Section 4 - Index to Appendices

Index to Activities in the Appendices

Activities & Plans and Projects	Appendix 1 (pg)	Appendix 2 (pg)
Access	A1 – 3	Access A2 - 4
Aggregate dredging	A1 – 5	-
Agricultural runoff	A1 – 7	-
Airborne sports	A1 – 9	Access A2 - 4
Anchoring	A1 – 11	Water Sports A2 - 55
Angling	A1 – 13	Access A2 - 4
Bait digging	A1 – 15	Bait collection A2 - 16
Barrage/sluice operation	A1 – 17	
Beach cleaning	A1 – 19	
Beneficial disposal of dredging	A1 – 21	Dredging A2 - 32
Boat repair/maintenance	A1 – 23	Water Sports A2 - 55
Capital dredging	A1 – 25	Dredging A2 - 32
Coastal development	A1 – 27	
Coast protection	A1 – 28	
Commercial shipping	A1 – 31	Commercial shipping A2 - 26
Construction/alteration slipways etc	A1 – 33	-
Discharges	A1 – 34	-
Disposal of dredged spoil	A1 – 35	Dredging A2 - 32
Educational/scientific study	A1 – 37	Access A2 -4
Egg harvesting	A1 – 39	-
Fishing	A1 – 41	Fishing A2 - 47
Flood defence	A1 – 43	-
Foreshore recharge	A1 – 46	Dredging A2 - 32
Freshwater Abstraction	A1 – 48	-
Grazing	A1 – 49	-
Holiday camps	A1 – 51	-
Houseboats	A1 – 52	-
Land based recreation	A1 – 54	Access A2 -4
Land reclamation	A1 – 56	-
Maintenance dredging	A1 – 57	Dredging A2 - 32
MOD aircraft	A1 – 60	-
Moorings (new)	A1 – 61	Water Sports A2 - 55
Moorings (ongoing management)	A1 – 63	Water Sports A2 - 55
Navigation	A1 – 65	Water Sports A2 - 55
Oil & Gas exploration	A1 – 67	-
Oil spill & oil spill clean up	A1 – 68	-
Other water sports	A1 – 71	Water Sports A2 - 55
Outfall maintenance/ replacement	A1 – 73	-
Pipeline construction	A1 – 75	-
Recreational boating – power	A1 – 77	Water Sports A2 - 55
Recreational boating – sail	A1 – 80	Water Sports A2 - 55
Sea Water Extraction	A1 – 83	-
Shellfisheries	A1 – 84	Fishing A2 - 47
Slipway cleaning and maintenance	A1 – 86	Water Sports A2 - 55
Wildfowling	A1 – 88	-

Section 5 - Appendix One
An Inventory of Human Activities in and around SEMS

Introduction

A comprehensive list of activities, which take place or have taken place in the past, which have the potential to harm the wildlife features has been assessed to create this summary inventory of human activity in and around the SEMS.

Relevant authorities with statutory responsibilities for each of these activities have had the opportunity to comment on whether their current management is effective in preventing harm to the wildlife features. This has the benefit of providing a clear audit trail to show all activities have been assessed at a similar level of detail.

Format

The summary includes information in the following format for each activity:

- Summary
  Categorises the activities, highlighting whether a key risk is identified.

- Introduction
  A general explanation of the activity, its location, extent and frequency.

- Responsibilities and Management
  Outlines the Relevant Authorities management of the activity and any other appropriate measures which affect its management. A list of current plans is listed as an annex.

- Impact/Issues
  Outlines the key impacts in relation to the types of operation that the activity may cause (types of operations are based on the generic types listed in English Natures Regulation 33 Advice).

- Conclusion
  Conclusions of the assessment of the possible risks to the features of interest, taking into account the current management measures in place.

- Management Considerations
  Lists the recommended management scheme actions.

The activities are listed in alphabetical order.

More detailed information is held in the activity inventories for each cluster held on the CD rom.

Access

Summary

!	Key Risk Area
✯	Possible risk in parts of the site

Introduction

Access includes rights of way, car parks, public open space, slipways and launch points. Where access is available various recreational activities can take place such as walking, dog walking, cycling, bird watching, informal recreation on open-spaces, organised recreation where facilities are provided, educational or scientific study, children's play areas and access to water based activities. Access occurs throughout the clusters and is largely uncontrolled. It can be intense at certain times of the year e.g. summer and where public amenities are of a high standard.

Responsibilities and Management

Relevant Authorities can influence access through their management and control of structures that help people to access the coast and land and by their control of movement to and from certain areas. The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- County Councils as a highway agency (Rights of Way) and through their land ownership.
- Local authorities through their land ownership (public open space, slipway/launch points, car parks), byelaws and local plan policies and as LPA (control over development which may provide access)
- Harbour Authorities through access to the water from slipways/launch points etc.
- English Nature through the SSSI consenting system and powers to make byelaws in EMS.
- Private owners and police.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

The coastal BAP recognises that there are issues in relation to recreation and suggests an action (coastal-32) to promote, disseminate and implement established codes of conduct for recreational and commercial users of the Hampshire coast.

The Solent Forum are co-ordinating the 'Around the Solent' project with the Isle of Wight Council and Hampshire County Council which will promote a Solent circular trail. The project, which hopes to attract Heritage Lottery funding, will aim to improve the rights of way network and interpretation on the route. There will be opportunities for SEMS to input into this project, in particular in relation to the interpretation.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence access in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Access can lead to the following impacts on the features of interest:

- Physical damage such as abrasion from trampling, erosion and compaction of the soil.

- Non-physical damage through noise and visual disturbance i.e. where access coincides with wildlife habitats, disturbance to wildlife may be observable, particularly at feeding, breeding and roosting times. Disturbing activities regarding access may include dogs, cycling and special events that attract lots of people.
- Introduction of synthetic and non-synthetic compounds through irresponsibly discarded litter which can have an impact on wildlife both on shore and in the water.

It is also noted that access is essential for many activities and is also required to enable direct management of the site with benefits for conservation.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD, and in appendix 2.

Conclusion
The analysis indicates that access could impact on the site, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. Access is therefore highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity under the access topic).

Management Considerations:
- *Keep a watching brief on the impacts of access in key risk areas.*
- *Relevant Authorities to continue to enforce current management measures. This could include enforcement of byelaws and implementation of policies, however these measures may be amended in the light of new information or changes in the activities being managed. Further information on current management measures is listed in the activity inventories for each cluster and a list of relevant plans and reports is listed in the annex to this Appendix.*

Aggregate Dredging

Summary

✯	Possible risk in parts of the site
Ⓟ	Constitutes a Plan or Project
⊗	Does not occur in parts of the site

Introduction

The only location where aggregate extraction occurs in the Solent is within Bembridge Harbour where year round removal of approximately 8440 tonnes of aggregate takes place from and adjacent to Bembridge Harbour entrance channel by a local contractor. The only other aggregate extraction occurs south of the Isle of Wight but proposals could occur in the future within the Solent. An area at Sinah sands in Langstone Harbour is licensed for extraction but isn't currently used due to the environmental sensitivity of the area.

Aggregates are landed at a number of wharves on the River Itchen and Test and at Portsmouth and Langstone Harbours.

Responsibilities and Management

Marine aggregate dredging is authorised by licences issued by the Crown Estate which are supported by a non-statutory Government View procedure. This is due to be replaced by a statutory system provided for in the forthcoming 'Environmental Impact Assessment and Habitats (Extraction of Minerals by Marine Dredging) Regulations' which will also encompass requirements under the Habitats Directive. Both the Interim and proposed Statutory Procedures are administered by the Department of Transport (DfT). Each application will involve the undertaking of an Environmental Impact Assessment and extensive consultation with the fishing industry, relevant government bodies and the general public. Both the Interim and Statutory Procedures have provision to hold a public inquiry if necessary.

Once the GV process has been completed the applicant then needs to formally apply for other appropriate consents, such as a FEPA Licence or Coast Protection Act consent.

The coastal BAP outlines an action (coastal -15) to review the impact of current coastal aggregate extraction licences on coastal processes and habitats. The BAP has a more specific action (shingle and sand dunes-3) to promote a presumption against the extraction of the sub-tidal shingle resources.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence aggregate dredging in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Aggregate extraction results in localised destruction of the seabed. This could result in the following possible impacts on the features of interest:

- Physical damage through removal of habitats and species
- Physical damage through resuspension and settlement of fines on the sea bed surface may smother organisms and clog delicate feeding and breathing structures of some species.
- Toxic contamination through the remobilisation of any pollutants bound within the dredged sediments either in solution or bound to fines.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

Any new proposals for aggregate extraction would constitute plans and projects and competent authorities would therefore ensure that the potential impacts on the habitats are fully addressed in any assessments. Procedures are therefore in place to consider any future applications for aggregate extraction.

Management Considerations:

- *Ensure that any proposals for aggregate extraction are properly assessed by the appropriate competent authorities, addressing the potential impacts of both the dredging and associated shipping movements.*

Agricultural Run-off

Summary

✯	Possible risk in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations
Ⓟ	Plan or Project

Introduction

Agricultural land surrounds the rivers and tributaries that drain into the site. Most agricultural land is in private ownership although some farms are owned by Relevant Authorities such as the County Councils and are farmed by tenants. Diffuse run-off from agricultural land can lead to the localised contamination of water courses with the potential of subsequently impacting on the SEMS. Agricultural runoff can come from point sources such as slurry / silage effluent/sheep dip and diffuse sources such as silt / fertilizers.

Responsibilities and Management

There is currently no effective means to regulate diffuse inputs. The following Relevant Authorities can influence the management of agriculture in their areas of jurisdiction:

- The principle regulatory body associated with farming activities is DEFRA. They provide Codes of Good Agricultural Practice (COGAP) for the protection of the environment.
- County Councils can influence agricultural runoff from farms under their ownership by changing working practises.
- English Nature have very limited control but can act as an adviser. They may work with owners and occupiers of SSSIs to develop Site Management Statements. These agreements help ensure that activities undertaken are consistent with the conservation objectives of the site.
- The Environment Agency has strategic use related targets known as River Quality Objectives which have been set for all rivers and provide a basis for planning the maintenance and improvement of river quality. The Environment Agency has its own pollution legislation under which it can undertake enforcement action as appropriate. A range of legislation applies to farmers e.g. Control of Pollution Act 1974, Control of Pollution (silage, slurry and agricultural fuel oils) Regulations (SSAFO), Water Resources Act 1991. Farmers have generally not been prosecuted under the Water Resources Act for diffuse pollution but are now facing increasing restrictions on the use of fertilisers and pesticides.

Promotion of less intensively and more environmentally friendly farming through schemes such as the habitat creation scheme, set aside, Environmentally Sensitive Areas (ESAs) and countryside stewardship is increasing. In addition best practice guidance is available through the NFU and through advice from Farming Wildlife Advisory Group.

The coastal BAP also recognises issues in relation to agriculture and has an action (coastal -10) to ensure that the conservation requirements of coastal habitats are taken into account when developing and revising the agri-environment programmes and to encourage the use of such programmes for the appropriate management and rehabilitation of coastal habitats.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence agricultural run-off in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues
Agricultural run-off can lead to pollution of water courses that lead into the SEMS, this could result in impacts on the features of interest as follows:

- Toxic contamination through the introduction of synthetic and non- synthetic compounds which could impact and damage the invertebrate fauna and fish in the receiving estuary and the vegetation composition on saltmarshes.
- Non toxic contamination through nutrient and organic enrichment which could lead to accelerated growth of ephemeral algae, which could lead to a change in species composition.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion
Agricultural runoff could impact on the site, however it is thought that this activity will be adequately managed through ENs Site Management Statements and EAs review of consents. In addition it will also be considered further through the implementation of the new Water Framework Directive which will, for the first time, provide a coherent structure to tackle diffuse pollution in an integrated way and provides a good opportunity for its effective control. Other aspects of the activity are considered as a plan or project and are therefore not relevant to the SEMS management scheme. It is therefore felt that systems are currently in place that ensure that the activity is managed in line with the requirements of the Habitats Regulations, therefore no further work in required.

Management Considerations:

- *Ensure that Environment Agency and English Nature take account of the requirements of the Habitats Directive when reviewing consents.*

Airborne Sports

Summary

!	Key Risk Area
✯	Possible risk in parts of the site
⊗	Does not occur in parts of the site

Introduction

Airborne sports includes activities such as small private aircraft, kite flying, helicopters, microlites, kite surfing and remote control aircraft and any other sport that involves craft in the air controlled by people on the ground or in the air. There is potential for the activity to occur on any open areas, and it is thought to occur at various locations around the Solent, although it is generally thought to be low intensity and infrequent. The exact scale of the activity is unknown due to lack of information, however increased popularity of these sports through media publicity and the staging of festivals can influence others to take up these activities.

Responsibilities and Management

Airborne sports are generally unregulated particularly where they occur outside of the Relevant Authorities areas of jurisdiction. The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- County Councils and District Councils can introduce bye-laws if necessary where they are landowners or where the area is a Local Nature Reserve.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.
- The civil aviation authority have low fly zones and byelaws.

The coastal BAP recognises that there are issues in relation to recreation and suggests an action (coastal-32) to promote, disseminate and implement established codes of conduct for recreational and commercial users of the Hampshire coast.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence airborne sports in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Airborne sports can lead to the following impacts on the features of interest:

- Non-physical disturbance through noise and visual presence particularly in areas where there are breeding birds e.g. remote controlled aircraft may make noise, and rapid movements of these types of craft may cause a visual impact. Normally the disturbance from these activities is likely to be minimal however large numbers or certain types of activity could increase the noise and visual impacts.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion
Airborne sports could impact on site, however there is no evidence to suggest that this is currently causing any disturbance to the features of interest. Airborne sports are therefore highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity under the access topic).

Management Considerations:
- *Keep a watching brief on the impacts of airborne sports in key risk areas.*

Anchoring

Summary

!	Key Risk Area
✯	Possible risk in parts of the site
Ⓟ	Plan or Project

Introduction

Anchoring can occur all year round with increased seasonal intensity during the summer. Safe anchoring areas are shown on admiralty charts, outside of these areas and within a jurisdiction of a Harbour Authority anchoring normally requires the permission of the authority and would only otherwise occur in emergencies. Trinity House Lighthouse Service (THLS) may need to anchor in the site whilst conducting its duties as the General Lighthouse authority for England and Wales as stated in the Merchant Shipping Act 1995. As a generalisation THLS does not operate these operations in areas that fall under the jurisdiction of a Local Lighthouse Authority (Ports, Harbours etc, that maintain Local Aids to Navigation (AtoN)).

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- Harbour Authorities have the regulatory powers of Trinity House and act as the local lighthouse authority. Harbour Authorities can make byelaws and the Harbour Master can direct the Masters of vessels, generally anchoring is prevented within navigable channels.
- THLS is the General Lighthouse Authority for England, Wales and the Channel Islands as stated in the Merchant Shipping Act 1995. Other Local Lighthouse Authorities must gain consent from THLS if they wish to establish, alter or remove any aids to navigation under their jurisdiction.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence anchoring in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Anchoring can lead to the following impacts on the features of interest:

- Physical damage to seabed habitats through abrasion caused by the impact or dragging of anchors may disturb or damage sensitive benthic communities, in both rocky and soft substrates.
- Non-physical damage such as visual presence if boats are anchored in large numbers.

Disturbance from anchoring depends upon the frequency, magnitude and location of activity, type of sediments, and the sensitivity of benthic communities. It is generally thought that any impacts will be slight unless anchoring is carried out incorrectly. In addition the management of anchoring keeps vessels contained in particular areas, away from sensitive sites. Correct

implementation of vessel traffic management policies should prevent any adverse impacts on site or site features.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion
Anchoring could impact on the cluster, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. It is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity under the water sports topic).

Management Considerations:
- *Keep a watching brief on the impacts of anchoring in key risk areas*
- *Relevant Authority to continue to enforce current management measures. This could include enforcement of byelaws and implementation of policies, however these measures may be amended in the light of new information or changes in the activities being managed. Further information on current management measures is listed in the activity inventories for each cluster and a list of relevant plans and reports is listed in the annex to this Appendix.*

Angling

Summary

!	Key Risk Area
✯	Possible risk in parts of the site

Introduction

Angling is predominantly informal and takes place from the shore and from vessels and on organised trips. A number of angling clubs are present around the area and others visit from further afield. The activity takes place throughout the year, with seasonal variations according to fish life cycles and intensity can be high during competitions. Target species include bass, mullet, flounder and plaice. Large areas of the SEMS are designated Bass Nursery Areas under the Bass (Specified Areas) (Prohibition of Fishing) (Variation) Order 1999. This precludes sea angling from boats from many estuaries during certain seasons however this allows bass landing from shore based angling. Many angling clubs voluntarily prohibit bass fishing within their club.

Responsibilities and Management

All angling is subject to fisheries legislation. Additional regulations apply if anglers sell their catch, when the law regards them as commercial fishermen. SFCs can only manage the fishing activity and therefore do not have any control over other impacts that the angler may make through his presence. The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- The Sea Fisheries Committees enforce E.U. and national legislation and make/enforce local byelaw regulations. Fish minimum size legislation will affect anglers, and in the case of angling from a boat the Bass Nursery Area designation restricts fishing for that species during certain times of the year.
- County Councils and District Councils can make bye-laws as a landowner, where there are LNRs and under the Public Health Acts Amendments Act 1907, for the prevention of danger, annoyance, obstruction to persons using the sea-shore.
- DEFRA enforce EU and national fisheries legislation.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.
- The Environment Agency has a specific duty regarding salmon, trout and European eel fisheries including licensing and powers to prosecute.
- Some Harbour Authorities can regulate fishing from a boat in relation to anchoring and mooring areas.

Other management includes voluntary codes by both national organisations such as the NFSA, Environment Agency and local clubs, regulation of catch in competitions and selective competitions for specific fish.

The coastal BAP recognises that there are issues in relation to recreation and suggests an action (coastal-32) to promote, disseminate and implement established codes of conduct for recreational and commercial users of the Hampshire coast.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence angling in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Angling can lead to the following impacts on the features of interest:

- Non-physical damage through noise and visual presence may affect bird species. Although shoreline fishing is a quiet activity associated with limited movement of participants, the activity takes place throughout the year and participants often seek out locations which are inaccessible for other activities. Where these locations coincide with wildlife habitats, disturbance to wildlife may be observable, particularly at feeding, breeding and roosting times. For sea fishing, disturbance to wildlife caused by the motorboats required to access fishing sites will vary depending upon its proximity to wildlife and the vulnerability of the wildlife to disturbance.
- Despite efforts of anglers, lost gear may cause a litter problem that may result in the introduction of synthetic compounds.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion

Angling can impact on the site, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. It is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity under the access topic).

Management Considerations:

- *Keep a watching brief on the impacts of angling in key risk areas.*

Bait Collection

Summary

!	Key Risk Area
✯	Possible risk in parts of the site
ⓘ	System has been put in place through the SEMS process to ensure that the activity is managed in line with the Habitats Regulations i.e. a voluntary code of conduct leaflet was produced and circulated, however this needs to be monitored.

Introduction

Bait collection can be divided in two types i) recreational collection which is part of the public right to fish under the Magna Carta and ii) commercial collection which requires various permissions. Bait collection occurs around the accessible intertidal shores of the Solent, these areas have been mapped in a report by Sarah Fowler (Jan 2002) "Investigation into the extent of bait collection and its impacts on features of conservation interest for birds and intertidal species and habitats within the Solent and Poole Bay Natural Area". It is predominantly small scale by local individuals, however if the bait stock is good on any particular site the intensity can increase. Certain areas have also been subjected to large scale bait digging presumed to be carried out by commercial diggers from outside of the local area.

Responsibilities and Management

The commercial collection of bait from the foreshore requires permission from the landowner (and consent from English Nature where it takes place in an SSSI), however collecting bait for personal use is part of the public right to fish. The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- County Councils where they either own the foreshore or where they use their powers under the Countryside Acts to manage the foreshore for nature conservation reasons i.e. where LNRs have been designated over the foreshore.
- Local Authorities are able to make bye-laws in areas that they own.
- Harbour Authorities can make byelaws to prevent bait-digging in proximity of moorings and navigation.
- English Nature through the SSSI consenting system, byelaws for the protection of a European marine site. They can also make Special Nature Conservation Orders.
- Environment Agency can control the collection of bait in the vicinity of an Environment Agency controlled structure, such as a sea wall or sluice.
- Sea Fisheries Committees for species legally defined as 'fish' i.e. green shore crab etc.
- Private landowner can control permissions of access.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence bait collection in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Bait collection can lead to the following impacts on the features of interest:

- Physical disturbance such as abrasion e.g. holes left in the mud. Sediment habitat damage from bait digging is most significant in sheltered habitats (estuaries and inlets), where holes

can persist for weeks or months. Recovery is rapid in high-energy environments. Mixed sediments are seriously affected, with fine sediments lost and stones uncovered, and very slow recovery. Overturning rocks and stones while searching for intertidal species damages this habitat.
- Non-physical disturbance through visual presence. The presence of bait collectors may cause disturbance of birds, scale varies as species have different tolerances to disturbance and radii of exclusion around bait diggers.
- Toxic contamination through the introduction of synthetic and non-synthetic compounds. Toxic contamination can occur as digging sheltered sediment releases fine materials into suspension and frees heavy metals and contaminants if anoxic sediments are disturbed.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion

A Topic Group for bait collection has already convened and taken action. The Topic Group included Chichester Harbour Conservancy (representing Solent harbour authorities), Fareham Borough Council (representing Solent local authorities), English Nature, the Crown Estate, National Federation of Sea Anglers, Solent Area Bait Diggers Association, Hampshire Police Marine Unit and 3 representatives of the angling and bait collecting community. The Topic Group carried out extensive consultation between October 2002 and December 2002 with bait collectors and angers in the area. Comments and ideas raised during the consultation helped develop a voluntary code of conduct for bait collection. The code has been published as a leaflet (42000 printed) and also as an A4 poster (200 printed) with funding from English Nature , The Crown Estate and Chichester Harbour Conservancy. The leaflet has been widely distributed to angling clubs, tackle shops, harbour users and other interested parties. There is a requirement to monitor awareness of the code in order to assess whether there are any outstanding issues connected with bait collection.

Management Considerations:
- *Keep a watching brief on the impacts of bait collection in key risk areas.*
- *Monitor success of the code of conduct and review if necessary.*

Barrage/Sluice Operation

Summary

✯	Possible risk in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations
Ⓟ	Plan or Project

Introduction

A number of barrages and sluices operate at various locations within the site to control water flows. Operation of barrages and sluices is carried out to regulate water flow for water level management and involves the exchange of freshwater/saline water, on the tidal cycle. The operation may be part of an ongoing management plan or may be necessary to alleviate water levels creating a flood risk. Most sluices are self operating (i.e. tidal sprung) or manually operated by the landowner or the Environment Agency's 'Emergency Work Force'. In some cases the activity can contribute to the favourable condition of the site, i.e. by maintaining a wetland of importance, although this may be at the expense of another important habitat. The Environment Agency's Flood Defence Bill of Quantities outlines the location of sluices in Hampshire and the Isle of Wight. The Bill of Quantities is updated yearly and is currently being reviewed under the Environment Agency's Habitats Regulations Review of Consents.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- Environment Agency have operational and regulatory role in relation to barrages and sluices.
- Other Relevant authorities have powers to maintain sluices or barrages (Under the Land Drainage Act), however, the exercise of these functions is historically left to the Environment Agency. Some Councils and landowners maintain their own barrages or sluices, however they still require consent from the Environment Agency and would consult with English Nature. Other Relevant Authorities also have power to regulate, through the planning process.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence barrage/sluice operation in the clusters e.g. Catchment Management Plans (CAM) and Abstraction Management Plans (AMPs). A list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Barrage/sluice operation can lead to the following impacts on the features of interest:

- Physical damage through abrasion/scour on the intertidal areas and through access to work on barrages which may effect the habitats.

- Physical damage through removal. At times of operation material will be removed from the immediate vicinity.

The activity can contribute to the favourable condition of the site by maintaining and managing water levels in marshes or lagoons behind sea walls, this may contribute to the favourable condition (actually the very existence) of any landward designated site but not to the seaward site.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion
The analysis indicates that barrage/sluice operation could impact on the site. However it is thought that this activity is adequately managed through ENs Site Management Statements and EAs review of consents and Catchment Management Plans. Other aspects of the activity are considered as a plan or project and are therefore not relevant to the SEMS management scheme.

It is therefore felt that systems are currently in place that ensure that the activity is managed in line with the requirements of the Habitats Regulations, therefore no further work in required.

Management Considerations:
- *All Relevant Authorities to ensure that they take into account the requirements of the Habitats Regulations in the operation of any barrage/sluices within their control.*

Beach Cleaning

Summary

✯	Possible risk in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations

Introduction

Local Authorities undertake beach cleansing, litter control and enforce dog bye-laws under the Environmental Protection Act. Beach cleaning is carried out more frequently in the summer months and in areas which have higher visitor numbers, it includes manual litter picking and mechanical collection. Shoreline litter clearance is often carried out by conservation volunteers such as the Friends of Langstone Harbour.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- Local Authorities have a duty to clean the litter from amenity beaches under the Code of Practice on Litter and Refuse as set out in the Environmental Protection Act 1990, this may be subcontracted. There is no requirement to clean other stretches of coastline, although local authorities may have policies in their local plans, and additional cleanups can be organised as and when required in response to reports from members of the public or inspections by Council officers.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site

The Marine Conservation Society (MCS) Adopt a Beach Scheme helps source volunteers for clean-up, as well as surveying the state of the country's beaches.

The Solent-wide beach clean is the first initiative being taken forward from the Clean Scene project which stems from the Solent Forum's Access and Environment Initiative. Clean Scene aims to unite local partnerships and other users of the Solent in moving towards a cleaner coastal environment. The Solent-wide beach clean also forms part of the Marine Conservation Society's national Beachwatch event and links to their Adopt a Beach scheme. A number of different organisations take part in the Solent-wide beach clean and survey including Local Authorities and the probation service. Various beaches are included such as St Helens on the Isle of Wight, foreshore of Portsmouth Harbour, North Hayling Beach, Hamble foreshore, Porchester foreshore, Calshot Activities Centre, Stokes Bay and Langstone Harbour in 2003. This was the first year for the Solent-wide beach clean event and it is expected to grow each year as an increasing number of groups and organisations become involved.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence beach cleaning in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues
The degree of impact will depend on the type of beach cleaning employed, hand picking will have less of an impact than mechanical cleaning. Beach cleaning can lead to the following impacts on the features of interest:

- Physical damage through abrasion. Mechanical collection of litter may remove strandline resulting in loss of strandline fauna and loss of food resource. The complete removal of the standline by mechanical means may also reduce the stabilising effect of natural strandline debris upon sediment movement at adjacent dune fronts.
- Non-physical damage through a noise and visual presence may disturb bird species.

If carried out correctly the activity can contribute to the favourable condition of the site. Removal of rubbish prevents smothering of habitats and injury to birds as well as preventing the introduction of pollutants into the water.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion
The analysis indicates that beach cleaning could impact on the site. It is thought that this activity is adequately managed through ENs Site Management Statements, although it was felt that further guidance may be required to ensure that beach cleaning is carried out with no damage to the site.

It is therefore felt that systems are currently in place that ensure that the activity is managed in line with the requirements of the Habitats Regulations, therefore no further work in required.

Management Considerations:

- *Ensure that local authorities carry out beach cleaning activities with due regard to the requirements of the Habitats Directive.*

Beneficial Disposal of Dredgings

Summary

!	Key Risk Area
✯	Possible risk in parts of the site
Ⓟ	Plan or Project

Introduction

For many years dredged material was considered as a waste material requiring disposal. Recently there has been a change in perception and dredged material is considered as a resource which could be used for potential benefit, especially where the material is uncontaminated. Section 13 of FEPA now requires a review of alternatives to disposal. Categories of beneficial use include construction, coast protection, agriculture, horticulture and forestry, amenity, habitats and capping. Examples can be found around the site e.g. Chichester Harbour and further areas are being considered in Southampton Water. (Beneficial disposal of dredging for foreshore recharge is covered as a separate activity).

Responsibilities and Management

Beneficial disposal of dredged spoil is a plan or project. The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- FEPA licence required from DEFRA
- Consent required under the Coast Protection Act by DfT.
- Planning Permission is required from the local authorities if deposited above mean low water
- Waste management licence required if deposited on land
- If the deposit of waste into or on to land (above mean high water) it requires a Pollution Prevention and Control Permit (PPC) from the Environment Agency. May also require a Land Drainage Consent.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.

A number of local plans, harbour plans and other non-statutory plans have policies that can influence beneficial disposal of dredging in the clusters, a list of all plans is included in annex 1. In particular a number of estuaries are producing sustainable dredging plans. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Beneficial disposal of dredging can lead to the following impacts on the features of interest:

- Physical loss through smothering of intertidal communities.
- Non physical disturbance through noise and visual presence may affect bird species.
- Toxic contamination through the introduction of synthetic and non-synthetic compounds through suspension of the contaminants in the water column (however the material is usually tested prior to disposal), these could effect shellfish waters.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion

There is currently an ongoing debate whether maintenance dredging should be considered as an activity within the management scheme or as a 'plan or project' under Regulation 48. A protocol is being developed between the ports industry and DEFRA which will outline how maintenance dredging should be addressed in European marine sites. It is likely that the protocol will suggest that the harbour authorities and English Nature should produce a baseline document about maintenance dredging and its effect on the European marine site. The EMS management scheme structure is suggested as a means of achieving this. The Medina estuary is being used as a pilot study to determine whether this is the correct approach to take. Until the protocol is in place a moratorium is in place that there will be no need for appropriate assessment under Regulation 48 at present. Although the protocol is only concerned with maintenance dredging, the MG have agreed that it may be possible to consider other aspects of dredging such as beneficial disposal of dredging within any future studies to ensure a more holistic approach to dredging. Although beneficial disposal of dredging is a plan or project which could impact on the cluster the MG will wait for further guidance (the protocol) before determining whether any further assessment is required of beneficial disposal of dredging (see appendix 2 for further detail on key areas at risk from the activity under the dredging topic).

Management Considerations:

- Wait for further guidance before determining whether any further assessment is required of beneficial disposal of dredging.

Boat Repair and Maintenance

Summary

!	Key Risk Area
✯	Possible risk in parts of the site

Introduction

Within marinas and boatyards there are often commercial maintenance areas for boat repair and maintenance, these can be either large hangers, or general boat areas where boat owners can carry out their own maintenance of craft, whether in dry berthing areas, against walls or on scrubbing grids. Within these areas pressure washing, scrubbing off antifouling, general maintenance, scraping and painting operations can take place. As a result of spillages, debris and wastes produced during these activities, the waters used to wash down maintenance areas may contain a mixture of contaminants including oils, oil emulsifiers, paints, solvents, detergents, bleach, antifouling paint scrapings or sandblasting wastes. The activity occurs particularly at the end of the summer season. Boatyard activities occur throughout the site. Many Harbour Authorities and marinas have repair facilities and reception facilities for contaminants such as waste oil.

Responsibilities and Management

Boat scrub down areas are found within yards or at intertidal scrubbing piles. Currently most of these areas discharge the residue from the washdown area directly to the river or sea and are not required to obtain consent to discharge nor are they prosecuted for a pollution offence. Some yards have installed a sump in their washdown area; the residue of the sump is then disposed of as contaminated waste.

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- The Environment Agency can prosecute discharges under the Water Resources Act 1991 as a pollution offence but have not yet done so. There is no system of testing for biocides and chemicals adjacent to these areas to form the basis of a prosecution. The Environment Agency issue Pollution Prevention Guidance for marinas & craft, which provides advice on boat owners to minimise pollution from their activities. All boat users are encouraged to be aware of this advice and follow it at all times. The Environment Agency is working with the British Marine Federation to educate boat owners and marina operators of the severe risks of boat scrubbing and other types of pollution. It is hoped that it will result in the revision of BMF's Environmental Code of Practice in September 2004 with guidance provided by the Environment Agency, and supported by practical projects to promote best practice. The Code of Practice will provide the detailed advice but it is hoped that the guidance will feed into existing schemes which will help obtain/retain accreditation.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence boat repair and maintenance in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Boat repair and maintenance can lead to the following impacts on the features of interest:

- Toxic contamination through the introduction of synthetic and non-synthetic compounds. Contaminated cleaning waters can be washed down into the harbour or marina basin directly or via the drainage system. On entering the marine environment these pollutants can have harmful or toxic effects on the animals and plants. In many cases the effects may be temporary and minimal due to the dilution of wastes in the harbour, however risks of possible adverse effects increase where cleaning agents and other chemicals are used incorrectly or in large quantities far in excess of needs or where wastes are washed into enclosed waters or areas with low tidal flushing. The release of antifouling paints e.g. tributyl tin (TBT) and copper compounds into the marine environment has been found to have harmful effects. When allowed to accumulate in high concentrations in sediments they can be toxic to non-target marine organisms. The adverse effects of TBT on marine life are well known, particularly with regard to shellfish and molluscs. Copper-based anti-fouling paints are less toxic to non-target species but may still have toxic effects in high concentrations.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion
Boat repair and maintenance can impact on the site, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. It is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity under the water sport topic).

Management Considerations:
- *Keep a watching brief on the impacts of boat repair and maintenance in key risk areas*
- *The Agency are in the process of considering setting up a research project in order to monitor the effects of wash down facilities in order to determine the percentage contribution to the background levels of both copper and also Irgarol within the Solent.*

Capital Dredging

Summary

!	Key Risk Area
✯	Possible risk in parts of the site
Ⓟ	Plan or Project

Introduction

A capital dredge is either a dredge carried out for the first time or a dredge that has not been repeated for 10 years. It occurs as and when its required and has occurred in most navigation channels in the Solent in the past. The need for the activity is dependent on sediment budgets and dynamics, and the socio-economic demand for development. There are no major plans for capital dredging in the site, however smaller proposals for capital dredges may be forthcoming in relation to development projects e.g. a number are proposed in the Medina Estuary, these will be looked at as a plan or project individually and the impact will also be considered in combination with dredging in other parts of the estuary possibly in line with recommendations from the Medina Estuary Sustainable Use Study.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- Consent is required from DfT Ports Division for certain marine works, including capital dredging and disposal, with implications on the provision of safety of navigation, under the Coast Protection Act 1949.
- FEPA licence required from DEFRA for disposal of dredgings.
- Harbour authorities have responsibilities for safe navigation and conservancy of the navigation. Harbour Authority consent is required where the activity takes place within the harbour limits.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.
- Land Drainage Consent may be required from the Environment Agency. Environment Agency also give advice to other consenting bodies e.g. DEFRA for a FEPA licence and give particular attention to areas designated under the Shellfish Water Directive to prevent smothering and other potential impacts on water quality.

The coastal BAP has an action (mudflats & eelgrass beds-3) to ensure that development schemes, dredging operations and fishing activities do not affect sediment flats or eelgrass beds.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence maintenance dredging in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Capital dredging can lead to the following impacts on the features of interest:

- Physical loss through removal of subtidal benthic species and communities and removal of sediments which in the long term may affect the sediment regime locally and possibly at some distance.
- Physical loss through smothering of benthic habitat and communities where loss of fine fractions during dredging and disposal operations results in settlement of fines on the sea bed.
- Physical damage through abrasion of the sediments. Alterations to coastal or estuary morphology, for example alteration of sediment pathways and changes to siltation patterns, may result in erosion, or creation of intertidal and subtidal habitat. Effects depend on the scale and frequency of the dredge and disposal, and the local conditions at the dredge and disposal site.
- Physical disturbance to migratory fish.
- Toxic contamination through the introduction of synthetic and non-synthetic compounds as pollution bound within the dredged sediments may be remobilised either in solution or bound to fines. These may become biologically available and enter the food chain.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and appendix 2.

Conclusion

There is currently an ongoing debate regarding whether maintenance dredging should be considered as an activity within the management scheme or as a 'plan or project' under Regulation 48. A protocol is being developed between the ports industry and DEFRA which will outline how maintenance dredging should be addressed in European marine sites. It is likely that the protocol will suggest that the harbour authorities and English Nature should produce a baseline document about maintenance dredging and its effect on the European marine site. The EMS management scheme structure is suggested as a means of achieving this. The Medina estuary is being used as a pilot study to determine whether this is the correct approach to take. Until the protocol is in place a moratorium is in place that there will be no need for appropriate assessment under Regulation 48 at present. Although the protocol is only concerned with maintenance dredging, the MG have agreed that it may be possible to consider other aspects of dredging such as capital dredging within any future studies to ensure a more holistic approach to dredging. Therefore although capital dredging is a plan or project which could impact on the cluster the MG will wait for further guidance (the protocol) before determining whether any further assessment is required of capital dredging (see appendix 2 for further detail on key areas at risk from the activity under the dredging topic).

Management Considerations:

- *Wait for further guidance before determining whether any further assessment is required of capital dredging.*

Coastal Development

Summary

✯	Possible risk in parts of the site
Ⓟ	Plan or Project

Introduction

Coastal development includes all building works (other than those mentioned as individual activities) waste disposal sites, transport routes etc. Some areas bordering the SEMS are highly urbanised, however other areas are made up of smaller harbours and other smaller urban areas with associated developments of housing and development associated with recreation and tourism. Any new coastal development is generally focussed around existing harbours, ports, towns and cities.

Responsibilities and Management

Coastal development is a plan and project. Development of land (to mean low water) is regulated through the planning system, proposals for the development of land, including the change of use of buildings, require planning permission. This system reconciles the needs of development, encouraging the optimum use of existing resources and the principles of sustainability. The planning system is operated by local authorities who prepare development plans to guide future development including structure plans, local plans and unitary plans. Applications are made in the first instance to local planning authorities who are required to determine applications in accordance with the development plans, unless material considerations indicate otherwise.

In general local planning policies place great emphasis on the high quality of the natural environment and seek to promote sustainable development.

In addition to local plans other statutory and non statutory plans also have policies for coastal development e.g. the estuary management plans, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Coastal development can lead to the following impacts on the features of interest:

- Physical damage through the removal/destruction of habitats and species

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

The activity is a plan or project and is therefore not relevant to the SEMS management scheme.

Management Considerations:

- *Ensure that any new development proposals are properly assessed by the appropriate competent authorities.*
- *Ensure that the SEMS is taken fully into account in the preparation of development plans and the assessment of planning applications.*

Coast Protection

Summary

✯	Possible risk in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations
Ⓟ	Plan or Project

Introduction

Coast protection involves the placing and maintenance of structures designed to reduce erosion. Coast protection is a plan and project. However, aspects of coast protection such as maintenance of structures can be considered as an ongoing activity. The coastline is defended along some of its length, reflecting the substantial urban population living within the coastal zone, together with the number of commercial and other properties. The historical trend in coastal defence has been for the progressive construction of walls, groynes, beach management and other works to prevent erosion. Various areas have small patches of DIY defences carried out by landowners without permission.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- The powers to carry out coast protection works are permissive and stem from the 1949 Coast Protection Act. Local Authorities as Coast Protection Authorities manage the frontage to reduce the risks of erosion and to some extent flooding and licence others. They also control development as the Local Planning Authority and have various polices relating to coast protection. Coast protection is a plan and project as the Local Authority has to give planning permission.
- The activity may require a works licence from the Harbour Authority .
- FEPA licence may be required from DEFRA if coastal protection is below Mean Low Water.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.
- Owners of the foreshore can also influence the activity including Local Authorities, Crown Estate etc.
- The Environment Agency does not have a statutory function to manage coastal protection works.

Shoreline Management Plans and coastal strategies are produced by the local coastal groups of operating authorities and set out a strategy for sustainable coastal defence within a 'sediment cell'. They provide guidance on coastal defence (flood defence and coast protection), taking into account natural coastal processes, coastal defence needs and environmental considerations.

The Solent CHaMP outlines areas where managed retreat could take place. A project is currently being put together by the local authorities/Environment Agency and English Nature which hopes to examine compensation habitat requirements i.e. how much compensation is likely to be needed, what types of habitat are required and where they should be located. This is expected to lead to a strategic land banking system jointly managed by the operating authorities and English Nature which will help fulfil the requirements of the Habitats Regulations. A similar project is being progressed on the Isle of Wight.

The work from these initiatives will provide essential information needed for the future review of the SMPs as it will provide a realistic review of opportunities for coastal realignment and ensure that biodiversity and SEMS conservation objectives are taken into account.

The coastal BAP also recognises issues in relation to coastal squeeze and has an action (coastal-2) to develop a strategy for maintaining (where possible) the extent and balance of all coastal habitats, particularly the Natura 2000 series and SSSI series, in the face of projected sea level rise and coastal squeeze. It has a further action (coastal-15) to review the impact of current coastal defence systems on coastal processes and habitats.

In addition to the above plans other statutory and non statutory plans also have policies for coastal protection e.g. the estuary management plans, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Coastal protection can lead to the following impacts on the features of interest:

- Physical loss through direct removal/destruction of habitats by construction of defences. Also indirect removal/destruction of habitats through increased risk of coastal squeeze.
- Physical loss through smothering of features (effective removal), due to dumping of material.
- Physical damage through abrasion. Modification of inshore coastal processes potentially leading to changed rates of erosion/accretion. Abrasion may be caused through the construction phase and during repair work and is therefore only temporary.
- Non physical disturbance. Noise and visual impacts on bird species may be an issue during construction phase and repair work but not during the ongoing operation phase and is therefore only temporary.

Conditions on planning consents aim to ensure that work is not carried out within the over-wintering period and this will therefore minimise some of the above impacts.

It is also important to note that in some instances the activity is fundamental to the sustainability of the individual features (e.g. spits) but also to the existence of the features which depend on them (e.g. saltmarsh).

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

Coastal protection can impact on the site. However coastal protection is a plan and project and as such is already considered under Regulation 48 of the Habitats Regulations, future work through the review of the SMP will ensure that future coastal protection polices are in line with the requirements of the Habitats Regulations. The maintenance of coastal protection is an ongoing activity, however it is unlikely that any further work will be required on coastal protection because it is already managed by other means i.e. through SMP, coastal groups, CHaMPS etc.

It is therefore felt that systems are currently in place that ensure that the activity is managed in line with the requirements of the Habitats Regulations, therefore no further work in required.

Management Considerations:

- *Ensure that any proposals for coastal protection are properly assessed by the appropriate competent authorities, addressing the potential impacts on the features of interest.*
- *Ensure that the next round of SMPs take full account of the requirements of the Habitats Directive.*

Commercial Shipping

Summary

!	Key Risk Area
✯	Possible risk in parts of the site
⊗	Does not occur in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations

Introduction

Commercial shipping, both for cargo and freight takes place in the Solent all year round and 24 hours per day. It is predominantly concentrated in Southampton Water and Portsmouth Harbour with other traffic also using the Medina, Wootton Creek and Lymington Estuaries. Elsewhere smaller scale commercial use does take place for instance in relation to aggregate cargoes, dredgers, passenger ferries and pleasure trips etc.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- The Harbour Authorities have a number of responsibilities regarding commercial shipping including a statutory duty regarding navigation, marine safety and speed limits in their areas of jurisdiction. Some Harbour Authorities are also responsible for the pilotage. Safety Management Systems are in place in all ports to ensure compliance with the Port Marine Safety Code and deal with issues such as Commercial Fuel Barge operations, managing vessel activity and navigational safety and are audited by the MCA. Port Waste Management Plans are also in place in all ports to ensure compliance with the Merchant Shipping and Fishing Vessel (Port Waste Reception Facilities Regulations 2003).
- Local Authorities can license pleasure craft.
- Private companies operating commercial shipping must comply to the various legislation e.g. Dangerous Vessels Act, and Merchant Shipping Acts etc..
- The provision of ferry services is generally undertaken within the private sector, although some services are financially supported by the local authorities.

The coastal BAP recognises that there are issues in relation to commercial use and suggests an action (coastal-32) to promote, disseminate and implement established codes of conduct for recreational and commercial users of the Hampshire coast.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence commercial shipping in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Commercial shipping can lead to the following impacts on the features of interest:

- Physical damage from abrasion may be caused from commercial shipping. This could be caused by grounding due to navigation error or accident. Ship wash may also cause changes

to the hydrodynamic regime which may result in erosion of intertidal and shallow subtidal habitats and disturbance to communities (impact of ship wash is dependent on the magnitude of the waves generated, distance between the vessel and the marine feature of interest, form of the seabed, depth of water and the type of shoreline). A boat that produces large waves some distance from the shoreline may have less impact then a vessel producing small waves closer to the shoreline.

- Non–physical disturbance such as noise and visual presence can be generated from large ships and may disturb bird species.
- Toxic contamination by introduction of synthetic and non-synthetic compounds can occur from the following
  → accidental and deliberate discharge of lubricants, fuel, refuse etc.
  → flushing of empty ballast tanks with seawater
  → pumping out oily bilges
  → disposal of refuse
  However legislation does exists to regulate these and where it does occur the practise would be illegal.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, (these are available as separate reports on the CD and in appendix 2 under commercial shipping topic).

Conclusion
Commercial shipping could impact on the site, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. Commercial shipping is already covered by a multitude of legislation however this legislation may not take into account the impact of commercial shipping on the features of interest. It is highlighted in the Management Scheme as a possible area for concern, see appendix 2 for further detail on key areas at risk from the activity.

Management Considerations:

- *Keep a watching brief on the impacts of commercial shipping in key risk areas.*
- *Harbour Authorities to continue to enforce current management and safety measures. This could include enforcement of byelaws and implementation of policies, however these measures may be amended in the light of new information or changes in the activities being managed. Further information on current management measures is listed in the activity inventories for each cluster and a list of relevant plans and reports is listed in the annex to this Appendix*

Construction/Alteration of Slipways

Summary

✯	Possible risk in parts of the site
Ⓟ	Plan or Project

Introduction

Numerous small pontoons, jetties and slipways associated with yacht clubs, private dwellings and businesses occur throughout the SEMS. Application for new slipways etc. are common throughout the site and require relevant permissions from the appropriate competent authorities.

Responsibilities and Management

A construction or alteration of a slipway is a plan or project. The following permissions are required:

- Construction and alteration of slipways requires a works licence from the Harbour Authority.
- The construction of a slipway would require planning permission from the Local Authority.
- If the construction is below mean low water it would require a FEPA licence from DEFRA.
- Permission is required from English Nature for any operation likely to damage a SSSI (Construction / alteration of hardstanding structures is cited on an SSSI Operation Likely to Damage list where the SSSIs are sensitive to this kind of operation.)

Local authority plans and other statutory and non-statutory plans such as estuary management plans may also have policies on the development of jetties, slipways and pontoons, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Construction/alteration of slipways can lead to the following impacts on the features of interest:

- Physical damage through the removal and destruction of habitats/species.
- Non physical disturbance from noise and visual presence during the during construction phases, however conditions may be placed on the proposal so that construction does not coincide with sensitive times of the year for various species such as breeding birds.
- Alteration of coastal processes and sediments dynamics.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

Construction/alteration of slipways could impact on the SEMS, however the activity is a plan or project and is therefore not relevant to the SEMS management scheme as procedures are in place to take account of the requirements of the Habitat Regulations.

Management Considerations:

- *Ensure that any proposals for new slipways are properly assessed by the appropriate competent authorities, addressing the potential impacts on the features of interest.*

Discharges

Summary

✯	Possible risk in parts of the site
Ⓟ	Plan or Project

Introduction

There are a number of coastal discharges, the majority of which are from wastewater treatment works, treating both domestic and industrial discharges. The activity occurs throughout the coastal zone of the SEMS and point source maps are available from the Environment Agency.

Responsibilities and Management

The construction of outfalls for discharges are a plan or project, however the ongoing management of an outfall can be considered as an activity. The following permissions are required:

- All discharges are controlled through a statutory system of licences known as discharge consents, issued by the Environment Agency.Environment Agency are also required to sample bathing waters. The Habitats Regulations requires a review of relevant consents and permissions including EAs review of consents.
- English Nature have duties where the activity may impact on the SEMS and permission is required for any operation likely to damage a SSSI. English Nature also has a degree of control of domestic outfalls through the consultation on Appendix 11 forms from the Environment Agency.

Various statutory and non statutory plans also have policies for discharges and pollution related issues e.g. the estuary management plans, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Outfall discharges can lead to the following impacts on the features of interest:

- Non-toxic contamination in the form of organic materials, input of nutrients, changes in temperature or of salinity and increased turbidity.
- Toxic contamination due to synthetic inputs such as synthetic pesticides and non synthetic inputs such as heavy metals.
- Physical damage caused by siltation.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

Outfall discharges could impact on the cluster, however as all discharges will be reviewed by the Environment Agency under the Habitats Regulations 'Review of Consents' the activity does not need to be considered any further in the management scheme.

Management Considerations:

- *Ensure that any proposals for new discharge consents are properly assessed by the appropriate competent authorities.*
- *Ensure that the Environment Agency review all current discharge consents with regard to the requirements of the Habitats Regulations.*

Disposal of Dredged Spoil

Summary

!	Key Risk Area
✯	Possible risk in parts of the site
Ⓟ	Plan or Project

Introduction

Disposal of dredge spoil can either be on land, at sea or used beneficially depending on the nature of the sediment that is dredged (beneficial disposal of dredging and foreshore recharge are included separately). It occurs throughout the Solent from navigation channels. The majority of dredgings are currently dumped at sea, at the Nab disposal ground to the east of the Isle of Wight, and Hurst narrows, both of which are outside the SEMS boundary.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- Disposal of dredged spoil is a plan or project.
- FEPA licence is required from DEFRA (Consult with English Nature, CEFAS, the Harbour Authority, local authorities or national organisations, such as Trinity House). In recent years all applications for sea disposal licences for dredged materials in the UK have been required to consider whether the material can be managed in such a way to derive environmental or other benefits or the potential for beneficial use of the material e.g. construction, agricultural and environmental uses. Conditions can be attached to consents to minimise potential harmful effects arising from the disposal of the material.
- Consent required under the Coast protection Act by DfT (they consult with English Nature, CEFAS, the Harbour Authority, Local authorities or national organisations, such as Trinity House).
- Planning Permission is required from the Local authorities if deposited on land.
- Waste management licence required from the Environment Agency if deposited on land.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence disposal of dredged spoil in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Disposal of dredged spoil can lead to the following impacts on the features of interest:

- Physical loss through smothering of sea bed communities. Smothering is inevitable at disposal site, however the communities within regularly used sites are often degraded.

- Toxic contamination through introduction of synthetic and non-synthetic compounds through re-suspension of the contaminants in the water column (however the material is usually tested prior to disposal)

Disposal of dredged material may lead to the creation of new subtidal or intertidal habitat, either inadvertently or through planned sediment recharge schemes.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and appendix 2.

Conclusion

There is currently an ongoing debate regarding whether maintenance dredging should be considered as an activity within the management scheme or as a 'plan or project' under Regulation 48. A protocol is being developed between the ports industry and DEFRA which will outline how maintenance dredging should be addressed in European marine sites. It is likely that the protocol will suggest that the harbour authorities and English Nature should produce a baseline document about maintenance dredging and its effect on the European marine site. The EMS management scheme structure is suggested as a means of achieving this. The Medina estuary is being used as a pilot study to determine whether this is the correct approach to take. Until the protocol is in place a moratorium is in place that there will be no need for appropriate assessment under Regulation 48 at present. Although the protocol is only concerned with maintenance dredging, the MG have agreed that it may be possible to consider other aspects of dredging such as disposal of dredged spoil within any future studies to ensure a more holistic approach to dredging. Although disposal of dredging is a plan or project which could impact on the cluster the MG will wait for further guidance (the protocol) before determining whether any further assessment is required of disposal of dredging. DEFRA are responsible for reviewing any outstanding consents in light of the requirements of the Habitats Regulations. (see appendix 2 for further detail on key areas at risk from the activity under the dredging topic).

Management Considerations:

- *Wait for further guidance before determining whether any further assessment is required of disposal of dredged spoil.*

Educational Fieldtrips and Research

Summary

!	Key Risk Area
✯	Possible risk in parts of the site

Introduction

The natural (physical, geological and biological) and historical assets of both the coastal and marine environment are an important educational and scientific resource. Parts of the site are regularly used by a variety of educational establishments from schools to universities and for scientific research and monitoring. Types of educational activities include habitat studies, canoeing and sailing training, nature/history walks, summer activity days, scientific survey. A number of other bodies undertake statutory monitoring, mainly in relation to public health issues, specific surveys and national programmes.

Responsibilities and Management

There is no formal management or co-ordination of these activities and individuals and organisations organise their own work programmes, however the following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- The County Authorities provide services that operate educational field trips, e.g. schools using HCC countryside sites or rights of way, or trips run by outdoor/field centres. The County Councils are only responsible for ensuring that the safety of school children is considered as outlined in various regulations this includes an awareness of the environment.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.
- As a landowner, the Harbour Authorities can control access to the shore and may have byelaws relating to noise, nuisance and conduct which would apply to any groups working within the Harbour boundary. Some Harbour Authorities provide educational field trips on an "as and when" basis tailored to the individual groups requirements and others may carry out their own scientific survey and monitoring.
- Landowners permission may also be required for access.
- Some school trips are organised by individual schools or charity institutions and are not coordinated by the Relevant Authorities.

The coastal BAP recognises issues in relation to educational field trips and has an action (coastal39) to raise public awareness by increasing links between schools, colleges and universities and local coastal sites by providing educational resources and training on the interpretation of habitats.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence educational/scientific study in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues
Educational/scientific study can lead to the following impacts on the features of interest:
- Physical damage through abrasion caused through trampling of the habitats, particularly where surveying vegetation off marked pathways.
- Non-physical damage through noise and visual disturbance may impact on bird species.

Research and monitoring are essential to ensure effective management of the site i.e. to highlight potential problems and offer solutions. However field operations, both amateur and professional have the potential to be detrimental if not managed properly.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion
Educational/scientific study could impact on the site, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. It is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity under the access topic).

Management Considerations:
- *Keep a watching brief on the impacts of educational and scientific study in key risk areas.*

Egg Harvesting

Summary

✯	Possible risk in parts of the site
⊗	Does not occur in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations

Introduction

Black Headed gull (*Larus Ridibundus*) egg harvesting for human consumption takes place under licence from DEFRA between April and 15 May at Lymington/Keyhaven marshes (max 85000 per year) and between April and 30th April on Gull Island, Needs Ore Point within the Beaulieu Estuary (max 4000 per year). The earlier date is a result of sandwich terns nesting earlier on the North Solent NNR. The activity only occurs between dawn - 9:30 on weekdays and dawn – 11:00 on sat/sun. There are 26 licensees – the majority as a group (Solent Egg Collectors) but others as individuals. No new licenses, outside of succession in existing families, are being granted.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- Collectors need a licence from DEFRA who set the limits in consultation with English Nature .
- Lymington Harbour Commissioners give their permission as landowners, LHC has given permission to 9 individuals in 2003 and 1 to Solent Egg Collectors (17 members).
- NFDC as a lessee of both sites give their permission as landlords to enter the site as well as the collecting license.
- Beaulieu River Management has a direct regulatory role as owner of the land and operator and has a licence from DEFRA for egg collecting.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site

Meetings locally in the last year have sought to clarify matters and improve the communication between all parties. There is a recognition to better understand the relationship between egg collecting and conservation interest. English Nature has placed a bid for the funding of a PhD to look into the impacts.

Impacts/Issues

Egg harvesting can lead to the following impacts on the features of interest:

- Selective extraction of species.
- Physical damage through abrasion from trampling on saltmarsh areas.
- Non-physical damage through visual disturbance may impact on bird species.

Egg Harvesting is traditional activity that has been conducted for generations and often at greater intensities. Currently there are arguments on behalf of egg collectors that the activity contributes to favourable conservation of the site, for example by managing the laying pattern of gulls so there are eggs later, it avoids the loss of chicks in early season inundation. Also having licensed individuals on site reduces the possible impact of uncontrolled human intervention.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

Egg collecting could impact on the site, however it is thought that this activity is adequately managed through the current licensing system which prevents detrimental impacts occurring. It is therefore felt that systems are currently in place that ensure that the activity is managed in line with the requirements of the Habitats Regulations, therefore no further work in required.

Management Considerations:

- *Ensure that any proposals for new licenses are properly assessed by the appropriate competent authorities, addressing the potential impacts on the features of interests.*

Fishing

Summary

!	Key Risk Area
✯	Possible risk in parts of the site

Introduction

The Solent is a mixed sea fishery, the fishing effort varies between a number of different commercial species throughout the year. The inshore waters have an important role as a nursery area for bass, with specific areas identified for protection, and for a range of other fin-fish. Various fishing activities take place including:

- Demersal trawling
- Drift netting
- Fyke netting
- Long lining
- Set netting
- Beam trawling
- Trapping

A number of the harbours serve as a port of registry and harbour for commercial craft who fish the wider Solent waters.

Responsibilities and Management

Fishing and its management is complex and is governed by several tiers of legislation as well as a substantial body of common law that has developed over hundreds of years. Fishing for sea fish is generally a public right. However there are certain areas where sea fisheries can be private by virtue of title granted prior to the magna carta or where 'several' or 'regulated' fisheries have been established. Regulations govern the size of fish that can be taken, the methods of fishing that may be used, closed seasons and closed areas and may also require that licences and permissions are obtained before fishing. The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- DEFRA deal with quota management and the licensing of fishing vessels.
- The Sea Fisheries Committees enforces E.U., national and make/enforce local byelaw regulations including in Sussex the 'Fixed Engine' byelaw, the 'Specified Methods' byelaw and the 'Vessel Length' byelaw amongst others.
- The Environment Agency regulates fisheries to six miles off shore for salmon, sea trout and eels. In addition the Environment Agency acts as the Sea Fisheries Committee (SFC) in some estuaries, mostly on the Isle of Wight for this Agency Area. The Environment Agency issues licences for netting of eels and one sea trout net fishery. Enforcement patrols are undertaken to ensure compliance and detect illegal exploitation. Seasonal net exclusion zones are in force around the mouths of rivers with a sea trout / salmon run to ensure that migratory salmonids are able to access rivers without encountering fixed net obstructions. Mandatory catch returns are required of eel and sea trout nets.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.
- Harbour Authorities can have byelaws to prohibit fishing activity which is likely to become an obstruction or danger to any person or property including in particular a vessel or mooring.

The coastal BAP has an action (mudflats & eelgrass beds-2) to introduce fisheries legislation or port and harbour regulations to protect important eelgrass beds. It has a further action (mudflats

& eelgrass beds-3) to ensure that development schemes, dredging operations and fishing activities do not affect sediment flats or eelgrass beds.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence fishing in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

The extent of any impacts from fishing activities are determined by a variety of factors including gear type, fishing effort, the nature of the seabed and its marine life. Fishing activity can lead to the following impacts on the features of interest:

- Physical damage through abrasion of the sea bed. Factors that will influence fishing activity i.e. ability of fishing gear to tow in certain areas may mean that there is no conflict with features for which the site has been designated. Abrasion of benthic habitats and marine life will generally be shorter lived on species and habitats that have adapted to or, been shaped, by frequent natural disturbances in comparison to those species and habitats in less exposed conditions. Slow growing, fragile species are particularly vulnerable. Trawling and dredging can affect the structure and composition of benthic communities to the point where they are dominated by short-lived, opportunistic species.
- Non-physical damage through a visual presence, although it is anticipated that this will be minimal.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion

Fishing could impact on the site, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. It is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity under the fishing topic).

Management Considerations:

- *Keep a watching brief on the impacts of fishing in key risk areas*
- *Relevant Authority to continue to enforce current management measures. This could include enforcement of byelaws and implementation of policies, however these measures may be amended in the light of new information or changes in the activities being managed. Further information on current management measures is listed in the activity inventories for each cluster and a list of relevant plans and reports is listed in the annex to this Appendix.*

Flood Defence

Summary

✯	Possible risk in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations
Ⓟ	Plan or Project

Introduction

The aim of flood defence is to reduce the risks of flooding from rivers and the sea to people, property and the natural environment by providing effective defences and warnings. Flood defence occurs throughout the Solent and is concentrated on low lying areas liable to flooding and in front of coastal development. Coastal Strategies and CHaMPs provide maps of where the activity occurs. Flood defence improvements include the raising or building of new flood defences and the need is identified from known flooding problems, asset inspections by operations and strategic studies (Shoreline Management Plans, Catchment Flood Management Plans). Flood defence maintenance refers to activities that keep flood defence structures such as flood banks, walls and gates in a defined operational state, and in keeping the hydraulic performance of watercourses within defined limits to ensure that the channel is able to convey flows effectively. Flood defence maintenance operations include: cutting, clearance and disposal (or burning) of trees, branches, undergrowth and weeds. The Environment Agency's Flood defence Bill of Quantities outlines the type of work and location in Hampshire and the Isle of Wight. The Bill of Quantities is updated yearly and is currently being reviewed under the Environment Agency's Habitats Regulations Review of Consents.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- The Environment Agency have an operational and regulatory role under the Water Resources Act 1991, Land drainage byelaws 1981 and Land Drainage Act 1976. The Environment Agency is currently reviewing its flood defence maintenance works under Regulation 50 of the Habitats Regulations 1994. This will determine the effects of all works listed in the Environment Agency's Bill of Quantities (BoQ) on the interest features of the European marine site. The Environment Agency has a regulatory role when other parties wish to carry out works on flood defence structures or within 15 metres of flood defence structures.
- These activities require a works licence from the harbour authority.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.
- A private owner can carry out their own flood defence with the appropriate permissions.

Shoreline Management Plans and coastal strategies set out a strategy for sustainable coastal defence within a 'sediment cell'. They provide guidance on coastal defence (flood defence and coast protection), taking into account natural coastal processes, coastal defence needs and environmental considerations. The SMPs are produced by the local coastal groups of operating authorities.

The Solent CHaMP outlines areas where managed retreat could take place. A project is currently being put together by the Local authorities/Environment Agency and English Nature which hopes to examine compensation habitat requirements i.e. how much compensation is likely to be needed, what types of habitats are required and where should they be located. This is expected

to lead to a strategic land banking system jointly managed by the operating authorities and English Nature which will help fulfil the requirements of the Habitats Regulations. A similar project is being progressed on the Isle of Wight.

The work from these initiatives will provide essential information needed for the future review of the SMPs as it will provide a realistic review of opportunities for coastal realignment and ensure that biodiversity and SEMS conservation objectives are taken into account.

The coastal BAP also recognises issues in relation to coastal squeeze and has an action (coastal-2) to develop a strategy for maintaining (where possible) the extent and balance of all coastal habitats, particularly the Natura 2000 series and SSSI series, in the face of projected sea level rise and coastal squeeze. It has a further action (coastal-15) to review the impact of current coastal defence systems on coastal processes and habitats.

A number of other statutory and non-statutory plans have policies that can influence flood defence in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Flood defence can lead to the following impacts on the features of interest:

- Physical loss through direct removal/destruction of habitats by construction of defences. Also indirect removal/destruction of habitats through increased risk of coastal squeeze.
- Physical loss through smothering of features (effective removal), due to dumping of material.
- Physical damage through abrasion. Modification of inshore coastal processes potentially leading to changed rates of erosion/accretion. Abrasion may be caused through construction phase and during repair work and is therefore only temporary.
- Non physical disturbance. Noise and visual impacts on bird species may be an issue during the construction phase and repair work but not during the ongoing operation phase and is therefore only temporary.

Conditions on planning consents aim to ensure that work is not carried out within the over-wintering period and this will therefore minimise some of the above impacts.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

Flood defence can impact on the site. However flood defence is a plan and project and as such is already considered under Regulation 48 of the Habitats Regulations, future work through the review of the SMP will ensure that future coastal protection polices are in line with the requirements of the Habitats Regulations. The maintenance of flood defence is an ongoing activity, however it is unlikely that any further work will be required on coastal protection because it is already managed by other means i.e. through SMP, coastal groups, CHaMPS etc.

It is therefore felt that systems are currently in place that ensure that the activity is managed in line with the requirements of the Habitats Regulations, therefore no further work is required.

Management Considerations:

- *Ensure that any proposals for flood defence are properly assessed by the appropriate competent authorities, addressing the potential impacts on the features of interest.*
- *Ensure that the next round of SMPs take full account of the requirements of the Habitats Directive.*

Foreshore Recharge

Summary

!	Key Risk Area
✯	Possible risk in parts of the site
Ⓟ	Plan or Project

Introduction

Foreshore recharge involves the deposition of material on the foreshore for either flood defence, coastal protection or amenity beach preservation. It is often necessary to replenish beach material lost through natural processes – longshore drift etc. There are two main types of recharge material i.e. sediment and aggregate these can be used in various beneficial ways to recharge the foreshore including i) recharge of marshes to raise elevations ii) sub-tidal placement of sediment to reduce the tendency for erosion of adjacent intertidal margins; iii) foreshore placement in order to increase the dissipation of wave energy, iv) or trickle-feed sediment back into the wider estuarine system. The activity has occurred at a number of locations in the site.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- FEPA licence required from DEFRA.
- Consent required under the Coast Protection Act by DfT.
- Planning Permission is required from the Local authorities if deposited above mean low water.
- Waste management licence is required from the Environment Agency if it is on land. Environment Agency also give advice to other consenting bodies e.g. DEFRA for a FEPA licence and give particular attention to areas designated under the Shellfish Water Directive to prevent smothering and other potential impacts on water quality.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.

The coastal BAP has an action (mudflats & eelgrass beds-8) to investigate the beneficial use of fine dredged materials to promote intertidal flat accretion.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence beneficial disposal of dredging in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Foreshore Recharge can lead to the following impacts on the features of interest:

- Physical loss through smothering of intertidal communities.

- Non physical disturbance through noise and visual presence may disturb bird species.
- Toxic contamination through the introduction of synthetic and non-synthetic compounds through re-suspension of the contaminants in the water column (however the material is usually tested prior to disposal)

Foreshore recharge can be beneficial and may lead to the creation of new subtidal or intertidal habitat and can help prevent coastal erosion.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion

There is currently an ongoing debate regarding whether maintenance dredging should be considered as an activity within the management scheme or as a 'plan or project' under Regulation 48. A protocol is being developed between the ports industry and DEFRA which will outline how maintenance dredging should be addressed in European marine sites. It is likely that the protocol will suggest that the harbour authorities and English Nature should produce a baseline document about maintenance dredging and its effect on the European marine site. The EMS management scheme structure is suggested as a means of achieving this. The Medina estuary is being used as a pilot study to determine whether this is the correct approach to take. Until the protocol is in place a moratorium is in place that there will be no need for appropriate assessment under Regulation 48 at present. Although the protocol is only concerned with maintenance dredging, the MG have agreed that it may be possible to consider other aspects of dredging such as foreshore recharge within any future studies to ensure a more holistic approach to dredging. Although foreshore recharge is a plan or project which could impact on the cluster the MG will wait for further guidance (the protocol) before determining whether any further assessment is required of foreshore recharge (see appendix 2 for further detail on key areas at risk from the activity under the dredging topic).

Management Considerations:

- *Wait for further guidance before determining whether any further assessment is required of foreshore recharge.*

Freshwater Abstraction

Summary

⊗ Does not occur

Ⓟ Plan or Project

Introduction

Freshwater is abstracted from the rivers that drain into the Solent and from groundwater supplies for various purposes including industrial cooling, public drinking water and agricultural use.

Responsibilities and Management

All fresh water extractions are controlled by Environment Agency abstraction licences which control the volumes that may be taken, and which may contain conditions which are calculated to protect the environment and other abstractors. Environment Agency have a duty under the EC Surface Waters Abstraction Directive regarding the quality of water at public potable supply abstraction points. To do this they specify zones or areas around water sources that will seek to control certain potentially polluting activities. The Groundwater Protection Policy forms the basis for the management of activities relating to groundwater. Where it is necessary to protect particularly sensitive surface water supplies, Environment Agency can apply to the Secretary of State to designate protection zones upstream of major water intakes. In such zones, risk assessment could identify whether certain chemicals should be prohibited and/or safety procedures improved so that the downstream water intakes are protected.

The Water Companies have the responsibility to ensure that water supplied by them satisfies statutory standards.

A number of other statutory and non-statutory plans have policies that can influence freshwater abstraction, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Fresh water extraction can lead to the following impacts on the features of interest:

- Change to the water regime with consequent impacts on species composition
- Non-toxic contamination due to changes to salinity and the thermal regime.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

The activity is a plan or project and is therefore not relevant to the SEMS management scheme as other mechanisms are in place to ensure that it is managed in line with the Habitats Regualtions.

Management Considerations:

- *Ensure that any new fresh water abstraction proposals are properly assessed by the appropriate competent authorities*.

Grazing

Summary

✯	Possible risk in parts of the site
⊗	Does not occur in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations

Introduction

The activity includes agricultural grazing and commoning of cattle and ponies within the SEMS. The activity takes place on saltmarshes by free roaming ponies and cattle. Grazing on surrounding terrestrial land is common throughout the site.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- County Council have control over grazing on land that they own e.g. Eames Farm that is managed under an agreement with Chichester Harbour Conservancy.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site. They may work with owners and occupiers of SSSIs to develop Site Management Statements. These agreements help ensure that activities undertaken are consistent with the conservation objectives of the site.

The majority of grazing is carried out by private individuals.

The coastal BAP also recognises issues in relation to agriculture and has an action (coastal-10) to ensure that the conservation requirements of coastal habitats are taken into account when developing and revising the agri-environment programmes and to encourage the use of such programme for the appropriate management and rehabilitation of coastal habitats.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence grazing in the clusters, a list of all plans is included in annex 1. The Grazing Animals Project (GAP) and countryside stewardship can also help manage this activity. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Grazing can lead to the following impacts on the features of interest:

- Physical damage through abrasion
- Non physical disturbance through visual impact.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion
Grazing could impact on the site, however it is thought that this activity is adequately managed through ENs SSSI consenting procedure and Site Management Statements.

It is therefore felt that systems are currently in place that ensure that the activity is managed in line with the requirements of the Habitats Regulations, therefore no further work in required.

Management Considerations:
- *Ensure that ENs SSSI consenting procedure and Site Management Statements take into account the possible impacts of grazing*.

Holiday Camps

Summary

✯ Possible risk in parts of the site

Ⓟ Plan or Project

Introduction

Holiday camps occur at Woodside Bay, Wootton Creek (fishbourne), River Hamble (Manor Farm), Hayling Island (Sinah Common), Solent Breezes, Carrington and the New Forest (caravan site at Keyhaven). The activity is more intense in the summer.

Responsibilities and Management

The application to construct and open a holiday camp is a plan and project and planning permissions would be required from the local planning authority. In addition English Nature have duties where the activity is in the SEMS and permission is required for any operation likely to damage an SSSI. (Recreational activities which may damage or destroy flora and fauna are cited on the operations likely to damage list of SSSIs which are sensitive to that operation.)

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence holiday developments in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Holiday camps can lead to the following impacts on the features of interest:

- Removal/destruction of habitats and species.
- Non-physical disturbance through noise and visual impacts during construction and also during the ongoing running of a camp, however the later are considered under individual activity heading such as land-based recreation.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

Holiday camps could impact on the SEMS, however the activity is adequately managed as a plan or project by other Relevant Authorities. Other activities arising from holiday camps are considered as an activity however these are all covered under separate headings. Therefore although the activity is an area for concern it is of low priority due to other measures in place.

Management Considerations:

- *Ensure that any proposals for new holiday camps are properly assessed by the appropriate competent authorities, addressing the potential impacts on the features of interest.*

Houseboats

Summary

✯	Possible risk in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations
Ⓟ	Plan or Project

Introduction

People live on houseboats all year round. Some of the houseboats have connection for water and electricity to the mainland, however they can be self sufficient. The activity occurs on the Itchen, Langstone Harbour, Chichester Harbour, Bembridge Harbour, Hamble, Wootton Creek and Medina Estuary.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- Harbour Authorities license houseboats.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.
- Also subject to environmental health inspections by local councils.

There are also number of illegal houseboats in the site.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence houseboats in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Houseboats can lead to the following impacts on the features of interest:

- Non-physical disturbance by noise and visual presence may affect bird species.
- Toxic contamination through the introduction of synthetic and non synthetic compounds from accidental chemicals and fuel inputs.
- Non-toxic contamination in the form of organic materials and input of nutrients in effluents.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

The analysis indicates that houseboats could impact on the site. However it is thought that this activity is adequately managed through other means and other aspects of the activity are considered as a plan or project and are therefore not relevant to the SEMS management scheme.

It is therefore felt that systems are currently in place that ensure that the activity is managed in line with the requirements of the Habitats Regulations, therefore no further work in required.

Management Considerations:

- *Review any future applications for houseboats in view of the requirements of the Habitats Regulations.*

Land-based Recreation

Summary

!	Key Risk Area
✯	Possible risk in parts of the site

Introduction

The activity includes walking, cycling, horse riding, vehicular recreation, swimming, sun bathing, bird watching, ball games, picnics, visitor attractions and maritime events. In general much of the land based recreational activity is casual and concentrated where vehicular or pedestrian access is available, good facilities are on offer and the surroundings are reasonably pleasant.

Responsibilities and Management

Land-based recreation is generally unregulated, however the following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- County Council can control through byelaws.
- Local Authorities have no direct regulatory role, although they do promote the activity through tourism and recreation initiatives and local plans may have policies. They may also influence the activity where they own coastal land.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.
- Sport England have codes for best practice for some of the activities for which they have responsibility.

The coastal BAP recognises that there are issues in relation to recreation and suggests an action (coastal-32) to promote, disseminate and implement established codes of conduct for recreational and commercial users of the Hampshire coast.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence land-based recreation in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Intertidal areas can come under considerable pressure from recreational activities. Not only do they support a variety of land based activities, such as walking and horse riding, but they also provide access channels to the water for water-based recreation. Land-based recreation can lead to the following impacts on the features of interest:

- Physical damage through abrasion. Interest features such as eelgrass beds can be damaged by trampling. This can result in erosion of soils and upper levels of less durable marine features, changes in the level and diversity of vegetation within a site or feature and changes in feature density, porosity and penetrability. However, the greatest erosional forces exerted on a feature come from natural sources such as rain, wind and, in the intertidal area, wave action. As recreational activities tend to be concentrated along specific access routes or in small areas, their impact can be magnified, causing significant erosional patches within a site

or feature. Such erosion is particularly evident in coastal areas frequented by walkers and in the vicinity of heavily used access points.

- Non-physical disturbance (visual or noise) both through presence of participants and also through direct interference. Potentially noisy activities include organised sports matches, skateboarding, ball games and children playing. Levels of disturbance are difficult to assess as the sensitivity of different species to disturbance varies considerably, as does the potential disturbance caused by each activity. Disturbance to birds results from walking – particularly with dogs and can result in stress and bird mortality, this can be worse in hard weather.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion

Land-based recreation could impact on the site, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. It is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity under the access topic).

Management Considerations:

- *Keep a watching brief on the impacts of land-based recreation in key risk areas*
- *Relevant Authority to continue to enforce current management measures. This could include enforcement of byelaws and implementation of policies, however these measures may be amended in the light of new information or changes in the activities being managed. Further information on current management measures is listed in the activity inventories for each cluster and a list of relevant plans and reports is listed in the annex to this Appendix*

Land Reclamation

Summary

⊗ Does not currently occur in the site

Ⓟ Plan or Project

Introduction

Land reclamation is the deliberate encroachment of land onto the foreshore, including the subsequent coastal protection that land reclamation will require.

There has been a history of land use and reclamation of intertidal areas for landfill waste disposal, principally at Broadmarsh (Langstone Harbour), Dibden Bay (Southampton Water) and Paulsgrove (Portsmouth Harbour). Other areas have been reclaimed for industrial, port or residential use. Major reclamation has occurred recently in Portsmouth Harbour, however these have been outside of the designated areas.

Further opportunities for reclamation are now limited in the SEMS.

Responsibilities and Management

Land reclamation is a plan or project.

- A FEPA licence would be required from DEFRA.
- Permission is required from English Nature for any operation likely to damage a SSSI.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence land reclamation in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Land reclamation can lead to the following impacts on the features of interest:

- Removal/loss of habitats and species

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

Land reclamation could impact on the SEMS, however it is a plan or project and is therefore not relevant to the SEMS management scheme. Therefore although the activity is an area for concern it is low priority due to other measures in place.

Management Considerations:

- *Ensure that any proposals for land reclamation are properly assessed by the appropriate competent authorities, addressing the potential impacts on the features.*

Maintenance Dredging

Summary

!	Key Risk Area
✯	Possible risk in parts of the site
Ⓟ	Plan or Project

Introduction

Maintenance dredging is a fundamental requirement for most harbours and ports. Maintenance dredging is the routine/periodic removal of recently accumulated material in approach channels and basins to assist safe access for vessels. This may vary from an almost continuous activity throughout the year to an infrequent activity occurring only once every few years. For the purpose of a disposal licence if a period of 10 years has lapsed between a new and previous dredge, the operation will be treated as a capital dredging. Maintenance dredging occurs in all the main harbours of the SEMS.

Responsibilities and Management

At the moment, maintenance dredging is treated as plans or project, which implies that where it is likely to have a significant effect on a European marine site, an appropriate assessment is required. Depending upon the frequency that maintenance dredging is required, this could imply a continuing programme of consent applications together with accompanying Environmental Statements and Appropriate Assessments which could be extremely onerous and threaten the ability of the port or marinas to function economically. Other UK guidance (DfT 1998) and thinking from DG11 suggests that a management scheme approach is more appropriate. Common sense argues that a practical approach is therefore needed that maximises environmental safeguards whilst minimising resource demands on applicants, regulators and advisors alike.

The ports industry, competent authorities and English Nature, have agreed that a sustainable approach to maintenance dredging is required to increase the efficiency in consenting maintenance operations and seek to minimise bureaucracy and un-necessary legal and consultancy costs. As a consequence, a working group has been established to develop a common approach to consent for maintenance dredging that ensures that the Habitats Regulations are followed appropriately. A protocol is currently being worked on which will set out how maintenance dredging will be dealt with in the future. This seeks agreement on a possible way forward that ensures proper evaluation of maintenance dredging within a morphologically distinct unit (estuary) and provides a baseline for determining subsequent consent applications. It may be that the guidance will suggest the use of the management scheme to consider a sustainable approach to maintenance dredging with the production of a baseline study. In the interim English Nature advises that proposals for ongoing maintenance dredging will not be required to have an appropriate assessment.

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- Consent is required from DfT Ports Division for certain marine works, including maintenance dredging and disposal, with implications on the provision of safety of navigation, under the Coast Protection Act 1949.
- FEPA licence required from DEFRA for disposal of dredgings.
- Often maintenance dredging has occurred according to provisions made within the legislation that allows individual ports and harbours to manage their own activities and consent the activities of others. Consents can run for various periods. Harbour authorities

are the regulator as statutory Harbour Authority with responsibilities for safe navigation and conservancy of the navigation. Harbour Authority consent is required where the activity takes place within the harbour limits.

- The Environment Agency may issue a Land Drainage Consent. Environment Agency also issue advice to other consenting bodies, e.g. DEFRA, for a FEPA licence. Particular attention is paid to the method of dredging, to ensure that the effect on water quality is minimised with particular attention to over wintering birds and also fish. Environment Agency also requires that areas designated under the EC Shellfish Waters Directive should not be breached as a result of the activities associated with this project. This will require the application of techniques to minimize the amount of dredged material escaping the immediate area of the development site. The Agency usually request conditions on licence to ensure that the water quality is protected.
- Maintenance dredging may need planning permissions from the local authority, however this is only relevant in certain circumstances .
- Certain methods of dredging operate by throwing material into suspension in the water column. As these methods do not involve disposal, they therefore fall outside the DEFRAs licensing process, and are regulated by the harbour authority.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.

The coastal BAP has an action (mudflats & eelgrass beds-3) to ensure that development schemes, dredging operations and fishing activities do not affect sediment flats or eelgrass beds.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence maintenance dredging in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Maintenance dredging can lead to the following impacts on the features of interest:

- Physical loss through removal of subtidal benthic species and communities. However the communities within regularly dredged channels are likely to be degraded and there is relatively rapid recovery. Also removal of sediments which in the long term may affect the sediment regime locally and possibly at some distance.
- Physical loss through smothering of benthic habitats and communities where loss of fine fractions during dredging and disposal operations results in settlement of fines on the sea bed.
- Physical damage through abrasion of the sediments. Alterations to coastal or estuary morphology, for example alteration of sediment pathways and changes to siltation patterns, may cause the alteration of erosion and sedimentation patterns in adjacent areas, which may result in erosion, or creation of intertidal and subtidal habitat.
- Toxic contamination through the introduction of synthetic and non-synthetic compounds as pollution bound within the dredged sediments may be remobilised either in solution or bound to fines. These may become biologically available and enter the food chain.

Effects depend on the scale and frequency of dredge and disposal, and the local conditions at the dredge and disposal site.

In general, maintenance dredging has been carried out within ports, harbours and estuaries over several years if not decades and is an intimate part of the sediment regime and dynamics of an area. However there may be gaps in the scientific understanding of hydrodynamics and sediment transport and therefore gaps in our knowledge of the impacts on the environment.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion
Maintenance dredging is highlighted in the Management Scheme as a possible area for concern, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest (see appendix 2 for further detail on key areas at risk from the activity under the dredging topic).

There is currently an ongoing debate regarding whether maintenance dredging should be considered as an activity within the management scheme or as a 'plan or project' under Regulation 48. A protocol is being developed between the ports industry and DEFRA which will outline how maintenance dredging should be addressed in European marine sites. It is likely that the protocol will suggest that the harbour authorities and English Nature should produce a baseline document about maintenance dredging and its effect on the European marine site. The EMS management scheme structure is suggested as a means of achieving this. The Medina estuary is being used as a pilot study to determine whether this is the correct approach to take. Until the protocol is in place a moratorium is in place that there will be no need for appropriate assessment under Regulation 48 at present. The MG will wait for further guidance (the protocol) before determining whether any further assessment is required of maintenance dredging.

Management Considerations:
- *Wait for further guidance before determining whether any further assessment is required of maintenance dredging.*

MOD and other Aircraft

Summary

✯	Possible risk in parts of the site
⊗	Does not occur in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations

Introduction

MOD and other aircraft such as private helicopters and planes fly over the SEMS.

Responsibilities and Management

The Civil Aviation Authority:

- Ensures that UK civil aviation standards are set and achieved:
  - Regulates airlines, airports and National Air Traffic Services economic activities and encourages a diverse and competitive industry
  - Manages the UK's principal travel protection scheme, the Air Travel Organiser's Licensing (ATOL) scheme, licenses UK airlines and manages consumer issues
  - Brings civil and military interests together to ensure that the airspace needs of all users are met as equitably as possible.

Impacts/Issues

- Physical disturbance from a noise and visual presence.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

Aircraft could impact on the SEMS, however the CAA manage the activity in addition no Relevant Authorities have any responsibility for this activity so it does not need to be considered further in the SEMS management scheme.

Management Considerations:

- *Ensure that the airspace needs of all users are met as equitably as possible and that there is no disturbance to the SEMS.*

Moorings (New)

Summary

!	Key Risk Area
✯	Possible risk in parts of the site
Ⓟ	Plan or Project

Introduction

Mooring areas are located throughout the cluster. Mooring are subject to control by Harbour Authorities and in some cases by Local Planning Authorities. The restrictive nature of planning has concentrated the most recent proposals for new moorings on the built up coast. It is generally considered that rather than creating new mooring areas most harbours are considering streamlining of existing areas to improve facilities and access, exceptions to this include Chichester and Langstone Harbours.

Responsibilities and Management

Applications for new fixed moorings are dealt with through the planning process including appropriate assessments, as such the activity is a plan or project. The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- New moorings may require planning permission. Local Authorities may have additional management responsibilities where they are landowners.
- New moorings may require a FEPA licence from DEFRA.
- New moorings may require consent under the Coast Protection Act from DfT.
- Harbour Authority consent is required where the activity takes place in the harbour limits.
- Environment Agency may issue a Land Drainage Consent. Particular attention is paid to the method of piling to ensure that the disturbance caused is minimised with particular attention to over wintering birds and also fish, particularly Salmonids.
- Harbour Authorities are the licensing authority/planning consultee.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.
- New piled moorings may be subject to consent from the Crown Estate Commissioners

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence moorings (new) in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Moorings (new) can lead to the following impacts on the features of interest:

- Physical loss through removal or modification of existing natural habitats and associated estuarine species, in particular where land claim is part of the development.
- Physical loss through smothering of habitats.
- Physical damage through abrasion and disturbance through the construction phase.
- Non-physical damage through noise and visual impacts on birds particularly during the construction phases.

The magnitude of potential environmental impacts caused by boating facilities developments depends on factors such as the actual location of the development, the scale of the scheme,

construction methods and project design and implementation. All impacts are possible from poorly considered new provision, but not necessarily so depending on location and design. The operation and management of moorings does prevent ad hoc arrangements that could be more intrusive and damaging such as temporary anchoring, and ensures moorings are in the least sensitive locations. It is recognized that pilings for moorings often provide ideal habitat for a range of molluscs and other organisms, but little work has been carried out to quantify such effects.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and appendix 2.

Conclusion

Moorings (new) could impact on the site, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. It is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity under the water sports topic).

Management Considerations:

- *Keep a watching brief on the impacts of new moorings in key risk areas. This could include enforcement of byelaws and implementation of policies, however these measures may be amended in the light of new information or changes in the activities being managed. Further information on current management measures is listed in the activity inventories for each cluster and a list of relevant plans and reports is listed in the annex to this Appendix.*

Moorings (Ongoing Management)

Summary

!	Key Risk Area
✯	Possible risk in parts of the site
Ⓟ	Plan or Project

Introduction

Mooring areas are located throughout the site and are found in nearly all the sheltered estuarine areas and particularly in harbour areas. Types of moorings include pile moorings, pontoon moorings, fore and aft and swinging moorings. Mooring are subject to control by Harbour Authorities and in some cases by Local Planning authorities.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- Ongoing use of moorings and movement of moorings can be established within a Harbour plan and is then an ongoing consented activity. Safety Management Systems are in place in all ports to ensure compliance with the Port Marine Safety Code and deal with issues such as managing vessel activity and navigational safety and are audited by the MCA. Port Waste Management Plans are also in place in all ports to ensure compliance with the Merchant Shipping and Fishing Vessel (Port Waste Reception Facilities Regulations 2003*).*
- The statutory Harbour Authorities are responsible for moorings including the following aspects: holder of Crown Estate Regulating lease, ownership / management of facilities (laying of moorings and charge for their use), byelaws and navigational safety. Sailing club/marina mooring areas are allocated by the harbour authority, but the responsibility of managing them on a day-to-day basis is undertaken by the clubs themselves.
- The Environment Agency are responsible for issuing Land Drainage Consent. Particular attention is paid to the method of piling to ensure that the disturbance caused is minimised with particular attention to over wintering birds and also fish, with particular attention given to Salmonids.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence moorings (ongoing maintenance) in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Moorings (ongoing maintenance) can lead to the following impacts on the features of interest:

- Physical loss through removal and smothering of habitats from the following: buoys and chains of existing swinging moorings, pile berths at low water, pontoons at low water.
- Physical disturbance through scour/abrasion from the swinging moorings at low water or from vessels left on these moorings. Also from existing pile berths and pontoons at low water.

- Non physical disturbance from noise and visual impacts on bird species through the use of all moorings types.

The magnitude of potential environmental impacts caused by moorings facilities depends on factors such as the actual location and management. The operation and management of moorings does prevent ad hoc arrangements that could be more intrusive and damaging such as temporary anchoring and ensures moorings are in the least sensitive locations.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion
Moorings (ongoing maintenance) could impact on the site, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. It is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity under water sports topic).

Management Considerations:
- *Keep a watching brief on the impacts of moorings (ongoing management) in key risk areas*
- *Harbour Authorities to continue to enforce current management measures. This could include enforcement of byelaws and implementation of policies, however these measures may be amended in the light of new information or changes in the activities being managed. Further information on current management measures is listed in the activity inventories for each cluster and a list of relevant plans and reports is listed in the annex to this Appendix*

Navigation

Summary

!	Key Risk Area
✯	Possible risk in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations

Introduction

Navigation includes the movement of all craft on the water. Infrastructure and maintenance associated with safe navigation occurs throughout the site and includes buoys and other navigational markers and the marking of new hazards to shipping such as ship wrecks, where they are a danger to navigation.

Responsibilities and Management

- Harbour Authorities have a statutory function for the safety of navigation within their areas of jurisdiction and, therefore, have control over any vessels using the water, and other activities that may influence this safety aspect (e.g. construction of new structures that may present a hazard). This requires the provision of adequate aids to navigation and ensuring they are efficiently maintained. It also requires regular surveys of the navigation channels and berths to determine water depths relative to a recognised datum point so that vessels can navigate and moor in safety. These are included in the 'navigation' category and are not highlighted for all other individual categories. Safety Management Systems are in place in all ports to ensure compliance with the Port Marine Safety Code and deal with issues such as Commercial Fuel Barge operations, managing vessel activity and navigational safety and are audited by the MCA.
- Trinity House Lighthouse Service (THLS) is the General Lighthouse Authority for England, Wales and the Channel Islands as stated in the Merchant Shipping Act 1995 (this act consolidates the MSA 1884 to 1994 and related legislation). Other Local Lighthouse Authorities must gain consent from THLS if they wish to establish, alter or remove any aids to navigation under their jurisdiction. THLS is an adviser to the DfT regarding marking requirements for certain works to which the consent of the Secretary of State has been issued under the Coast Protection Act 1949 and offshore installations under the Continental Shelf Act 1964.

A number of local harbour plans and other statutory and non-statutory plans have policies that can influence navigation in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Navigation can lead to the following impacts on the features of interest:

- Non physical disturbance through noise and visual presence where maintenance of navigation markers takes place.
- Physical disturbance due to abrasion.

The activity i.e. the enforcement of speed limits and marking of channels contributes to the favourable condition of the site indirectly by keeping navigation to a set channel rather than uncontrolled in the most sensitive parts of SEMS. The primary purpose of the mark is to limit the potential for vessels to run aground and to this end the marks provide significant benefit to the surrounding environment. All activities relating to the positioning and performance of

navigation marks are regulated and subject to relevant health & safety and environmental legislation.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and appendix 2.

Conclusion
Navigation could impact on the cluster, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. It is recognised that this activity also helps prevent impacts and as such measures are in place to ensure the activity is adequately managed. It is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity under the water sports topic).

Management Considerations:
- *Keep a watching brief on the impacts of navigation in key risk areas*
- *Harbour Authorities to continue enforcement of existing speed limits for boats. This could include enforcement of byelaws and implementation of policies, however these measures may be amended in the light of new information or changes in the activities being managed. Further information on current management measures is listed in the activity inventories for each cluster and a list of relevant plans and reports is listed in the annex to this Appendix*

Oil and Gas Exploration

Summary

✯	Possible risk in parts of the site
⊗	Does not occur
Ⓟ	Plan or Project

Introduction

It is known that oil exists in the rock strata beneath the Solent, but the reserves are understood not to be commercially viable at the present time.

In 1984, Shell UK Ltd was awarded a licence to search for oil and gas in the Solent. The company carried out seismic surveys and a series of environmental studies. They concluded that oil was not available in commercial quantities and the environmental constraints on exploration were too great. Two further licences have been issued in the western Solent to Brabant, and Elf Enterprise was granted licences to the west of the Isle of Wight. No progress has been made with these beyond seismic exploration and test drilling.

Responsibilities and Management

Oil and gas exploration is a plan and project. Oil is vested in the Crown, and only those companies granted a licence through the Department of Trade and Industry have the right to carry out exploration and production. There are two systems of licensing for oil exploration: one for onshore, including 'bay closing areas' (such as the Solent and Southampton Water) and one for offshore.

In the absence of planning controls in 'bay closing areas' and offshore, the Standing Conference on Oil and Gas Development in the English Channel (SCOG) was formed in 1979 to co-ordinate the views of local authorities. It covers the whole of the South Coast from Devon to West Sussex. It is recognised by government as the point of contact for local authority views on oil licensing, exploration and production.

In 1993, SCOG published its 'Policy Towards Offshore Exploration and Production', updating previous policies. Where drilling is proposed in estuaries and other sensitive inshore areas, such as the Solent, SCOG expects to be closely involved in assessing the likely risks and nuisances and in developing mitigation measures to reduce impacts on marine interests and users.

Impacts/Issues

Oil and gas exploration can lead to the following impacts on the features of interest:

- Physical damage through removal/destruction of habitats and species.
- Non-toxic contamination.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

The activity is a plan or project and in addition does not occur in the site, it is therefore not relevant to the SEMS management scheme.

Management Considerations:

- *In the absence of any particular issue at present, there is simply a need to keep a watching brief on future proposals*.

Oil Spill & Oil Spill Clean-up

Summary

✯	Possible risk in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations

Introduction

This is not an activity that is deliberately carried out, but one which normally results from an accident or incident, therefore cleaning occurs on an ad-hoc basis when complaints occur or as part of the emergency plan. The risk of oil spill is present throughout the cluster from the following causes:

- Shipping could cause a oil spill either as a result of a collision or through poor maintenance of a vessels engine or fuel systems. A minor spillage of light boat fuel is more likely in summer months and potential spillages of crude oil from tankers are likely at any time though there is probably an increased risk during foul winter weather.
- Land based spillage could potentially damage the site either directly or through spillage into a watercourse.
- Road bridges.
- Fuelling points in the Rivers.
- Terminals at Hamble and Fawley.
- Marinas.

Response to an oil spill can either be on shore or at sea. Small-scale oil spill clean-up involves removing oil contamination from the foreshore, but normally cleaning is left to natural processes. Larger scale events may involve the deployment of booms, dispersants or other devices for enclosing the oil or removing it from the water surface.

Responsibilities and Management

Emergencies such as an oil spill in the marine environment become local authority responsibility when they come ashore. The method of dealing with such emergencies is a nested system which is detailed below. All County Councils, have an Emergency Plan which is consulted at the time of any major incident. This plan lists the contact details of those that could be involved in the "frontline" response to the emergency, such as district and harbour authorities, emergency services, voluntary services, the military, utility companies and health authorities.

The following plans are relevant:

- National Contingency Plan for Marine Pollution produced by the Maritime and Coastguard Agency who lead the response in all maritime pollution incidents.
- SOLFIRE is a contingency plan developed to deal with any marine emergency or non-routine incident occurring within the Port of Southampton as well as the Dockyard Port of Portsmouth.
- Coastal Oil and Chemical Pollution Plans produced by Local Authorities, each district has their own plan on how to deal with oil on the beach.
- Contingency Plans. Harbour Authorities have a statutory responsibility for responding to oil spills within their Harbour Area, as laid out under the Oil Pollution, Preparedness, Response and Co-operation Convention. This requires UK ports to prepare OPRC plans for dealing with oil spills in their areas of jurisdiction. All ports in SEMS have these plans in place.
- The oil companies have also published their own contingency plans which detail their responses.

The Contingency Plans are provided to assist the Harbour Authority and other organisations in dealing with an accidental discharge of oil. Its primary purpose is to set in motion the necessary actions to stop or minimise the discharge and to mitigate its effects. In the event of an oil spill incident, the OPRC Plan requires an Environment Group to be set up. This brings together representatives of the Environment Agency, English Nature, DEFRA, Maritime and Coastguard Agency and local authorities as well as Harbour Authority staff and it will be consulted before any course of action is undertaken regarding the treatment of the spill. The Maritime and Coastguard Agency is contacted to determine the need to establish a Shoreline Response Centre (SRC) which are run by the local authority. Oil Spill Response Limited are contracted to deal with any oil pollution incident greater than a Tier 1 spill and will use the appropriate equipment as necessary and as advised.

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- In a major (Tier 3) event the MCA take over the running of the oil spill with local Harbour Authorities on hand to provide advise as necessary. The MCA can provide technical advice at all levels of incident. Harbour Authorities deal with Tier 1 (minor oil pollution incidents) 'in house', co-ordinating efforts to contain a Tier 2 event with other appropriate authorities and organisations.
- Harbour authority prepare OPRC compliant plans and are responsible for leading a clean-up until such time as the MCA takes over (a Tier 3 event)
- Harbour Authorities lead on the clean up of pollution in the water within their Harbour Area before it reaches the Mean Low Water Mark
- Local authorities and other terrestrial organisations are responsible for an oil spill once it goes above the Mean Low Water Mark
- The Environment Agency would generally have responsibility for dealing with oil spillages from land-based sources within the 7-mile limit and can take a role in the prevention and clean-up operations. The Environment Agency would act as a technical advisor in such issues as waste disposal, impact on surface and groundwaters, etc.
- English Nature can advise clean-up operations through Environmental Groups set up to deal with particular incidents.
- HM Coastguard have responsibilities for this area depending upon the significance of the event

A Standing Environment Group (SEG) meet about twice a year and consists of English Nature, the Environment Agency and local authority representatives. During an incident the SEG will advise the Secretary of State's representative (SOSREP) on the ecological implications of each decision. It is then SOSREP's responsibility to determine the best course of action to deal with the incident.

The MCA are planning a project to update the current (out of date) UK Coastal Environmental Sensitivity Maps i.e. Atlas of Nature Conservation Sites in Great Britain Sensitive to Coastal Pollution. This will be issued to UK bodies with a role in maritime pollution incident response and will have updated information including information on European marine sites.

A list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it, however the MCA would have a role to play.

Impacts/Issues

Oil spill can lead to the following impacts on the features of interest:
- Physical damage due to smothering of reefs, intertidal sand and mud by oil
- Toxic contamination by the introduction of synthetic and non synthetic compounds by oil or chemical inputs.

Oil spill clean-up can lead to the following impacts on the features of interest:
- Physical damage through abrasion due to trampling by the clean-up operation or booms.
- Toxic contamination by the introduction of synthetic and non synthetic compounds by chemical inputs and dispersants used to help clean-up the oil, in addition the clean up might disperse the spill which would result in introduction of non-synthetic compounds.

Spills will not contribute to favourable condition of the site, but the processes to clean up and monitor, plus preventative plans, do assist when it is appropriate to intervene. However some clean up operations introduce substances into the environment and cannot be seen to have a positive effect other than by removing the oil itself. The level of impact will depend on the scale and nature of the incident and the type of clean-up employed.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion
Oil spill and oil spill cleanup could impact on the site. The activity is adequately managed through the contingency plans and the SEG. However in some instances oil spill contingency plans do not necessarily currently identify the location of the EMS and its interest features. Therefore location and vulnerability of site interest features should be included in all relevant oil spill response plans, this information will be provided to the SEG by English Nature to ensure that the contingency plans take into account the Habitats Regulations. The MCA project to update the Atlas of Nature Conservation Sites in Great Britain Sensitive to Coastal Pollution will also help solve this issue in the longer term.

It is therefore felt that systems are currently in place that ensure that the activity is managed in line with the requirements of the Habitats Regulations, therefore no further work in required.

Management Considerations:
- *English Nature to provide relevant information about site features to the to the SEG to ensure that the contingency plans take into account the Habitats Directive.*
- *MCA project to update the Atlas of Nature Conservation Sites in Great Britain Sensitive to Coastal Pollution with information about EMS.*

Other Water Sports

Summary

!	Key Risk Area
✯	Possible risk in parts of the site

Introduction

Other water sports occur throughout the site and include the following (personal water craft and waterskiing are dealt with under recreational boating (power)): canoeing, rowing, raft races, windsurfing, diving, surfing and swimming. The activity is not confined to any particular areas, but is often concentrated around access points e.g. public slipways, clubs.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- The Harbour Authorities have statutory controls for safe navigation and can make byelaws for speed limits, zones etc. A number of speed limits are in place in the harbours and estuaries of the Solent. Organised events submit Risk Assessments to the Statutory Harbour Authority, as a requirement of the Port Marine Safety Code, but the Harbour Master has the power to veto or amend the event's arrangements, as appropriate.
- The Local Authorities own and/or manage land from which craft can be launched. Section 94 of the Public Health Acts Amendment Act 1907 enables local authorities to grant licences for pleasure boats to be let for hire or to be used for carrying passengers for hire. Byelaws can be set for a) the mooring places for such boats, b) for securing their good and orderly conduct & c) for fixing the qualifications of the boatmen or other persons in charge of such boats or vessels.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.

The coastal BAP recognises that there are issues in relation to recreation and suggests an action (coastal-32) to promote, disseminate and implement established codes of conduct for recreational and commercial users of the Hampshire coast.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence other water sports in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

The launching of craft for all types of other water sports from designated access points is likely to have minimal impact on marine features except where it involves trampling and scouring of the features. The launching of craft for all types of other water sports from informal access points, which is relatively common for small dinghies and windsurfers, may result in compaction and erosion of features and damage to vegetation. Water sports can lead to the following impacts on the features of interest:

- Non physical disturbance through noise and visual presence can be caused to wildlife by the presence of small craft used for other water sport activities in areas inaccessible to larger

craft, including nesting sites. The impact will vary depending upon the type of activity, the time it takes place and the vulnerability of the wildlife. The impact is extremely difficult to quantify and should be examined on a case by case basis.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion
Other water sports could impact on the cluster, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. It is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity, under the water sports topic).

Management Considerations:
- *Keep a watching brief on the impacts of other water sports in key risk areas.*
- *Relevant Authority to continue to enforce current management measures.This could include enforcement of byelaws and implementation of policies, however these measures may be amended in the light of new information or changes in the activities being managed. Further information on current management measures is listed in the activity inventories for each cluster and a list of relevant plans and reports is listed in the annex to this Appendix*

Outfall Maintenance and Replacement

Summary

✯	Possible risk in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations
Ⓟ	Plan or Project

Introduction

A number of types of outfalls exist e.g. domestic outfalls, industrial outfalls, storm overflows and drains through coastal defences. The Environment Agency's flood defence Bill of Quantities outlines the type of work and location of all consented outfalls. Replacement and maintenance of these occurs throughout the site, and are ongoing activities. County Councils and local authorities will have a responsibility where any private outfalls occur on land under their ownership. Some outfalls may be privately owned e.g. properties with septic tanks or treatment plants along the Beaulieu River, however the majority are owned by the water companies or the Environment Agency. Southern Water undertakes non-intrusive scanning inspections of its outfalls. In addition, as a result of new European or national legislation, new outfalls may occasionally be needed, for which the normal statutory consultation procedures would be followed.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- The Environment Agency have powers under the Water Resources Act 1991, Land drainage byelaws 1981 and Land Drainage Act 1976 to carry out works on any outfalls within flood defence structures where it is thought to be in the public's interest, this is regardless of ownership. The Environment Agency has a regulatory role when other parties wish to carry out works on flood defence structures or within 15 metres of flood defence structures.
- Water Companies maintain water supply and pipelines, however they require consent from the Environment Agency.
- Landowners, owner occupiers, local authority or harbour authority may have control over a private outfall that falls under their responsibility.
- The County Council have responsibilities for ensuring the highways are maintained and drainage is in place to prevent surface water flooding.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence outfall maintenance/replacement in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Outfall maintenance/replacement can lead to the following impacts on the features of interest:

- Physical loss through removal of habitats.
- Physical loss through smothering of habitats.

- Physical damage through abrasion can be caused temporarily during works, particularly where machinery is used.
- Non physical disturbance from noise and visual presence on bird species can be caused temporarily during works.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

Outfall maintenance/replacement could impact on the site, however it is thought that this activity is adequately managed through other means e.g. ENs Site Management Statements and SSSI consenting system and EAs review of consents. Other aspects of the activity are considered as a plan or project and are therefore not relevant to the SEMS management scheme.

It is therefore felt that systems are currently in place that ensure that the activity is managed in line with the requirements of the Habitats Regulations, therefore no further work in required.

Management Considerations:

- *Ensure that outfall maintenance and construction takes into account the requirements of the Habitats Regulations.*

Pipeline Construction

Summary

✯	Possible risk in parts of the site
Ⓟ	Plan or Project

Introduction

Pipelines required for water, sewage or gas etc are present across the site both above and below mean low water. Pipelines currently under construction or recently constructed include the underground sewage discharge pipe between Budds Farm and Kendells Wharf and onto Fort Cumberland. The Environment Agency have point source maps of outfalls.

Responsibilities and Management

Pipeline construction is a plan and project. Permissions are required from various authorities depending on the location of the pipeline, in certain instances there are permitted development rights to construct or alter pipelines.

- English Nature have duties where the activity may affect the SEMS and permission is required for any operation likely to damage a SSSI. (Pipeline construction is an operation likely to damage "Construction of roads, tracks, walls, fences….or the laying, maintenance or removal of pipelines or cables above or below ground)
- Pipelines may require a works licence from the harbour authority.
- Water Companies have jurisdiction over water supply and pipelines.
- Under the terms of the Water Resources Act 1991, the Land Drainage Act 1991 and byelaws the prior written consent of the Environment Agency is required for any proposed works or structures in, under, over or within 15 metres of a tidal flood defense. Under the terms of the Water Resources Act 1991 and the Land Drainage Byelaws, the prior written consent of the Agency is required for any proposed works or structures in, under, over or within 8 metres of the top of the bank of a designated 'main river'.
- Landowners, owner occupiers, local authority or harbour authority may have control over private outfalls that fall under their responsibility.
- Planning permission would be required from local authorities where the pipeline is above mean low water.
- A FEPA licence may be required from DEFRA where the pipeline is below mean low water.

Local authority plans, harbour authority plans EMPs, Water Level Management Plans, AMPs and CAMs all have some degree of control over outfalls especially if they are to control water levels in an internationally important wetland, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Impacts/Issues

Pipeline construction can lead to the following impacts on the features of interest:

- Physical damage through removal/destruction of habitats and species.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

Pipeline construction could impact on the SEMS, however the activity is a plan or project and is therefore not relevant to the SEMS management scheme. Although the activity may be an area for concern it is low priority as other measures are in place.

Management Considerations:

- *Ensure that any proposals for pipeline construction are properly assessed by the appropriate competent authorities, addressing the potential impacts on the features of interest.*

Recreational Boating (power)

Summary

!	Key Risk Area
✯	Possible risk in parts of the site

Introduction

Recreational power boating occurs throughout the cluster. The activity is not confined to any particular areas, although specific concentrations of activity are often associated with local sailing clubs and marinas. Boats vary in size from personnal water craft, small dory's and RIBs to large motor cruisers and can be used for activities such as water skiing. There has been a noticeable trend towards the increased use of powered craft, with a growing range of products on the market, such as personal water craft. A number of events also attract large numbers of power boats e.g. the Offshore Powerboat Festival in August in Cowes. Activities are restricted in certain areas by speed limits, bye-laws and voluntary agreements for zoned areas. Some types of craft such as jet skiis are constrained by access points.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- The Harbour authorities have statutory controls for safe navigation and can make byelaws for speed limits, zones etc. A number of speed limits are in place in the harbours and estuaries of the Solent and there are also a number of zoned areas for waterskiing e.g. Southampton Water and Langstone Harbour. Safety Management Systems are in place in ports to ensure compliance with the Port Marine Safety Code and deal with issues such as Commercial Fuel Barge operations, managing vessel activity and navigational safety and are audited by the MCA. Organised events submit Risk Assessments to the Statutory Harbour Authority, as a requirement of the Port Marine Safety Code, but the Harbour Master has the power to veto or amend the event's arrangements, as appropriate. Port Waste Management Plans are also in place in all ports to ensure compliance with the Merchant Shipping and Fishing Vessel (Port Waste Reception Facilities Regulations 2003) and include details on waste reception facilities.
- The Local Authorities own and/or manage land from which craft can be launched. Section 94 of the Public Health Acts Amendment Act 1907 enables local authorities to grant licences for pleasure boats to be let for hire or to be used for carrying passengers for hire. Bye-laws can be set for a) the mooring places for such boats, b) for securing their good and orderly conduct & c) for fixing the qualifications of the boatmen or other persons in charge of such boats or vessels.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.

The coastal BAP recognises that there are issues in relation to recreation and suggests an action (coastal-32) to promote, disseminate and implement established codes of conduct for recreational and commercial users of the Hampshire coast.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence recreational boating (power)in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Recreational boating (power) can lead to the following impacts on the features of interest:

- Physical damage through abrasion caused by erosion. The natural process of bank erosion can be accelerated and accentuated by boating activities. Indirectly, boats may impact on vegetation by the generation of wash and wake and the consequent effect of erosion and turbidity. Boating may have an impact on vegetation through the contact of boats with banks, scouring and uprooting of submerged vegetation by hulls, chains, oars and anchors and cutting of vegetation by propellers.
- Physical damage through abrasion caused by trampling. The launching of craft from formal/constructed access points is likely to have minimal impact on marine features except where it involves trampling and scouring of the feature. The launching of craft from informal non-constructed access points may result in compaction and erosion of features both on the land and in the intertidal area.
- Non physical disturbance through noise and visual presence may affect bird species. Wildlife may be disturbed not only by the boats themselves but also by the participants, particularly where the boats allow the users access to sensitive habitats. The following aspects of boating may impact on the species: speed, sound, size, visual intrusion and characteristics of craft movement. Disturbance is a particular issue for birds and can include the following impacts:
  - → Birds may take flight temporarily, but return after the disturbance ends. This results in energy intake ceasing and energy expenditure greatly increasing. At times of limited food supply and/or cold weather this could be life threatening for certain species.
  - → Birds may modify their feeding habits.
  - → More sensitive species may suffer reduced breeding success or, ultimately, desert the site.

  The effect which disturbance has on waterfowl varies greatly between the different species of bird and also depends upon the size and characteristics of the water body and the availability of alternative sites. Vulnerable periods for some wildlife coincides with the low season for boating.
- Non-toxic contamination through changes in nutrient loading. Sewage discharge from craft can have localised impact on marine features, particularly in low flushing estuaries and inlets and bays, where it may contribute to reduced oxygen availability. However, its impact in fast flushing areas is negligible. The potential impact is likely to be most significant in areas which already suffer from environmental stresses, often caused by sewage discharge from water company plants or agricultural run-off. In such areas, where there are already low levels of dissolved oxygen and high levels of nutrients in the water, an increase in biochemical oxygen demand and nutrient levels resulting from boat sewage discharge can damage marine fauna and flora. The irresponsible disposal of chemical toilet waste can also have a localised impact on marine fauna and flora. Some marinas and harbour authorities have installed pump-out facilities which are useful for motor cruisers with holding tanks and will minimise the risk of nutrient loading.

It is very difficult to assess the impact on species of boating-related disturbance in isolation from other sources of disturbance, both natural and human influenced.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion
Recreational boating (power) could impact on the site, although the Harbour Authorities etc do have some measures in place to manage these activities such as byelaws for speed limits. There is no evidence to suggest that this activity is currently causing any damage or deterioration to the features of interest, however it is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity under the water sports topic).

Management Considerations:
- *Keep a watching brief on the impacts of recreational power boating in key risk areas*
- *Relevant Authority to continue to enforce current management measures such as existing speed limits. This could include enforcement of byelaws and implementation of policies, however these measures may be amended in the light of new information or changes in the activities being managed. Further information on current management measures is listed in the activity inventories for each cluster and a list of relevant plans and reports is listed in the annex to this Appendix*

Recreational Boating (sail)

Summary

!	Key Risk Area
✯	Possible risk in parts of the site

Introduction

Recreational sailing is an extremely popular activity throughout the site. The activity is not confined to any particular areas, although specific concentrations of activity are often associated with local sailing clubs and marinas. The types of sailing is very varied, from dinghies to large yachts. The size of boats and method of sailing varies considerably. Some use small dinghies, while others use fully crewed high tech racing yachts. The activity is seasonally intensive but occurs all year round, peak time for this is the period May to September. Occasions such as Cowes week and the Round the Island are the most popular. There are various sailing clubs and launch facilities for dinghies to large yachts around the site with concentrations in the major harbours and estuaries.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- The Harbour authorities have statutory controls for safe navigation and can make byelaws for speed limits, zones etc. A number of speed limits are in place in the harbours and estuaries of the Solent. Safety Management Systems are in place in all ports to ensure compliance with the Port Marine Safety Code and deal with issues such as Commercial Fuel Barge operations, managing vessel activity and navigational safety and are audited by the MCA. Organised events submit Risk Assessments to the Statutory Harbour Authority, as a requirement of the Port Marine Safety Code, but the Harbour Master has the power to veto or amend the event's arrangements, as appropriate. Port Waste Management Plans are also in place in all ports to ensure compliance with the Merchant Shipping and Fishing Vessel (Port Waste Reception Facilities Regulations 2003) and include details of waste reception facilities.
- The Local Authorities own and/or manage land from which craft can be launched. Section 94 of the Public Health Acts Amendment Act 1907 enables local authorities to grant licences for pleasure boats to be let for hire or to be used for carrying passengers for hire. Byelaws can be set for a) the mooring places for such boats, b) for securing their good and orderly conduct & c) for fixing the qualifications of the boatmen or other persons in charge of such boats or vessels.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence recreational boating (power)in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Recreational boating (sail) can lead to the following impacts on the features of interest:

- Physical damage from abrasion caused by erosion. The natural process of bank erosion can be accelerated and accentuated by boating activities. Indirectly, boats may impact on vegetation by the generation of wash and wake and the consequent effect of erosion and turbidity. Boating may have an impact on vegetation through the contact of boats with banks, scouring and uprooting of submerged vegetation by hulls, chains, oars and anchors and cutting of vegetation by propellers.
- Physical damage from abrasion caused by trampling. The launching of craft from formal/constructed access points is likely to have minimal impact on marine features except where it involves trampling and scouring of the feature. The launching of craft from informal non-constructed access points may result in compaction and erosion of features both on the land and in the intertidal area.
- Non physical disturbance from noise and visual impact may affect bird species. Wildlife may be disturbed not only by the boats themselves but also by the participants, particularly where the boats allow the users access to sensitive habitats. The following aspects of boating may impact the species: speed, sound, size, visual intrusion and characteristics of craft movement. Disturbance is a particular issue for birds and can include the following impacts:
  - → Birds may take flight temporarily, but return after the disturbance ends. This results in energy intake ceasing and energy expenditure greatly increasing. At times of limited food supply and/or cold weather this could be life threatening for certain species.
  - → Birds may modify their feeding habits.
  - → More sensitive species may suffer reduced breeding success or, ultimately, desert the site.

  The effect which disturbance has on waterfowl varies greatly between the different species of bird and also depends upon the size and characteristics of the water body and the availability of alternative sites. Vulnerable periods for some wildlife coincides with the low season for boating. It is generally thought that any impacts will be slight unless sailing is carried out without care and attention and sailing boats are often a popular visual feature of the estuary.
- Non-toxic contamination from the introduction of synthetic and non-synthetic compounds. Sewage discharge from craft can have localised impact on marine features, particularly in low flushing estuaries and inlets and bays, where it may contribute to reduced oxygen availability. However, its impact in fast flushing areas is negligible. The potential impact is likely to be most significant in areas which already suffer from environmental stresses, often caused by sewage discharge from water company plants or agricultural run-off. In such areas, where there are already low levels of dissolved oxygen and high levels of nutrients in the water, an increase in biochemical oxygen demand and nutrient levels resulting from boat sewage discharge can damage marine fauna and flora. The irresponsible disposal of chemical toilet waste can also have a localised impact on marine fauna and flora. Some marinas and harbour authorities now have pump out facilities for those yachts with holding tanks.

It is very difficult to assess the impact on species of boating-related disturbance in isolation from other sources of disturbance, both natural and human influenced.

The coastal BAP recognises that there are issues in relation to recreation and suggests an action (coastal-32) to promote, disseminate and implement established codes of conduct for recreational and commercial users of the Hampshire coast.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and in appendix 2.

Conclusion
Recreational boating (sail) could impact on the site, although the Harbour Authorities etc do have some measures in place to manage these activities such as byelaws for speed limits. There is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest, however it is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity, under the water sports topic).

Management Considerations:
- *Keep a watching brief on the impacts of recreational sail boating in key risk areas*
- *Relevant Authority to continue to enforce current management measures. This could include enforcement of byelaws and implementation of policies, however these measures may be amended in the light of new information or changes in the activities being managed. Further information on current management measures is listed in the activity inventories for each cluster and a list of relevant plans and reports is listed in the annex to this Appendix*

Sea-water Abstraction

Summary

✯	Possible risk in parts of the site
Ⓟ	Plan or Project

Introduction

Seawater is abstracted from the Solent for various purposes including cooling and sea water swimming pools.

Responsibilities and Management

All seawater extractions are controlled by Environment Agency abstraction licences which control the volumes that may be taken, as such seawater abstraction is a plan or project. Extraction licences may contain conditions to protect the environment and other abstractors.

Impacts/Issues

Sea water extraction can lead to the following impacts on the features of interest:

- Change to the water regime with consequent impacts on species composition.
- Non-toxic contamination due to changes to salinity and the thermal regime.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

The activity is a plan or project and is therefore not relevant to the SEMS management scheme.

Management Considerations:

- *Ensure that any new sea water abstraction proposals are properly assessed by the CAs*

Shellfisheries (including shellfish collection, dredging, shellfish laying and mariculture)

Summary

!	Key Risk Area
✯	Possible risk in parts of the site
ⓘ	Systems in place to ensure that the activity is managed in line with the Habitats Regulations

Introduction

Shellfisheries includes a number of related sub activities i.e. shellfish collection, shellfish dredging, shellfish laying and mariculture.

Shellfish collection is gathering shellfish such as cockles, mussels, oysters, clams and winkles by hand and it occurs at various locations around the coast. Seasonal oyster collection occurs between Sept- March.

Shellfish dredging is the collection of shellfish from the benthos by means of a dredge. The most significant shellfishery is for the native oyster which represents the largest self-sustaining stock in Europe and is of international conservation importance. The fishery is targeted by vessels typically under 12m in length (by virtue of byelaw controls) and occurs within statutory open seasons (there are differences in timing of seasons for public and private grounds). Commercial clam digging for the American hard shelled clam also takes place throughout the year as specified in the Sea Fisheries byelaws.

Mariculture is the cultivation of fish, shellfish or marine species, however only mariculture of shellfish occur in the SEMS i.e. for Native Oyster, but there has been historic mariculture of other shellfish. The spat are collected and placed on a suitable substrate to produce a crop of either oyster or clam.

Responsibilities and Management

Shellfish collection from the beach or rocky shore as a common law right is an activity although this right may be managed. Shellfish dredging is managed outside the public right to fish through several and regulation orders, and local byelaws manage the public fisheries The status of mariculture as a plan or project is difficult to define as a result of the scale of the operation. In theory consent should be sought from English Nature for any size operation but in theory this would be hard to administer.

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- The Sea Fisheries Committee enforces E.U., national and make/enforce local byelaw regulations . The SFC's have the power to make byelaws and can apply for several/regulating orders e.g. byelaw for dredging or fishing for and taking of oysters and clams and the removal of cultch and fishing for and taking of whelks and winkles.
- The Emsworth Harbour Fishermen's Federation Limited under 'The Emsworth Channel Fishery Order 1975. Stanswood Bay Oystermen Limited under 'The Stanswood Bay Oyster Fishery (Variation) Order 1995, Calshot Oyster Fishermen Limited under the Calshot Oyster Fishery (Variation) Order 1995. The Southern Sea Fisheries Committee under the Solent Oyster Fishery Order 1980 manage several and regulated fisheries.

- Local Authorities have a regulatory role through environmental health i.e. they enforce the Food Safety (Fishery Products and Live Shellfish) (Hygiene) Regulations 1998 (as amended) in relation to the harvesting of shellfish.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.
- DEFRA through fishing vessel licensing.

Native Oyster is subject to a national Species Action Plan.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence mariculture in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues
Shellfisheries can lead to the following impacts on the features of interest:
- Physical loss through smothering of seabed habitats through shellfish laying and mariculture.
- Physical disturbance due to abrasion damage from trampling by collectors and damage to sensitive species. Physical disturbance due to abrasion damage from dredges operating and damage to sensitive species. Subtidal and intertidal dredge tracks may be visible for varying amounts of time, ie. months in stable sediments, hours in mobile sediments.
- Non-physical disturbance due to visual presence to roosting and feeding birds on the inter-tidal area (particularly over winter and during bird migration periods).

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and appendix 2.

Conclusion
Shellfisheries could impact on the site, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. It is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity under the fishing topic).

Management Considerations:
- *Keep a watching brief on the impacts of shellfisheries in key risk areas*
- *Relevant Authority to continue to enforce current management measures. This could include enforcement of byelaws and implementation of policies, however these measures may be amended in the light of new information or changes in the activities being managed. Further information on current management measures is listed in the activity inventories for each cluster and a list of relevant plans and reports is listed in the annex to this Appendix*

Slipway Cleaning and Maintenance

Summary

!	Key Risk Area
✯	Possible risk in parts of the site

Introduction

A large number of privately and publicly owned slipways occur throughout the site. These are cleaned, some frequently (once a month) and some fairly infrequently (once or twice a year) often involving high pressure hoses. It is only carried out as required i.e. when algal growth has accumulated, mainly spring/summer or during the winter after storms to remove build up of shingle. The activity is usually carried out as a health and safety requirement.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- Local authorities are a local planning authority for new proposals for locating slipways. They also have a duty of care to ensure slipways in their ownership are properly maintained. Local plans can have policies related to slipways.
- Owners of private slipways have a similar duty of care to local authorities.
- Harbour authorities have safety controls over slipways.
- The Environment Agency would be required to consent any large-scale maintenance involving engineering works.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence slipway cleaning and maintenance in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

Slipway cleaning and maintenance can lead to the following impacts on the features of interest:

- Non-physical disturbance through noise can occur for instance from jet wash and cleaning, this can potentially be visually intrusive.
- Toxic contamination through the introduction of synthetic and non-synthetic compounds. Bleach and other chlorine containing chemicals used to clean slipways may have toxic effects on shellfish and fish, and reduce the diversity of marine wildlife in localised areas. The use of detergents for cleaning operations can form phosphate-rich waters that may encourage the formation of algal blooms which can cause oxygen depletion and may result in the localised suffocation of animals. There is also a possibility that the process may wash spillages on the slipway into the water.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD and appendix 2.

Conclusion
Slipway cleaning and maintenance could impact on the site, however there is no evidence to suggest that this is currently causing any damage or deterioration to the features of interest. It is highlighted in the Management Scheme as a possible area for concern, (see appendix 2 for further detail on key areas at risk from the activity, under the water sports topic).

Management Considerations:
- *Keep a watching brief on the impacts of slipway cleaning and maintenance in key risk areas*

Wildfowling

Summary

✯ Possible risk in parts of the site

ⓘ Systems in place to ensure that the activity is managed in line with the Habitats Regulations

Introduction

Shooting of quarry species using shot guns without lead shot (wildfowling) is carried out in the winter months on the mudflats of the Solent. The main quarry species are wild geese and ducks which are mostly migrants, travelling from the Arctic Circle, Scandinavia and the Low Countries in the Autumn and returning to their breeding grounds in the spring. Regulated wildfowling is carried out by a number of clubs affiliated to the British Association for Shooting and Conservation. The clubs seek to integrate properly regulated wildfowling with sound management of wildlife and habitat. The 5 clubs in the Solent collectively manage c 5000 acres of land, of this only 5-10% actually has wildfowling taking place with the rest as managed refuge or other forms of un-shot areas. The clubs hold the land and rights freehold, leasehold and under licence. Where land is held leasehold they have a variety of landlords – including the Crown Estate, local authorities, and the RSPB. A number of leases are held jointly with other bodies such as RSPB and the Hampshire Wildlife Trust.

Responsibilities and Management

The following Relevant Authorities can influence the management of the activity in their areas of jurisdiction:

- The operation is consented by English Nature's advice.
- English Nature can influence the activity where it impacts on an SSSI or where necessary through byelaws for the protection of a European marine site
- Local authorities can award licence to clubs.
- Harbour Authorities lease land to clubs.
- Landowners and other relevant authorities where appropriate may grant or refuse permission as there is no common law right to shoot.

Various legislation controls the activity:

- The 1830 Game Act of England and Wales
- The 1860 Game licensing Act of England, Wales and Scotland.
- The 1954 Protection of Birds Act
- The 1981 Wildlife and Countryside Act.
- Firearms act 1968 (amended 1988) control the use of all firearms. The Environment Protection (Regulation on use of lead shot) (England) 1999 prevents the use of lead shot for wildfowling in England.
- W&C Act covers which species may be shot (Schedule 2 part 1). Close and open seasons for wildfowling (open season = 1 September to 20 February inclusive for the foreshore) and permitted methods of shooting. Section 2 (6) and 2 (7) of the W&C Act can be used to create statutory cold weather wildlfowing bans (note that no other activity is regulated this way). Section 28 (6) (a) Consents under the W&C Act 1981, as amended by the CRoW Act 2000 and Regulation 19, 20 and 21 of the Habs Regs 1994 requires that all wildfowling on SSSIs is carried out under written consent from English Nature .

All clubs in the SEMS area have previously given written notice of the wildfowling management regime and received written consent for their activities from English Nature . English Nature has also reviewed these under the Habitats Regulations, therefore the activity is already managed so as to secure the favourable condition of the site.

Wildfowling clubs are strictly self-regulated. Wildfowling clubs maintain active warden schemes on the areas they manage for shooting and non shooting to deter poachers. BASC (British Association for Shooting and Conservation) is the umbrella organisation that controls all affiliated wildfowling clubs and they have a code of conduct that all clubs follow. Wildlfowing is managed through club permit schemes. Before a member can shoot unaccompanied on club land he/she must demonstrate a satisfactory level of proficiency to do so. Internal club proficiency training is important for maintaining and improving the already high standards. Clubs set bag limits, however these are rarely achieved and club rules prevent the sale of shot waterfowl. The clubs have open and closed seasons and will suspend shooting of certain species if the population numbers are low. The ethical code of coastal wildlfowling is that no species or number of waterfowl are taken unless the individual wildfowler wants them for personal consumption or has a use for them. All clubs complete a shooting return which is collated on an annual basis so that the level of, location of and trends in wildfowling can be monitored.

A number of local plans, harbour plans and other statutory and non-statutory plans have policies that can influence wildfowling in the clusters, a list of all plans is included in annex 1. The individual cluster activity inventories also contain further detail on specific responsibilities and management where appropriate.

Some areas of the SEMS may fall outside of any Relevant Authorities area of jurisdiction, where the activity occurs in these areas it may therefore not be within any Relevant Authorities power to control it.

Impacts/Issues

It is difficult to determine the impact of shooting levels on migratory populations in the context of other variables such as the natural factors affecting breeding season success. There is considerable uncertainty about the number of birds shot and how this relates to the size of the overwintering population. Wildfowling can lead to the following impacts on the features of interest:

- Physical damage through abrasion. In areas where wildfowling takes place, the activity may lead to trampling impacts on vegetation.
- Non physical damage through noise and visual presence of people on the marshes may affect bird species. However it is noted that in order for a successful shoot it is important that the wildfowlers are inconspicuous.

Further details of where these operations are likely to occur in each cluster and which features of interest are most at risk are included in the activity inventories for each cluster, these are available as separate reports on the CD.

Conclusion

Wildfowling could impact on the site, however it is thought that this activity is adequately managed through the lease agreements and through consent with English Nature . It is therefore felt that systems are currently in place that ensure that the activity is managed in line with the requirements of the Habitats Regulations, therefore no further work in required.

Management Considerations:

- *Ensure that any future licences for wildfowling are properly assessed by the appropriate competent authorities, addressing the potential impacts on the features.*

Annex I – Current Plans Affecting SEMS

Type	Plan Title	Lead Body	Geographical Area	Date Published	Status	Key Focus	Date for Review	Website
AONB	Chichester Harbour AONB Management Plan 2004-2009	Chichester Harbour Conservancy	Chichester Harbour	2004	Published	Multi-sectoral	2009	www.conservancy.co.uk/about/management_plan.htm
AONB	Isle of Wight AONB Management Plan	Isle of Wight Council	Isle of Wight AONB	1994	Published	Landscape	2003 consultation on new plan	www.wightaonb.org.uk/management/management_plan.asp
BAP	Chichester District Local Biodiversity Action Plan	Chichester District Council	Chichester District	2003	Published	Nature conservation	3-5 years	www.chichester.gov.uk/live/conserving_the_built__natural/local_biodiversity_action_plan.cfm
BAP	Biodiversity Action Plan for Eastliegh	Eastliegh Borough Council	Eastliegh Borough Council	May 2002	Published	Nature conservation	unknown	www.eastleigh.gov.uk/countryside/bio2004action.htm
BAP	A Local Biodiversity Action Plan for Fareham	Fareham Borough Council	Fareham Borough Council	Not dated	Published	Nature conservation	unknown	www.fareham.gov.uk/council/departments/planning/naturec/bio/finalbap.pdf
BAP	Biodiversity Action Plan for Hampshire (Volume 1 and 2)	Hampshire Biodiversity Partnership	Hampshire	1998	Published	Nature conservation	unknown	www.hampshirebiodiversity.org.uk/action.html
BAP	Biodiversity Action Plan for the Hampshire Coast	Hampshire Biodiversity Partnership	Hampshire Coast	2003	Published	Nature conservation	unknown	www.hampshirebiodiversity.org.uk/pdf/PublishedPlans/coastal_BAP.pdf
BAP	Hampshire Biodiversity Action Plan - Shorebirds Species Action Plan	Hampshire Biodiversity Partnership	Hampshire	Due 2004	-	Nature Conservation	unknown	www.hampshirebiodiversity.org.uk/vol-two.html *When published.*
BAP	Brent Goose Strategy	Hants Wildlife Trust	SE Hants Coast	2002	Consultation Draft	Nature Conservation	unknown (plans to convert to cover all Hants)	Not available on a website

Type	Plan Title	Lead Body	Geographical Area	Date Published	Status	Key Focus	Date for Review	Website
BAP	Wildlife of the Isle of Wight	Isle of Wight Biodiversity Partnership	Isle of Wight	July 2000	Published	Nature conservation	unknown	www.iow.gov.uk/living_here/planning/images/WildlifeoftheIsleofWight.pdf
BAP	Isle of Wight Biodiversity Action Plan	Isle of Wight Biodiversity Partnership	Isle of Wight	In preparation	Audit published July 2000 (see above). Various HAPs and SAPs being produced.	Nature conservation	unknown	www.iwight.com/living_here/planning/Countryside/Ecology/Habitats/default.asp
BAP	Isle of Wight Biodiversity Action Plan – Solent Coastal Habitat Action Plan	Isle of Wight Biodiversity Partnership	Isle of Wight	2004	Published	Nature conservation	unknown	www.iow.gov.uk/living_here/planning/images/SolentCoastalHAP.pdf
BAP	A Local Biodiversity Action Plan for Sussex	Sussex Biodiversity Partnership	Sussex	1998	Published	Nature conservation	unknown	www.biodiversitysussex.org/introduction.htm
BAP	Coastal Habitat Action Plans for Sussex	Sussex Biodiversity Partnership	Sussex		Some Published other in preparation	Nature conservation	unknown	www.biodiversitysussex.org/index.htm
BAP	Test Valley Biodiversity Action Plan	Test Valley Borough Council	Test Valley Borough	Due in 2004	In preparation	Nature conservation	unknown	Not available on a website
BAP	Species Action Plan Native Oyster.UK Biodiversity Group Tranche 2 Action Plans - Volume V: Maritime species and habitats	Shellfish Association of Great Britain	National	Oct 1999	In preparation	Nature Conservation	Unknown	www.ukbap.org.uk/asp/UKPlans.asp?UKListID=495
CHaMP	Coastal Habitat Management Plan (Hampshire & West Sussex Coast)	English Nature/Environment Agency	Hampshire and West Sussex Coasts	2003	Published	Nature conservation	pilot study	www.english-nature.org.uk/livingwiththesea/champs/pilots.asp

Type	Plan Title	Lead Body	Geographical Area	Date Published	Status	Key Focus	Date for Review	Website
CMP	Chichester Coastal Management Plan	Chichester District Council	Chichester Harbour to Pagham Harbour	In preparation		Multi-sectoral	unknown	www.chichester.gov.uk/live/conserving_the_built__natural/coastal_management_plan.cfm
CMP	The Beachlands Plan	Havant Borough Council	South coast of Hayling Island	May 1990	Published	Environmental improvements	unknown	Not available on a website
CMP	New Forest District Coastal Management Plan	New Forest District Council	New Forest Coastline	1997	Published	Multi-sectoral	2004	Not available on a website
CMP	Seafront Management Strategy	Portsmouth City Council	Southsea	1999	Published		unknown	Not available on a website
EMP	Chichester Harbour Management Plan 2004-2009	Chichester Harbour Conservancy	Chichester Harbour	Draft	Consultation draft	Multi-sectoral	2009	Not available on a website
EMP	Cowes Harbour Plan	Cowes Harbour Commissioners	Cowes Harbour	1994		Development	Sustainability study underway	Not available on a website
EMP	Medina Estuary Management Plan	Cowes Harbour Commissioners	Medina Estuary	1997, 2000	Published	Multi-sectoral	Sustainability study underway	www.iwight.com/living_here/environment/estuaries/Estuary_Management/
EMP	Bembridge Harbour Plan	Isle of Wight Council	Bembridge Harbour		Initial consultation phase 1999	Multi-sectoral	Sustainability study underway	Not available on a website
EMP	Langstone Harbour Management Plan	Langstone Harbour Board	Langstone Harbour	1997	Published	Multi-sectoral	unknown	Not available on a website
EMP	Keyhaven River Management Strategy	New Forest Borough Council	Keyhaven River	2003	Published	Multi-sectoral	2004	www.nfdc.gov.uk/index.cfm?articleid=1099
EMP	Portsmouth Harbour Plan Review	Portsmouth City Council	Portsmouth Harbour	2000	Published	Multi-sectoral	unknown	Not available on a website
EMP	River Hamble Estuary Management Plan	River Hamble Harbour Authority	River Hamble	2002	Published	Multi-sectoral	unknown	www.hants.gov.uk/hambleharbour/emp.html

Type	Plan Title	Lead Body	Geographical Area	Date Published	Status	Key Focus	Date for Review	Website
EMP	Western Yar Estuary Management Plan	Yarmouth Harbour Commissioners	Western Yar Management Plan	1998	Published	Multi-sectoral	unknown	www.iwight.com/living_here/environment/estuaries/Western_Yar_Estuary_Management_Plan/
EMS	Solent European Marine Sites Management Plan	Management Group of Relevant Authorities	Solent SACs and SPAs	In preparation	Consultation draft	Nature conservation	Every 5 Years	www.solentforum.hants.org.uk/SEMS/homepage.html
EMS	South Wight SAC Management Plan	Isle of Wight Council	South Wight	In preparation	In preparation	Nature conservation	unknown	Not available on a website
Energy	Renewal Energy Strategy for the Isle of Wight to 2010	Isle of Wight Council	Isle of Wight	2003	Published	Energy	unknown	www.iwight.com/council/documents/renewable.pdf
EP	Cowes Emergency Plan	Cowes Harbour Commissioners	Cowes Harbour	December 2002	Published	Contingency Planning	Every 5 Years	Not available on a website
EP	Cowes Harbour Oil Response Plan	Cowes Harbour Commissioners	Cowes Harbour	March 2003	Published	Contingency Planning	unknown	Not available on a website
EP	Langspill – Oil Pollution Contingency Plan	Langstone Harbour Board	Langstone Harbour		Published	Contingency planning	2005	Not available on a website
EP	Hamble River Harbour – Oil Spill Contingency Plan	River Hamble Harbour Authority	River Hamble	2001	Published	Contingency Planning	Updated regularly	Not available on a website
EP	Solent Environment Group Marine Pollution Contingency Plan	Solent Environment Group: CCDCs Consultants in Communicable Desease Control, DEFRA, English Nature , EA, HCC, IoWC, MCA	Hants Coast, West Sussex to Selsey Bill and IOW	November 2002	Final Copy	Contingency Planning	unknown	Not available on a website
EP	Oil Spill Response Plan	Yarmouth (IOW) Harbour Commissioners	Yarmouth Harbour and beach frontage to Council land	Jan 2004	Ongoing reassessment	Contingency planning	As required	Not available on a website
LA21	Isle of Wight Local Agenda 21 Strategy	Isle of Wight Council	Isle of Wight	2000	Published	Sustainability	unknown	Not available on a website
LC	Southern Region Local Contributions	Environment Agency	Hampshire and IoW		Published	Environment	2004	Not available on a website

Type	Plan Title	Lead Body	Geographical Area	Date Published	Status	Key Focus	Date for Review	Website
Misc	ABPs Notices to Mariners	ABP	Southampton Water	Various	Published	Management	Updated regularly	www.southamptonspin.net/content/notices.asp
Misc	Chichester Harbour Conservancy Local byelaws and Local Notice to Mariners	Chichester Harbour Conservancy	Chichester Harbour	Various	Published	Management	Update regularly	www.conservancy.co.uk/water/pdf/CHCByelaws.pdf & www.conservancy.co.uk/water/local_notices.asp
Misc	Cowes Harbour Byelaws	Cowes Harbour Commissioners	Cowes Harbour	-	Published	Management	Updated Regularly	www.cowes.co.uk/getting_in.html
Misc	Langstone Harbour Byelaws	Langstone Harbour Board	Langstone Harbour	-	Published	Management	Updated Regularly	www.langstoneharbour.org.uk/byelaws/byelaws.htm
Misc	Lymington Harbour Byelaws	Lymington Harbour Commissioners	Lymington Harbour	-	Published	Management	Updated Regularly	http://fp.lymingtonharbour.plus.com/Harbour%20Byelaws%201992.htm
Misc	River Hamble Byelaws	River Hamble Harbour Authority	Hamble	-	Published	Management	Updated Regularly	www.hants.gov.uk/hambleharbour/blaw.html
Misc	Sussex Sea Fisheries Local Regulations	Sussex Sea Fisheries Committee	Sussex	-	Published	Management	Updated Regularly	www.sussex-sfc.gov.uk/local_regulations.htm
Misc	QHM Regulations	QHM	Dockyard Port of Portsmouth	-	Published	Management	-	www.qhmportsmouth.com/index.php?subject=dregs
Misc	Yarmouth Rules of the Inner Harbour	Yarmouth Harbour Commissioners	Yarmouth Harbour	-	Published	Management	Updated Regularly	www.yarmouth-harbour.co.uk/getting.html#rules

Type	Plan Title	Lead Body	Geographical Area	Date Published	Status	Key Focus	Date for Review	Website
PMSC	ABPs Marine Policy	ABP	All ABP Ports	-	Published	Port and Navigational safety	Unknown	www.abports.co.uk/general/pdfs/Marinepolicy.pdf
PMSC	Chichester Harbour Conservancy Port Marine Safety Code	Chichester Harbour Conservancy	Chichester Harbour	2000	Published	Port and navigational safety	Reviewed annually	www.conservancy.co.uk/news/pdf/pmsc.pdf
PMSC	Cowes Safety Management System Manual (to ensure compliance with the Port Marine Safety Code)	Cowes Harbour Commissioners	Cowes Harbour	2002	Published	Port and navigational safety	Ongoing	Not available on a website
PMSC	Marine Safety Manual February	Lymington Harbour Commissioners	Lymington River	2002	Published	Port and navigational safety	Regular Review	Not available on a website
PMSC	Dockyard Port Of Portsmouth Port Marine Safety Code Annual Report	QHM	Dockyard Port of Portsmouth	March 2004	Published	Port and Navigational Safety	Regular Review	http://qhmportsmouth.com/index.php?subject=an_pmsc
PMSC	River Hamble Safety Management System (to ensure compliance with the Port Marine Safety Code)	River Hamble Harbour Authority	River Hamble	Commenced 2002	Published	Port and navigational safety	Ongoing	Not available on a website
PMSC	Wightlink Safety Management System (to ensure compliance with the Port Marine Safety Code)	Wightlink (Audited annually by MCA)	Solent	Commenced 1997	Published	Port and navigational safety	Ongoing	Not available on a website
PWMP	Chichester Harbour Port Waste Management Plan	Chichester Harbour Conservancy	Chichester Harbour	1998	Published	Waste Management	2003	Not available on a website
PWMP	Cowes Harbour Port Waste Management Plan	Cowes Harbour Conservancy	Cowes Harbour	Awaiting approval from MCA	Awaiting approval from MCA	Waste Management	Every 3 years	Not available on a website
PWMP	Langstone Harbour Waste Management Plan	Langstone Harbour Board	Langstone Harbour	Jan 2004	Published	Waste Management	2007	Not available on a website
PWMP	Lymington Port Waste Management Plan	Lymington Harbour Commissioners	Lymington	Feb 2004	Published	Waste Management	2007	Not available on a website
PWMP	Portsmouth Commercial Port Waste Management Plan	Portsmouth Commercial Port	Portsmouth Ferry Port	Awaiting approval from MCA	Awaiting approval from MCA	Waste Management	Every 3 Years	www.portsmouth-port.co.uk/i.php?s=a&l=2&ss=generalinfo&p=ps

Type	Plan Title	Lead Body	Geographical Area	Date Published	Status	Key Focus	Date for Review	Website
PWMP	River Hamble Port Waste Management Plan	River Hamble Harbour Authority	River Hamble	2000	Published	Waste Management	2006	Not available on a website
PWMP	Wightlink Port Waste Management Plan	Wightlink	Portsmouth, Wootton Creek, Lymington, Yarmouth	Jan 2004	Published	Waste Management	2007	Not available on a website
PWMP	Yarmouth (IOW) Harbour Waste Management Plan	Yarmouth (IOW) Harbour Commissioners	Yarmouth Harbour	Jan 2004	Formal reassessment every 3 yrs	Controlled Waste	2007	Not available on a website
SG	Strategy for Hampshire's Coast	Hampshire County Council	Hampshire Coast	1991	Published	Multi-sectoral	unknown	www.hants.gov.uk/plazhn/c891.html
SG	Strategic Guidance for the Solent	Solent Forum	Solent	1997	Published	Multi-sectoral	unknown	www.solentforum.hants.org.uk/publications/strategicguid.htm
SG	State of the Solent	Solent Forum	Solent	2001	Published	Multi-sectoral	Every 5 years	www.solentforum.hants.org.uk/publications/sosproj.html
SG	Marine Consents Guide	Solent Forum	Solent	2002	Published	Mult-sectoral	Regularly updated	www.solentforum.hants.org.uk/publications/marinecons.html
SG	Access Improvements and Environment Enhancements - a strategy for the Solent	Solent Forum	Solent	2002	Published	Multi-sectoral	not applicable	www.solentforum.hants.org.uk/pdf/aefinaldoc.pdf
SMP	East Solent Shoreline Management Plan	Havant Borough Council	River Hamble to Pagham Harbour	1997	Published	Coastal defence	unknown	www.havant.gov.uk/havant-2787
SMP	Isle of Wight Shoreline Management Plan	Isle of Wight Council	Isle of Wight	1997	Published	Coastal defence	unknown	Not available on a website
SMP	Western Solent Shoreline Management Plan	New Forest District Council	Christchurch Bay to the River Hamble	1998	Published	Coastal defence	unknown	www.solentforum.hants.org.uk/othercoast/western_solent_smp.htm

Type	Plan Title	Lead Body	Geographical Area	Date Published	Status	Key Focus	Date for Review	Website
SMP - SS	Hurst-Calshot Strategy	New Forest District Council	Hurst – Calshot	2003 In Preparation	In preparation	Coastal defence	unknown	Not available on a website
SMP - SS	West Wight Coastal Defence Strategy	Isle of Wight Council				Coastal defence	unknown	Not available on a website
SMP - SS	Isle of Wight North East Coast Strategy	Isle of Wight Council	North East Coast of Isle of Wight	Autumn 2000	In preparation	Coastal defence	unknown	Not available on a website
SMP - SS	Sandown Bay & Undercliff Strategy	Isle of Wight Council				Coastal defence	unknown	Not available on a website
SMP - SS	Bembridge Harbour and East Yar Valley Study	Isle of Wight Council				Coastal defence	unknown	Not available on a website
SMP - SS	Isle of Wight Environmental Mitigation Plan	Isle of Wight Council				Coastal defence	unknown	Not available on a website
SMP - SS	Falkland Gardens and Esplanade Sea Walls Strategy Study	Gosport Borough Council				Coastal defence	Unknown	Not available on a website
SMP - SS	Gosport Town Centre	Gosport Borough Council				Coastal defence	unknown	Not available on a website
SMP - SS	Portchester Castle to Emsworth Strategy Study			Expected to start 2004		Coastal defence	unknown	Not available on a website
SMP –SS	Old Portsmouth Study			Nov 1997		Coastal defence	unknown	Not available on a website
SMP - SS	Portsea Island Coastal Strategy Study	Portsmouth City Council/Halcrow	Portsea Island	Scoping study complete Stage 2 due Feb 2004	Scoping study	Coastal defence	unknown	Not available on a website
SMP - SS	Hayling Island Coastal Defence Strategy Study (In certain areas more detailed strategies have been developed which have superceeded	Environment Agency/Havant Borough Council	Hayling Island	1998	Published	Coastal defence	unknown	Not available on a website

Type	Plan Title	Lead Body	Geographical Area	Date Published	Status	Key Focus	Date for Review	Website
	the above document.)							
SMP - SS	Selsmore to Megham Sectoral Strategy	Environment Agency/Havant Borough Council	Hayling Island	Feb 2001	Published	Coastal defence	When Hayling Island Coastal Defence Strategy is updated	Not available on a website
SMP - SS	Eaststoke Northen and Southern Frontage Sectoral Strategy	Environment Agency/Havant Borough Council	Hayling Island		Published	Coastal defence	When Hayling Island Coastal Defence Strategy is updated	Not available on a website
SMP –SS	Eastoke Beach Management Strategy		Southern frontage of Eastoke peninsula	April 1999		Coastal defence	unknown	Not available on a website
SMP -SS	Eastoke Peninsula, Hayling Island Sectoral Strategy Study	Havant Borough Council	Eastoke peninsula	May 2002		Coastal defence	unknown	www.havant.gov.uk/havant-2296
SMP - SS	East Head to Pagham Harbour Strategy	Chichester District Council	East Head to Pagham	May 2001		Coastal defence	unknown	www.chichester.gov.uk/live/coastal_defence_strategy.cfm
SP	Chichester District Local Plan to 2006	Chichester District	Chichester District	1999	Published	Landuse planning	LDF expected	www.chichester.gov.uk/live/conserving_the_built__natural/local_plan.cfm
SP	Eastleigh Borough Local Plan	Eastleigh Borough Council	Eastleigh Borough	2003 Second deposit	Public inquiry January 2004	Landuse planning	LDF expected	www.eastleigh.gov.uk/services/PlanPolicy/2nddepmenu.htm
SP	Fareham Borough Local Plan to 2006	Fareham Borough Council	Fareham Borough	2000 Adopted	working on LDF 2006-2011	Landuse planning	LDF expected	www.fareham.gov.uk/council/departments/planning/localplan.asp
SP	Gosport Borough Local Plan	Gosport Borough Council	Gosport Borough	1995	Adopted	Landuse planning	LDF expected	www.gosport.gov.uk/sections/your-council/council-services/planning/borough-local-plan

Type	Plan Title	Lead Body	Geographical Area	Date Published	Status	Key Focus	Date for Review	Website
SP	Gosport Borough Local Plan Review	Gosport Borough Council	Gosport Borough	2004 First deposit	Revised Deposit June 2004	Landuse planning	LDF expected	www.gosport.gov.uk/sections/your-council/council-services/planning/local-plan-review
SP	Havant Borough Local Plan 1996-2011	Havant Borough Council	Havant Borough	2002 Public Inquiry	Awaiting inspectors report	Landuse planning	LDF expected	www.havant.gov.uk/havant-2346
SP	Hampshire County Structure Plan to 2011	Hampshire County Council	Hampshire	2000 Adopted	RSS to replace	Landuse planning	RSS consultation due Autumn 2004	www.hants.gov.uk/structureplan/
SP	Isle of Wight UDP to 2011	Isle of Wight Council	Isle of Wight	2001	Adopted	Multi-sectoral	LDF expected	www.iwight.com/council/documents/policies_and_plans/udp/udp_2002.asp
SP	New Forest District Local Plan First Alteration	New Forest District Council	New Forest District	2003 Public Inquiry	Awaiting inspectors report. Expect to adopt 2004	Multi-sectoral	LDF expected	www.nfdc.gov.uk/index.cfm?articleid=951
SP	Portsmouth City Local Plan to 2011	Portsmouth City Council	Portsmouth City	2002 Second deposit	Local Plan review	Multi-sectoral	LDF expected	www.portsmouth.gov.uk/pcc/html/City%20Plan%20Revised%20Dep%20Draft/RTitle%20Page.htm
SP	City of Southampton Local Plan to 2011	Southampton City Council	Southampton City	2003 Second deposit	Local Plan Review	Multi-sectoral	unknown	www.southampton.gov.uk/localplan/
SP	Test Valley Borough Local Plan Review	Test Valley Borough Council	Test Valley Borough	2004 Second deposit	Review of 1996 plan	Land-use palnning	LDF expected	www.testvalley.gov.uk/TestValley/services.nsf/Public/AllServices/31CB4BCFC28AB15685256A17005416E0?OpenDocument
SP	West Sussex Structure Plan 2001-2016	West Sussex County Council	West Sussex	2004 first deposit	Third review of 1993 plan	Multi-sectoral	Adoption due summer 2004	www.westsussex.gov.uk/content/your-council/plans-policies-

Type	Plan Title	Lead Body	Geographical Area	Date Published	Status	Key Focus	Date for Review	Website
								reports-and-initiatives/structure-plan/structure-plan-2001-2016.jsp?g11n.enc=UTF-8
SP	Winchester City Local Plan 2001-2011	Winchester City Council	Winchester City	Revised Deposit 2003	Local Plan Review	Multi-sectoral	unknown	www.winchester.gov.uk/planning/revised_deposit2003/index.shtml

Further information about the plans/ reports listed and other management measures such as byelaws are outlined in the individual cluster activity inventories.

Key Types of Plan

AONB	Area of Outstanding Natural Beauty
BAP	Biodiversity Action Plans
CHaMPs	Coastal Habitat Management Plans
CMP	Coastal Management Plan
Energy	Energy
EP	Emergency Plans
EMP	Estuary Management Plan
EMS	European Marine Sites
LA21	Local Agenda 21
LC	Local Contribution (Environment Agency Plans)
Misc	Miscellaneous
PWMP	Port Waste Management Plan
PMSC	Port Marine Safety Code
SG	Strategic Guidance
SMP	Shoreline Management Plan
SMP SS	Shoreline Management Plan Strategic Study
SP	Statutory Plan

Source: Solent Forum 2004