habitat Creation Programme compiles the compensatory habitat creation needs for the Region from the Appropriate Assessments carried out for the different SMPs covering that Region. Habitat needs are therefore based on the estimated impacts of approved SMP policies for all frontages, including Local Authority and third party frontages. It has been assumed, in the calculation of habitat requirements, that all private or third party owned defences will continue to exist on their current alignment; as this is the worst case scenario in terms of coastal squeeze losses. It is not necessary for the anticipated compensatory habitats to be in place at the time that the SMP is approved, but only when the damage is likely to occur. The Programme therefore aims to secure sites and develop habitat in a timely manner in advance of damage occurring. The RHCP will be identified within the Appropriate Assessment as the proposed delivery vehicle for compensating for habitat losses, so parties agreeing to the SMP are also agreeing to the method for compensating for its impacts.

3.10 The Southern Regional Habitat Creation Programme has provisionally included the following habitat needs for the North Solent, based on the findings of the Solent Dynamic Coast Project:

- Epoch 1 - 0-20 years: 136ha Intertidal habitat
- Epoch 2 - 20-50 years: 234ha Intertidal habitat and Grazing Marsh
- Epoch 3 - 50-100 years: 287ha Intertidal habitat and Grazing Marsh

3.11 Delivery of the Habitat Creation Programme will involve partnership working between the Environment Agency, Natural England, Local Authorities and private landowners to ensure that habitat creation sites are secured and developed as efficiently as possible to enable timely delivery of flood and coastal erosion risk management projects for the benefit of all parties.

4. Customer Focus Appraisal

A Customer Focus Appraisal has been completed, and is attached to this Decision Report as Appendix 5.

5. Consultation
5.1 A three month public consultation exercise on the draft Plan ran from 1st February to 23rd April 2010. The final proposed policies differ from those at public consultation due to private owners indicating their intentions for their defences over the full or partial life of the strategy.

5.2 Elected Member representatives from each of the authorities have been involved throughout the development of the SMP and have been consulted at various stages to comment and approve specific outputs, such as tidal flood risk and erosion risk maps and analysis.

5.3 Stakeholder involvement in the preparation of the second round of SMPs is of key importance. Workshops with Planners and Development Control, Archaeologists and Heritage Officers, Key Stakeholders, Landowners, Environmental and Ecological Officers have been held and various issues and concerns have been raised and discussed, and considered in the various assessments.

5.4 Minutes of meetings, stakeholder events and details of those attending are all available as background documents. A summary of the consultation is included in the briefing note in appendix 1.

6. Resources Implications and Value for Money

There are no immediate resource implications arising from this Plan since the County Council is not statutorily obliged to contribute towards coastal protection or flood risk management schemes. The Plan sets the policies only – any further work would require the production of a strategy (as for example with the Pagham to East Head Coastal Defence Strategy). These strategies are likely to require involvement of County Council staff as part of the Council's role as Lead Local Flood Authority, however this work is currently already resourced. As stated in section 2, the policies are set based on coastal processes and driven by planning, and not on availability of public funding. Policies are stated with clear indication of availability and likelihood of public funding.

7. Risk Management Implications

Significant risks to life and property are inherent in this Plan. However, as can be seen, the Hold the Line and Managed Realignment approaches propose the maintenance of existing defence policy for the residents of West Sussex for the foreseeable future. Therefore the current level of risk is unchanged.

8. Legal Implications

It should be noted that the Flood and Water Management Act 2010 gives the Environment Agency responsibility for strategic overview of the management of flood and coastal erosion risk. This Act also gives the County Council responsibility for leading the co-ordination of flood risk management in West Sussex as Lead Local Flood Authority; meeting recommendation 14 of the Pitt Review. It should also be noted that pursuant to the Flood Risk Regulations 2009 the County Council as the Lead Local Flood Authority is responsible for preparing preliminary assessment reports, identifying flood risk areas, preparing flood hazard maps and flood risk maps and also undertaking reviews. The SMP process currently sits outside these
requirements but will form a fundamental basis for coastal flood protection work.

9. **Crime and Disorder Act Implications**

There are no foreseeable crime and disorder implications associated with this project/proposal/application.

10. **Human Rights Act Implications**

The rights of those living in the area behind the coastal and flood defences have been considered. The partners in the production of the Plan are aware of the impacts that changes to the coastline will have on residents of the area, with reference to the Human Rights Act. The Plan will consider the rights of individuals to maintain existing defences to protect existing assets.

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Director of Operations - Community Services

**Ron Crank**

Head of Sustainable Development

**Appendices**

- Appendix 1. SMP Briefing note
- Appendix 2. Map of Policy Units
- Appendix 3. Policy Unit Descriptions
- Appendix 4. Policy Unit Maps
- Appendix 5. Customer Focus Appraisal

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