

Site Improvement Plan

Solent

Site Improvement Plans (SIPs) have been developed for each Natura 2000 site in England as part of the Improvement Programme for England's Natura 2000 sites (IPENS). Natura 2000 sites is the combined term for sites designated as Special Areas of Conservation (SAC) and Special Protected Areas (SPA). This work has been financially supported by LIFE, a financial instrument of the European Community.

The plan provides a high level overview of the issues (both current and predicted) affecting the condition of the Natura 2000 features on the site(s) and outlines the priority measures required to improve the condition of the features. It does not cover issues where remedial actions are already in place or ongoing management activities which are required for maintenance.

The SIP consists of three parts: a Summary table, which sets out the priority Issues and Measures; a detailed Actions table, which sets out who needs to do what, when and how much it is estimated to cost; and a set of tables containing contextual information and links.

Once this current programme ends, it is anticipated that Natural England and others, working with landowners and managers, will all play a role in delivering the priority measures to improve the condition of the features on these sites.

The SIPs are based on Natural England's current evidence and knowledge. The SIPs are not legal documents, they are live documents that will be updated to reflect changes in our evidence/knowledge and as actions get underway. The information in the SIPs will be used to update England's contribution to the UK's Prioritised Action Framework (PAF).

The SIPs are not formal consultation documents, but if you have any comments about the SIP or would like more information please email us at IPENSLIFEProject@naturalengland.org.uk, or contact Natural England's Responsible Officer for the site via our enquiry service 0300 060 3900, or enquiries@naturalengland.org.uk

This Site Improvement Plan covers the following Natura 2000 site(s)

UK9011011 Chichester and Langstone Harbours SPA

UK9011051 Portsmouth Harbour SPA

UK9011061 Solent & Southampton Water SPA

UK0030059 Solent Maritime SAC

Site description

The Solent SIP covers the Solent Maritime SAC, Solent and Southampton Water SPA, Portsmouth Harbour SPA and Chichester and Langstone Harbours SPA.

The Solent is a complex site encompassing a major estuarine system on the south coast of England. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime with double tides, as well as for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive areas of intertidal mudflats, often supporting eelgrass *Zostera spp.* and green algae, saltmarshes and natural shoreline transitions, such as drift line vegetation.

All four species of cordgrass found within the UK are present within the Solent and it is one of only two UK sites with significant amounts of the native small cordgrass *Spartina maritima*. The rich intertidal mudflats, saltmarsh, shingle beaches and adjacent coastal habitats, including grazing marsh, reedbeds and damp woodland, support nationally and internationally important numbers of migratory and over-wintering waders and waterfowl as well as important breeding gull and tern populations.

Plan Summary

This table shows the prioritised issues for the site(s), the features they affect, the proposed measures to address the issues and the delivery bodies whose involvement is required to deliver the measures. The list of delivery bodies will include those who have agreed to the actions as well as those where discussions over their role in delivering the actions is on-going.

Priority & Issue	Pressure or Threat	Feature(s) affected	Measure	Delivery Bodies
1 Public Access/Disturbance	Threat	A026(NB) Little Egret, A046a(NB) Dark-bellied Brent Goose, A048(NB) Common shelduck, A050(NB) Wigeon, A052(NB) Eurasian teal, A054(NB) Pintail, A056(NB) Shoveler, A069(NB) Red-breasted Merganser, A137(NB) Ringed Plover, A141(NB) Grey Plover, A144(NB) Sanderling, A149(NB) Dunlin, A156(NB) Black-tailed Godwit, A157(NB) Bar-tailed Godwit, A160(NB) Curlew, A162(NB) Common redshank, A169(NB) Turnstone, A176(B) Mediterranean Gull, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern, H1210 Annual vegetation of drift lines, H1220 Coastal shingle vegetation outside the reach of waves, Waterbird assemblage	Reduce disturbance through access management, awareness raising and wardening	Hampshire County Council, Natural England, RSPB, Southern Inshore Fisheries Conservation Authority (IFCA), Solent Forum, Harbours and ports, Solent Recreation Mitigation Partnership (SRMP), Partnership for Urban South Hampshire (PUSH)

2 Coastal squeeze	Threat	A026(NB) Little Egret, A046a(NB) Dark-bellied Brent Goose, A048(NB) Common shelduck, A050(NB) Wigeon, A052(NB) Eurasian teal, A054(NB) Pintail, A056(NB) Shoveler, A069(NB) Red-breasted Merganser, A137(NB) Ringed Plover, A141(NB) Grey Plover, A144(NB) Sanderling, A149(NB) Dunlin, A156(NB) Black-tailed Godwit, A157(NB) Bar-tailed Godwit, A160(NB) Curlew, A162(NB) Common redshank, A169(NB) Turnstone, A176(B) Mediterranean Gull, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern, H1140 Intertidal mudflats and sandflats, H1310 Glasswort and other annuals colonising mud and sand, H1320 Cord-grass swards, H1330 Atlantic salt meadows, Waterbird assemblage	Investigate options to create alternative habitat	Environment Agency, Natural England, Eastern Solent Coastal Partnership, Southern Coastal Group (SCG), Standing Conference on Problems Associated with the Coastline (SCOPAC)
3 Fisheries: Commercial marine and estuarine	Threat	A026(NB) Little Egret, A046a(NB) Dark-bellied Brent Goose, A048(NB) Common shelduck, A050(NB) Wigeon, A052(NB) Eurasian teal, A054(NB) Pintail, A056(NB) Shoveler, A069(NB) Red-breasted Merganser, A137(NB) Ringed Plover, A141(NB) Grey Plover, A144(NB) Sanderling, A149(NB) Dunlin, A156(NB) Black-tailed Godwit, A157(NB) Bar-tailed Godwit, A160(NB) Curlew, A162(NB) Common redshank, A169(NB) Turnstone, A176(B) Mediterranean Gull, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern, H1110 Subtidal sandbanks, H1140 Intertidal mudflats and sandflats, Waterbird assemblage	Introduce appropriate management measures where required and ensure compliance	Environment Agency, Southern Inshore Fisheries Conservation Authority (IFCA), Sussex Inshore Fisheries Conservation Authority (IFCA)

4	Water Pollution	Threat	A026(NB) Little Egret, A046a(NB) Dark-bellied Brent Goose, A048(NB) Common shelduck, A050(NB) Wigeon, A052(NB) Eurasian teal, A054(NB) Pintail, A056(NB) Shoveler, A069(NB) Red-breasted Merganser, A137(NB) Ringed Plover, A141(NB) Grey Plover, A144(NB) Sanderling, A149(NB) Dunlin, A156(NB) Black-tailed Godwit, A157(NB) Bar-tailed Godwit, A160(NB) Curlew, A162(NB) Common redshank, A169(NB) Turnstone, A176(B) Mediterranean Gull, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern, H1130 Estuaries, H1140 Intertidal mudflats and sandflats, H1310 Glasswort and other annuals colonising mud and sand, H1320 Cord-grass swards, H1330 Atlantic salt meadows, Waterbird assemblage	Implement actions in the Diffuse Water Pollution Plan, and investigate further pollution	Environment Agency, Hampshire and Isle of Wight Wildlife Trust, Natural England, Ofwat, Portsmouth Water Plc, RSPB, Rural Payments Agency (RPA), Southern Water Services Ltd, Green Blue, Harbours and ports, Chichester Harbour Authority
5	Changes in species distributions	Threat	A026(NB) Little Egret, A046a(NB) Dark-bellied Brent Goose, A048(NB) Common shelduck, A050(NB) Wigeon, A052(NB) Eurasian teal, A054(NB) Pintail, A056(NB) Shoveler, A069(NB) Red-breasted Merganser, A137(NB) Ringed Plover, A141(NB) Grey Plover, A144(NB) Sanderling, A149(NB) Dunlin, A156(NB) Black-tailed Godwit, A157(NB) Bar-tailed Godwit, A160(NB) Curlew, A162(NB) Common redshank, A169(NB) Turnstone, A176(B) Mediterranean Gull, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern, H1310 Glasswort and other annuals colonising mud and sand, H1320 Cord-grass swards, H1330 Atlantic salt meadows, S1016 Desmoulin's whorl snail, Waterbird assemblage	Investigate the causes of change	Hampshire and Isle of Wight Wildlife Trust, Chichester Harbour Authority
6	Climate change	Threat	A176(B) Mediterranean Gull, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern	Investigate the effects of climate change	Not yet determined

7	Change to site conditions	Threat	A026(NB) Little Egret, A046a(NB) Dark-bellied Brent Goose, A048(NB) Common shelduck, A050(NB) Wigeon, A052(NB) Eurasian teal, A054(NB) Pintail, A056(NB) Shoveler, A069(NB) Red-breasted Merganser, A137(NB) Ringed Plover, A141(NB) Grey Plover, A144(NB) Sanderling, A149(NB) Dunlin, A156(NB) Black-tailed Godwit, A157(NB) Bar-tailed Godwit, A160(NB) Curlew, A162(NB) Common redshank, A169(NB) Turnstone, A176(B) Mediterranean Gull, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern, H1310 Glasswort and other annuals colonising mud and sand, H1320 Cord-grass swards, H1330 Atlantic salt meadows, S1016 Desmoulin`s whorl snail, Waterbird assemblage	Investigate the reasons for change	Not yet determined
8	Invasive species	Threat	A176(B) Mediterranean Gull, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern, H1110 Subtidal sandbanks, H1140 Intertidal mudflats and sandflats, H1150 Coastal lagoons, H1220 Coastal shingle vegetation outside the reach of waves, H1330 Atlantic salt meadows	Implement the management options to control invasive non-native species (INNS)	Hampshire and Isle of Wight Wildlife Trust
9	Direct land take from development	Threat	H1130 Estuaries, H1140 Intertidal mudflats and sandflats	Option appraisal for private coastal defences	Not yet determined
10	Biological Resource Use	Threat	A026(NB) Little Egret, A046a(NB) Dark-bellied Brent Goose, A048(NB) Common shelduck, A050(NB) Wigeon, A052(NB) Eurasian teal, A054(NB) Pintail, A056(NB) Shoveler, A069(NB) Red-breasted Merganser, A137(NB) Ringed Plover, A141(NB) Grey Plover, A144(NB) Sanderling, A149(NB) Dunlin, A156(NB) Black-tailed Godwit, A157(NB) Bar-tailed Godwit, A160(NB) Curlew, A162(NB) Common redshank, A169(NB) Turnstone, A176(B) Mediterranean Gull, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern, Waterbird assemblage	Appropriate egg collection licensing	Not yet determined

11 Change in land management	Threat	A176(B) Mediterranean Gull, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern, H1150 Coastal lagoons, H1210 Annual vegetation of drift lines, H1220 Coastal shingle vegetation outside the reach of waves, Waterbird assemblage	Ensure appropriate ditch management, and assess the effects of tidal sluice operation	Not yet determined
12 Inappropriate pest control	Threat	A176(B) Mediterranean Gull, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern, Waterbird assemblage	Increase control of foxes	Hampshire and Isle of Wight Wildlife Trust, Hampshire County Council, Natural England, RSPB
13 Air Pollution: impact of atmospheric nitrogen deposition	Pressure	A046a(NB) Dark-bellied Brent Goose, A050(NB) Wigeon, A054(NB) Pintail, A156(NB) Black-tailed Godwit, A160(NB) Curlew, A164(NB) Common greenshank, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern, H1130 Estuaries, H1150 Coastal lagoons, H1310 Glasswort and other annuals colonising mud and sand, H1330 Atlantic salt meadows, H2120 Shifting dunes with marram	Reduce the impacts of air pollution	Not yet determined
14 Hydrological changes	Threat	H1150 Coastal lagoons, H1320 Cord-grass swards, H1330 Atlantic salt meadows, S1016 Desmoulin`s whorl snail	Review abstraction licenses	Environment Agency
15 Direct impact from 3rd party	Threat	A026(NB) Little Egret, A046a(NB) Dark-bellied Brent Goose, A048(NB) Common shelduck, A050(NB) Wigeon, A052(NB) Eurasian teal, A054(NB) Pintail, A056(NB) Shoveler, A069(NB) Red-breasted Merganser, A137(NB) Ringed Plover, A141(NB) Grey Plover, A144(NB) Sanderling, A149(NB) Dunlin, A156(NB) Black-tailed Godwit, A157(NB) Bar-tailed Godwit, A160(NB) Curlew, A162(NB) Common redshank, A169(NB) Turnstone, A176(B) Mediterranean Gull, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern, H1130 Estuaries, H1140 Intertidal mudflats and sandflats, H1310 Glasswort and other annuals colonising mud and sand, H1320 Cord-grass swards, H1330 Atlantic salt meadows, Waterbird assemblage	Assess the activities and their effects	Natural England, Trading Standards Authority, Wildlife Crime Partnership

16	Extraction: non-living resources	Threat	H1110 Subtidal sandbanks, H1140 Intertidal mudflats and sandflats, H1310 Glasswort and other annuals colonising mud and sand, H1320 Cord-grass swards, H1330 Atlantic salt meadows	Investigate the extent and impact of shingle extraction	Not yet determined
17	Other	Threat	A026(NB) Little Egret, A046a(NB) Dark-bellied Brent Goose, A048(NB) Common shelduck, A050(NB) Wigeon, A052(NB) Eurasian teal, A054(NB) Pintail, A056(NB) Shoveler, A069(NB) Red-breasted Merganser, A137(NB) Ringed Plover, A141(NB) Grey Plover, A144(NB) Sanderling, A149(NB) Dunlin, A156(NB) Black-tailed Godwit, A157(NB) Bar-tailed Godwit, A160(NB) Curlew, A162(NB) Common redshank, A169(NB) Turnstone, A176(B) Mediterranean Gull, A191(B) Sandwich Tern, A192(B) Roseate Tern, A193(B) Common Tern, A195(B) Little Tern, H1110 Subtidal sandbanks, H1130 Estuaries, H1140 Intertidal mudflats and sandflats, H1220 Coastal shingle vegetation outside the reach of waves, H1310 Glasswort and other annuals colonising mud and sand, H1320 Cord-grass swards, H1330 Atlantic salt meadows, H2120 Shifting dunes with marram, S1016 Desmoulin`s whorl snail, Waterbird assemblage	Consider/explore boundary change to amend the SAC / SPA designations, to include habitats outside of the existing boundaries	Natural England

Issues and Actions

This table outlines the prioritised issues that are currently impacting or threatening the condition of the features, and the outstanding actions required to address them. It also shows, where possible, the estimated cost of the action and the delivery bodies whose involvement will be required to implement the action. Lead delivery bodies will be responsible for coordinating the implementation of the action, but not necessarily funding it. Delivery partners will need to support the lead delivery body in implementing the action. In the process of developing the SIPs Natural England has approached the delivery bodies to seek agreement on the actions and their roles in delivering them, although in some cases these discussions have not yet been concluded. Other interested parties, including landowners and managers, will be involved as the detailed actions are agreed and delivered. Funding options are indicated as potential (but not necessarily agreed or secured) sources to fund the actions.

1 Public Access/Disturbance

Many human activities in the area can disturb birds. This includes activities such as: walking; dog walking; bird watching; boating; kayaking; kite surfing; hang gliding; paramotors; jet skis; wildfowling; model helicopters/aircraft; boat mooring, and Hovercraft. Recreational activities can also affect annual vegetation of drift lines (H1210) and the vegetation of stony banks (H1220).

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Investigate the effect of recreation upon the annual vegetation of drift lines (H1210) and the perennial vegetation of stony banks (H1220) within the SAC.	£12,000	2015-17	Investigation / Research / Monitoring	Natural England	Natural England	n/a

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1B	Identify bird sensitive areas and dog walking zones and investigate alternative dog walking locations through liaison with dog owners.	Not yet determined	2014-17	Investigation / Research / Monitoring	Natural England	Solent Recreation Mitigation Partnership (SRMP)	

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1C	Improve dog owners' awareness of the impact of bird disturbance by dogs, of bird sensitive areas and alternative locations for their activity through liaison with dog owners, interpretation and updating of a website. Investigate access restrictions in most sensitive areas for overwintering and breeding birds.	£30,000	2015-17	Advice: Education & awareness raising	Natural England	Natural England	Solent Forum

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
1D	Improve users' awareness of the bird sensitive areas (refuge areas) and how they can minimise disturbance. Develop and disseminate codes of conduct for both recreational and commercial users using leaflets and interpretation boards.	£20,000	2015-17	Advice: Education & awareness raising	Natural England, Solent Disturbance and Mitigation Project (SDMP)	Local partnership	Solent Forum, Partnership for Urban South Hampshire (PUSH)
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
1E	Assess the impact of all types of public disturbance (dogs, water sports etc) to breeding birds.	£75,000	2015-17	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
1F	Investigate the effects of all aircraft (including military and model helicopters) upon birds in all areas of the SPA.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Natural England	Hampshire County Council
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
1G	Implement the recommendations of the Solent Forum Natural Environment Group projects on canoeing/kayaking and hovercraft /paramotors.	Not yet determined	2015-17	Advice: Education & awareness raising	Not yet determined	Solent Forum	n/a

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
1H	Make all Solent Recreation Mitigation Partnership (SRMP) rangers full time, so that they can cover the breeding bird period as well as the wintering bird period.	£250,000 over 5 years	2015-20	Advice: Wardening	Natural England, Landfill tax, Community Infrastructure Levy (CIL), Voluntary conservation organisation	Local partnership	Hampshire and Isle of Wight Wildlife Trust, Hampshire County Council, RSPB, Solent Forum
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
1I	Employ a manager to run a team of wardens across the Solent.	£200,000 over 5 years	2015-20	Advice: Wardening	Natural England, Landfill tax, Community Infrastructure Levy (CIL), Voluntary conservation organisation	Local partnership	Solent Forum
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
1J	Introduce wardening for water-based recreational activities.	£330,000 over 5 years	2015-20	Advice: Wardening	Natural England, Landfill tax, Community Infrastructure Levy (CIL), Voluntary conservation organisation	Solent Recreation Mitigation Partnership (SRMP)	Southern Inshore Fisheries Conservation Authority (IFCA), Solent Forum, Harbours and ports

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
1K	Limit access and disturbance to sensitive bird breeding areas and sites by managing: visitor numbers and intensity; screening; temporary movements of paths; notices, and temporary fencing etc.	Not yet determined	2015-20	Advice: Access Strategy	Not yet determined	Natural England	RSPB, Solent Forum, Solent Recreation Mitigation Partnership (SRMP)
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
1L	Monitor bird response to disturbance; this should include surveying wader and wildfowl roosts and offshore waterfowl and analysing WeBs data.	Not yet determined	2015-20	Investigation / Research / Monitoring	Developer Contributions Scheme (DCS), Solent Recreation Mitigation Partnership (SRMP)	Natural England	Solent Forum
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
1M	Investigate the extent of wildfowling to assess whether there is any impact on interest features.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Solent Forum	

2 Coastal squeeze

Habitats are being lost as they are squeezed between rising sea levels and hard coastal defences that are maintained. There is a direct impact due to loss of the SAC habitats such as saltmarsh. There is also an impact on birds due to the loss of habitat for feeding, roosting and breeding. In some areas rising sea levels will result in coastal grasslands being lost to more saline grasslands, thus losing habitat for some breeding waders of the waterbird assemblage. The habitats that are lost could be created elsewhere, but there is difficulty in finding suitable areas. The neutral grassland habitats will take a long time to create as mitigation, but intertidal habitat can be created relatively quickly. Current compensation provides required habitat for Epoch 1 of the Shoreline Management Plan 2, further investigation is required for Epoch 2 and 3. This project will utilise outputs from Shoreline Management Plans, the Environment Agency's Regional Habitat Creation Project and the New Forest District Council/Channel Coastal Observatory's Solent Dynamic Coast Project.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
2A	Investigate areas that can be used as compensatory habitat past the 2030 level of Medmerry - next steps in EA Regional Habitat Creation Programme.	Not yet determined	2014-20	Shoreline Management Plan and Strategies	Developer, Local Authority, Flood and Coastal Erosion Risk Management (FCERM) 2015-21	Environment Agency	Natural England, Southern Coastal Group (SCG), Standing Conference on Problems Associated with the Coastline (SCOPAC)
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
2B	Investigate and identify areas on the north coast of the Isle of Wight that can be used as compensatory habitat for coastal squeeze.	Not yet determined	2014-20	Shoreline Management Plan and Strategies	Developer, Local Authority, Flood and Coastal Erosion Risk Management (FCERM) 2015-21	Environment Agency	Natural England, Southern Coastal Group (SCG), Standing Conference on Problems Associated with the Coastline (SCOPAC)

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
2C	Provide alternative grazing marsh habitat to compensate for habitat loss as a result of managed realignment schemes, to compensate for coastal squeeze.	£2,000,000	2014-20	Shoreline Management Plan and Strategies	Developer, Local Authority, Flood and Coastal Erosion Risk Management (FCERM) 2015-21	Environment Agency	Natural England, Southern Coastal Group (SCG), Standing Conference on Problems Associated with the Coastline (SCOPAC)
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
2D	Investigate options and sites for habitat creation for SPA breeding birds.	£30,000	2015-20	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
2E	Encourage land owners to consider soft engineering approaches to coastal defence.	Not yet determined	2014-20	Implementation Of Appropriate Coastal Management	Not yet determined	Local partnership	Environment Agency, Eastern Solent Coastal Partnership
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
2F	Investigate causes of SPA breeding bird shifts in population and whether these are local/national/international trends, or site-specific declines.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a

3 Fisheries: Commercial marine and estuarine

Dredges (inc. Hydraulic), Benthic trawls and seines and Shore-based activities are categorised as 'Red' for these interest features (and specifically the sub-features: Intertidal muddy sand communities; Subtidal eelgrass *Zostera marina* beds as part of Defra's revised approach to commercial fisheries management in European Marine Sites (EMS), and requisite mechanisms are being or will be implemented by Southern IFCA and Sussex IFCA. Commercial fishing activities categorised as 'amber or green' under Defra's revised approach to commercial fisheries in EMSs require assessment and (where appropriate) management. This assessment will be undertaken by SIFCA. For activities categorised as 'green', these assessments should take account of any in-combination effects of amber activities, and/or appropriate plans or projects, in the site. Towed gear, hand gathering of shellfish, bait digging and aquaculture are the main fishery activities in this site.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
3A	Commercial fisheries activities categorised as 'amber/green' under Defra's revised approach to commercial fisheries in European Marine Sites (EMS) are being assessed by Southern IFCA and Sussex IFCA to determine whether management is required. Where the assessments indicate management is required, introduce appropriate measures.	Not yet determined	2014-16	Regulation: Creation / amendment of byelaws	Not yet determined	Southern Inshore Fisheries Conservation Authority (IFCA)	Environment Agency, Sussex Inshore Fisheries Conservation Authority (IFCA)
3B	If management measures are established, ensure compliance with bye-laws and provide an appropriate level of reporting to ensure sites are well managed and to enable Natural England to provide advice on the condition of the features and potential ongoing condition threats. Ongoing action.	Not yet determined	2014-20	Regulation: Creation / amendment of byelaws	Not yet determined	Southern Inshore Fisheries Conservation Authority (IFCA)	Sussex Inshore Fisheries Conservation Authority (IFCA)

4 Water Pollution

Water pollution affects a range of habitat and bird species at the site through eutrophication and toxicity. Sources include both point source discharges (including flood alleviation / storm discharges) and diffuse water pollution from agriculture / road runoff, as well as historic contamination of marine sediments, primarily from copper and Tributyltin (TBT). Environment Agency flood event discharge consents allow untreated waters to be discharged which end up in the SAC and are likely to have a negative impact. There is a threat of spillage from Oil Transportation and Transfer and by the usage by Ships & Pilotage.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4A	Investigation into the sources of high marine background nitrogen, and identification of mechanisms for improvement if possible.	Not yet determined	2015-16	Investigation / Research / Monitoring	Not yet determined	Environment Agency	Natural England
4B	Collect data on the distribution, extent and biomass of macroalgae mats in the Solent area, to help monitor the impact of water pollution from nitrogen inputs to the Solent.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Environment Agency	Chichester Harbour Conservancy , Natural England
4C	Review the evidence and revise Common Standards Monitoring guidance to include appropriate targets for macroalgae cover for littoral sediment habitats.	Not yet determined	2014-16	Investigation / Research / Monitoring	Not yet determined	Environment Agency/ Natural England	Hampshire and Isle of Wight Wildlife Trust, RSPB
4D	Regularly monitor Nitrogen and Phosphorus concentrations entering the Solent area, to help monitor the extent of water pollution from Nitrogen and Phosphorus inputs.	Not yet determined	2015-20	Investigation / Research / Monitoring	Not yet determined	Environment Agency	n/a

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4E	Offset additional nitrogen inputs from new development, through the adoption of a Local Planning Authority Implementation Plan.	Not yet determined	2014-16	Regulation: Grant Appropriate Planning Permission	Developer Contributions Scheme (DCS)	Natural England	n/a
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4F	Reduce the Nitrogen load from sewerage systems within the catchment, to secure compliance with the Urban Waste Water Treatment Directive.	Not yet determined	2015-20	Water Industry Asset Management Plan (AMP): Implement Plan Scheme	Not yet determined	Environment Agency	Ofwat, Southern Water Services Ltd
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4G	Reduce Nitrogen from agricultural diffuse pollution, through catchment-wide delivery of the options under the New Environmental Land Management Scheme (part of implementation of the Agricultural Implementation Plan for the Nutrient Management Strategy).	Not yet determined	2016-20	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	Environment Agency
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4H	Reduce Nitrogen from agricultural diffuse pollution, through securing and implementing delivery of Catchment Sensitive Farming partnership project (Downs and Harbours Clean Water Partnership).	Not yet determined	2015-20	England Catchment Sensitive Farming (CSF)	Not yet determined	Local partnership	Environment Agency, Hampshire and Isle of Wight Wildlife Trust, Natural England, Portsmouth Water Plc

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4I	Run equine management awareness training events to address run-off, nutrients and dirty yard water entering watercourses from stables and equine pasture.	Not yet determined	2015-20	Advice: Education & awareness raising	Not yet determined	Not yet determined	n/a
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4J	Reduce Nitrogen from agricultural diffuse pollution through implementing tighter measures in Cross Compliance and the Nitrate Vulnerable Zone (NVZ) Action Programme, especially in relation to thin (chalk) soils and drinking water source protection zones.	Not yet determined	2015-20	Regulation: Other - obtain appropriate permissions	Not yet determined	Environment Agency	Rural Payments Agency (RPA)
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4K	Undertake farm visits within the priority areas to provide pollution prevention advice, and raise awareness of the catchment issues and the impacts of agriculture on SSSIs.	Not yet determined	2015-20	Advice: Education & awareness raising	Not yet determined	Environment Agency	Chichester Harbour Authority
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4L	Secure funding for a Catchment Sensitive Farming (CSF) project beyond March 2015.	Not yet determined	2015-17	Mechanism not identified / develop mechanism	Not yet determined	Local partnership	Environment Agency, Natural England

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4M	Ensure the delivery of the Test, Itchen and Alresford Pond Diffuse Water Pollution Plan (DWPP).	Not yet determined	2015-17	Diffuse Water Pollution Plan	Not yet determined	Not yet determined	n/a
4N	Annually Review the Solent Diffuse Water Pollution Plan.	Not yet determined	2015-20	Diffuse Water Pollution Plan	Not yet determined	Natural England	Environment Agency
4O	Secure funding to build on the <i>Love Where You Sail</i> campaign, to raise awareness amongst recreational boat users to encourage the use of shore-side toilet facilities, holding tanks where fitted, and disposal of waste at pump-out facilities. Where direct discharge of sewage is necessary, encourage this as far offshore as possible in areas where strong currents ensure dispersion and dilution.	Not yet determined	2015-17	Advice: Education & awareness raising	Not yet determined	Chichester Harbour Authority	Environment Agency, Green Blue, Harbours and ports

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4P	Set targets for favourable condition using the outputs from the Solent Nitrate Project.	Not yet determined	2015-17	Advice: Review Conservation Objectives	Not yet determined	Not yet determined	n/a
4Q	Investigate the effects of eroding coasts at areas with historic landfill sites and potential for leaching of chemicals etc.	Not yet determined	2015-16	Investigation / Research / Monitoring	Landfill tax	Not yet determined	n/a
4R	Investigate the sources and effects of Copper and Tributyltin (TBT) in water bodies shown to have effects (e.g. River Hamble), to determine whether any management intervention is required.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a
4S	Investigate the frequency and effects of storm discharges from further upstream in rivers that enter the Solent area, including the impacts of saline incursion.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Environment Agency	n/a

5 Changes in species distributions

Many waders and wildfowl are decreasing in the Solent probably as they move north and east under national trends. Some fish, such as Sand eels, may be moving their breeding grounds resulting in less food availability for breeding terns. Invertebrate populations in the intertidal muds are changing and this may disadvantage some wintering wader species. Desmoulin's Whorl Snail has decreased dramatically. Areas of salt-marsh are eroding and decreasing resulting in decreasing breeding gulls and terns as their habitat decreases and decreasing plant species of salt-marshes.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
5A	Resurvey all potential and previous sites for Desmoulin's whorl snail within the SAC, in order to establish distribution, abundance, habitat suitability and site management recommendations. This investigation should incorporate results from the 2004 Portsmouth Water report of Fishbourne.	£1,200	2015-16	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a
5B	Investigate reasons for changes in distribution at local, national and international level of wintering birds, concentrating on species with high alerts that do not reflect national trends (shelduck, ringed plover, sanderling, and dunlin).	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a
5C	Survey and assess the distribution and abundance of all <i>Spartina</i> species in the Solent in order to assess the extent of any die-back, and to provide evidence with which to guide further action.	Not yet determined	2015-16	Investigation / Research / Monitoring	Not yet determined	Chichester Harbour Authority	n/a

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
5D	Let a short term contract to collate all information, studies and surveys of the Solent.	Not yet determined	2015-16	Investigation / Research / Monitoring	Not yet determined	Hampshire and Isle of Wight Wildlife Trust	n/a
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
5E	Assess the Wetland Bird Survey (WeBS) and Seabird monitoring programme data for the whole of each SPA since classification, in order to inform trends in species populations.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a

6 Climate change

Climate change has impacts upon coastal species, in that gull and tern colonies are more frequently washed out with raising sea levels when storm surges cause flooding to habitats.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
6A	Investigation into the effects of climate change on bird breeding areas suffering more washouts due to rising sea levels.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a

7 Change to site conditions

There is an increasing loss of salt-marsh in much of the Solent for reasons unknown, and this needs to be investigated.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
7A	Investigation, to assess reasons for the reduction of saltmarsh within the Solent.	£15,000	2015-16	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
7B	Investigate the potential for recharge/re-creation of salt-marsh that is being lost, using information from the Solent Capital Dredge Scoping report, work undertaken by ABP on behalf of Wight Link at Boiler Marsh Lymington, and the Crown Estate report of the beneficial reuse project at Lymington Harbour.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a

8 Invasive species

The highest risk pathways through which marine INNS are introduced and then spread have been identified as: commercial shipping (*through release of ballast water, and biofouling on hulls*); recreational boating (*through biofouling on hulls*); aquaculture (*through contamination of imported or moved stock - or escaped stock in the case of the pacific oyster*), and natural dispersal.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
8A	Implement measures for invasive species including options/capital works, to combat Himalayan Balsam, <i>Rosa rugosa</i> and other shingle invasive plants.	Not yet determined	2014-20	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Not yet determined	Not yet determined	n/a

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
8B	Assess the extent of the current problem by surveying and mapping for each of the terrestrial species.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
8C	Secure funding for Solent Aliens Project.	Not yet determined	2015-17	Invasive Control Plan: Invasive Species Control Programme	Not yet determined	Hampshire and Isle of Wight Wildlife Trust	n/a

9 Direct land take from development

Private sea defences are causing disruption to the natural processes of allowing erosion to move sediments around the SAC.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
9A	Commission a study or options appraisal to inform advice regarding coastal defences under private ownership, to avoid direct land take from Natura 2000 sites and preventing natural processes.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a

10 Biological Resource Use

Gull egg collecting occurs in some places, and wildfowling occurs in several places. These activities are likely to be disturbing to breeding and wintering birds even though they are licenced/consented at the moment.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
10A	Ensure that, through egg collection licensing, there is a continuation of closed areas that are not harvested, as well as areas that are collected.	Not yet determined	2015-20	Regulation: Issue Appropriate Notice/Consent	Not yet determined	Not yet determined	n/a

11 Change in land management

Changes to land management are likely to occur in areas where tidal flaps/sluices are altered and this results in changes to water levels or salinity of that land. Some sluices are failing, which may also result in changes to water levels or salinity of land. Some ditches and drains are neglected and this can cause difficulties in land management, resulting in changes.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
11A	Assess the effects of poorly operating tidal sluices upon the habitats, species, water levels, salinity and management upstream, and investigate how far upstream the effects are felt.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
11B	Implement the management of ditches.	Not yet determined	2014-20	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Not yet determined	Not yet determined	n/a

12 Inappropriate pest control

Predator control is decreasing, resulting in increased predation by foxes etc. and this is the likely cause of decrease in successful breeding of gulls and terns.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
12A	Collate information on the best methods of preventing foxes from disrupting breeding gulls and terns.	£9,000	2015-16	Investigation / Research / Monitoring	Not yet determined	RSPB	Hampshire and Isle of Wight Wildlife Trust, Hampshire County Council
12B	Work with landowners to increase the control of foxes in order to reduce predation on gull and tern	Not yet determined	2014-20	Advice: Negotiation	Not yet determined	Natural England	Landowner(s)
12C	Investigate the effects of Buzzard predation upon breeding SPA birds within the SPA, or collate known information.	£8,000	2015-17	Investigation / Research / Monitoring	Not yet determined	RSPB	Hampshire County Council

13 Air Pollution: impact of atmospheric nitrogen deposition

Nitrogen deposition exceeds site relevant critical loads. Locally observed effects are unknown.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
13A	Control, reduce and ameliorate atmospheric nitrogen impacts.	Not yet determined	2014-20	Site Nitrogen Action Plan	Not yet determined	Not yet determined	Not yet determined

14 Hydrological changes

Titchfield Haven has a high level of water abstraction licences - if all were used then water levels would be too low in the SAC/SPA . Percolation of sea water through sea walls is causing saline intrusion into non-saline grassland habitats and changing them.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
14A	Review abstraction licences and assess the potential impacts of them.	Not yet determined	2015-20	Water Industry Asset Management Plan (AMP): Abstraction Licence	Not yet determined	Environment Agency	n/a

15 Direct impact from 3rd party

Off-roading is causing damage to some areas of grassland. Private sea defences are causing disruption to the natural movement processes of natural materials along the coast. Military helicopters cause disturbance to wintering birds. House boats are unlicensed and have the potential to cause damage to intertidal habitats. Fly grazing is causing issues affecting large areas of Chichester Harbour.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
15A	Investigate how wide the problem of off-roading is and the its effects (disturbance) upon wintering and breeding birds.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a
15B	Investigate mechanism/protocol (working with Trading Standards) to enable the removal of illegally grazing animals (fly grazing), as the lack of control of the grazing can lead to unfavourable condition of the grassland areas for breeding and wintering birds through overgrazing.	Not yet determined	2014-16	Investigation / Research / Monitoring	Not yet determined	Natural England	Trading Standards Authority, Wildlife Crime Partnership

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
15C	Assess any licences issued for the shooting of Brent Geese in order to ensure that licensed killing for crop protection purposes is carried out only as a last resort and in a way that does not impact on the Brent Goose population in the Solent SPA. This is particularly important as Brent Goose numbers are decreasing nationally.	Not yet determined	2014	Investigation / Research / Monitoring	Not yet determined	Natural England	n/a

16 Extraction: non-living resources

Shingle extraction for aggregates may have an adverse impact upon intertidal fauna and flora, and may affect the movement of coastal sediments that would in turn have an impact upon intertidal habitats.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
16A	Investigate the extent and effects of shingle extraction from within Natura 2000 sites.	£9,000	2015-17	Investigation / Research / Monitoring	Not yet determined	Not yet determined	n/a

17 Other

SAC/SPA boundaries may not cover the extent of all Annex 1 and Annex 2 features and/or supporting habitats.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
17A	Consider boundary change to amend the SAC / SPA designation, to include habitats outside of the existing boundaries and assess the suite of habitats and species currently designated.	£12,000	2015-17	Designation strategy (SSSI)	Natural England	Natural England	n/a

Site details

The tables in this section contain site-relevant contextual information and links

Qualifying features

#UK Special responsibility

Chichester and Langstone Harbours SPA

A046a(NB) *Branta bernicla bernicla*: Dark-bellied brent goose

A069(NB) *Mergus serrator*: Red-breasted merganser

A052(NB) *Anas crecca*: Eurasian teal

A048(NB) *Tadorna tadorna*: Common shelduck

A054(NB) *Anas acuta*: Northern pintail

A157(NB) *Limosa lapponica*: Bar-tailed godwit

Waterbird assemblage

A160(NB) *Numenius arquata*: Eurasian curlew

A050(NB) *Anas penelope*: Eurasian wigeon

A056(NB) *Anas clypeata*: Northern shoveler

A162(NB) *Tringa totanus*: Common redshank

A141(NB) *Pluvialis squatarola*: Grey plover

A144(NB) *Calidris alba*: Sanderling

A149(NB) *Calidris alpina alpina*: Dunlin

A169(NB) *Arenaria interpres*: Ruddy turnstone

A191(B) *Sterna sandvicensis*: Sandwich tern

A193(B) *Sterna hirundo*: Common tern

A195(B) *Sterna albifrons*: Little tern

A137(NB) *Charadrius hiaticula*: Ringed plover

Portsmouth Harbour SPA

A046a(NB) *Branta bernicla bernicla*: Dark-bellied brent goose

A069(NB) *Mergus serrator*: Red-breasted merganser

A156(NB) *Limosa limosa islandica*: Black-tailed godwit

A149(NB) *Calidris alpina alpina*: Dunlin

Solent & Southampton Water SPA

A046a(NB) *Branta bernicla bernicla*: Dark-bellied brent goose

A052(NB) *Anas crecca*: Eurasian teal

A156(NB) *Limosa limosa islandica*: Black-tailed godwit

Waterbird assemblage

A176(B) *Larus melanocephalus*: Mediterranean gull

A191(B) *Sterna sandvicensis*: Sandwich tern

A192(B) *Sterna dougallii*: Roseate tern

A193(B) *Sterna hirundo*: Common tern

A195(B) *Sterna albifrons*: Little tern

A137(NB) *Charadrius hiaticula*: Ringed plover

Solent Maritime SAC

H1110 Sandbanks which are slightly covered by sea water all the time

H1320 *Spartina* swards (*Spartinion maritimae*)

H1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

S1016 *Vertigo moulinsiana*: Desmoulin's whorl snail

H1130 Estuaries

H1210 Annual vegetation of drift lines

H1220 Perennial vegetation of stony banks

H1140 Mudflats and sandflats not covered by seawater at low tide

H2120 Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")

H1150# Coastal lagoons

H1310 *Salicornia* and other annuals colonising mud and sand

Site location and links

Chichester and Langstone Harbours SPA

Area (ha) **5810.03** Grid reference **SU761014** [Map link](#)

Local Authorities City of Portsmouth; Hampshire; West Sussex

Site Conservation Objectives [European Site Conservation Objectives for Chichester and Langstone Harbours SPA](#)

European Marine Site conservation advice [Solent Maritime EMS](#)

Regulation 33/35 Package [Regulation 33/35 package link](#)

Marine Management Organisation site plan

[n/a](#)

Portsmouth Harbour SPA

Area (ha) **1248.77** Grid reference **SU616036**

[Map link](#)

Local Authorities

City of Portsmouth; Hampshire

Site Conservation Objectives

[European Site Conservation Objectives for Portsmouth Harbour SPA](#)

European Marine Site conservation advice

[Solent Maritime EMS](#)

Regulation 33/35 Package

[Regulation 33/35 package link](#)

Marine Management Organisation site plan

[n/a](#)

Solent & Southampton Water SPA

Area (ha) **5505.86** Grid reference **SZ335936**

[Map link](#)

Local Authorities

Hampshire; Isle of Wight; Southampton

Site Conservation Objectives

[European Site Conservation Objectives for Solent & Southampton Water SPA](#)

European Marine Site conservation advice

[Solent Maritime EMS](#)

Regulation 33/35 Package

[Regulation 33/35 package link](#)

Marine Management Organisation site plan

[n/a](#)

Solent Maritime SAC

Area (ha) **11325.09** Grid reference **SU756003**

[Map link](#)

Local Authorities

City of Portsmouth; City of Southampton; Hampshire; Isle of Wight; West Sussex

Site Conservation Objectives

[European Site Conservation Objectives for Solent Maritime SAC](#)

European Marine Site conservation advice

[Solent Maritime EMS](#)

Regulation 33/35 Package

[Regulation 33/35 package link](#)

Marine Management Organisation site plan

[n/a](#)

Water Framework Directive (WFD)

The Water Framework Directive (WFD) provides the main framework for managing the water environment throughout Europe. Under the WFD a management plan must be developed for each river basin district. The River Basin Management Plans (RBMP) include a summary of the measures needed for water dependent Natura 2000 sites to meet their conservation objectives. For the second round of RBMPs, SIPs are being used to capture the priorities and new measures required for water dependent habitats on Natura 2000 sites. SIP actions for non-water dependent sites/habitats do not form part of the RBMPs and associated consultation.

Chichester and Langstone Harbours SPA

River basin	South East	South East RBMP
WFD Management catchment	Arun & Western Streams	
WFD Waterbody ID (Cycle 2 draft)	GB107041006520, GB107041012350	

Portsmouth Harbour SPA

River basin	South East	South East RBMP
WFD Management catchment	East Hampshire	
WFD Waterbody ID (Cycle 2 draft)	n/a	

Solent & Southampton Water SPA

River basin	South East	South East RBMP
WFD Management catchment	East Hampshire, Isle of Wight, New Forest, Test & Itchen	
WFD Waterbody ID (Cycle 2 draft)	GB107042011170, GB107042011190, GB107042011220, GB107042011300, GB107042011330, GB107042016340, GB107042016640, GB107042016840, GB107101005971, GB107101006020, GB107101006100, GB30745606, GB30745790	

Solent Maritime SAC

River basin	South East	South East RBMP
WFD Management catchment	Arun & Western Streams, Isle of Wight, New Forest	
WFD Waterbody ID (Cycle 2 draft)	GB107041006520, GB107041012350, GB107042011170, GB107042011190, GB107042011300, GB107042011330, GB107042016340, GB107101006020	

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)

Chichester and Langstone Harbours SPA

Chichester Harbour SSSI

Langstone Harbour SSSI

Portsmouth Harbour SPA

Portsmouth Harbour SSSI

Solent & Southampton Water SPA

Hythe to Calshot Marshes SSSI

Upper Hamble Estuary & Woods SSSI

Newtown Harbour SSSI

Titchfield Haven SSSI

Sowley Pond SSSI

The New Forest SSSI

North Solent SSSI

Lymington River Reed Beds SSSI

Thorness Bay SSSI

Lincegrove & Hackett's Marshes SSSI

River Test SSSI

Hurst Castle & Lymington River Estuary SSSI

Yar Estuary SSSI

Whitecliff Bay & Bembridge Ledges SSSI

Medina Estuary SSSI

King's Quay Shore SSSI

Eling & Bury Marshes SSSI

Lower Test Valley SSSI

Lymington River SSSI

Brading Marshes to St Helen's Ledges SSSI

Ryde Sands & Wootton Creek SSSI

Lee-on-the Solent to Itchen Estuary SSSI

Solent Maritime SAC

Hythe to Calshot Marshes SSSI
Lee-on-the Solent to Itchen Estuary SSSI
Upper Hamble Estuary & Woods SSSI
Bouldnor & Hamstead Cliffs SSSI
Newtown Harbour SSSI
Bracklesham Bay SSSI
Chichester Harbour SSSI
North Solent SSSI
Lower Test Valley SSSI
Langstone Harbour SSSI
Thorness Bay SSSI
Hurst Castle & Lymington River Estuary SSSI
Yar Estuary SSSI
Medina Estuary SSSI
King's Quay Shore SSSI
Eling & Bury Marshes SSSI
Lincegrove & Hackett's Marshes SSSI

National Nature Reserve (NNR)**Chichester and Langstone Harbours SPA**

n/a

Portsmouth Harbour SPA

n/a

Solent & Southampton Water SPA

Newtown Harbour NNR

North Solent NNR

Titchfield Haven NNR

Solent Maritime SAC

Newtown Harbour NNR

North Solent NNR

Ramsar**Chichester and Langstone Harbours SPA**

Chichester and Langstone Harbours

Portsmouth Harbour SPA	Portsmouth Harbour
Solent & Southampton Water SPA	Solent & Southampton Water
Solent Maritime SAC	Chichester and Langstone Harbours Solent & Southampton Water

Special Areas of Conservation (SAC) and Special Protection Areas (SPA)

Chichester and Langstone Harbours SPA	Solent Maritime SAC Solent & Isle of Wight Lagoons SAC
Portsmouth Harbour SPA	n/a
Solent & Southampton Water SPA	South Wight Maritime SAC Solent Maritime SAC Solent & Isle of Wight Lagoons SAC
Solent Maritime SAC	Solent & Southampton Water SPA Chichester and Langstone Harbours SPA

<i>Version</i>	<i>Date</i>	<i>Comment</i>
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