

Site Improvement Plan

Chesil Beach & The Fleet

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)

UK0017076 Chesil & The Fleet SAC

UK9010091 Chesil Beach & the Fleet SPA

Site description

Chesil Beach and The Fleet SPA and SAC consists of a long linear shingle beach enclosing a brackish lagoon on the south coast of England in Dorset.

The site comprises of the Fleet, the largest and best example of a barrier-built saline lagoon and Chesil Bank, one of the three major shingle structures in the UK. The salinity gradient, peculiar hydrographic regime and varied substrates, together with associated reedbed and intertidal habitats have resulted in the Fleet being extraordinarily rich in wildlife, supporting large numbers of wintering waterbirds, including Wigeon. Chesil Bank is an important breeding site for Little Terns and supports important shingle plant communities.

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 Water Pollution	Pressure/Threat	A195(B) Little tern, H1150 Coastal lagoons, H1210 Annual vegetation of drift lines, H1220 Coastal shingle vegetation outside the reach of waves, H1330 Atlantic salt meadows, H1420 Mediterranean saltmarsh scrub	Implement Diffuse Water Pollution Plan and Dorset Pollution Clearance Plan	Dorset County Council, Environment Agency, Ministry of Defence (MoD), Natural England, Rural Payments Agency (RPA), Portland Harbour Authority
2 Changes in species distributions	Threat	A195(B) Little tern	Source funding to support continuation of Little Tern Recovery Programme	Dorset Wildlife Trust, Natural England, RSPB, Crown Estate, Chesil Bank and the Fleet Nature Reserve
3 Public Access/Disturbance	Pressure/Threat	A050(NB) Wigeon, A195(B) Little tern, H1210 Annual vegetation of drift lines, H1220 Coastal shingle vegetation outside the reach of waves, H1330 Atlantic salt meadows, H1420 Mediterranean saltmarsh scrub	Reduce disturbance to sensitive features through wardening and public education	Dorset Wildlife Trust, Ministry of Defence (MoD), Natural England, Wardens, Weymouth And Portland Borough Council, Chesil Bank and the Fleet Nature Reserve

4 Fisheries: Commercial marine and estuarine	Pressure/ Threat	H1150 Coastal lagoons	Enforcement of byelaws and implementation of additional management measures	Environment Agency, Natural England, Southern Inshore Fisheries Conservation Authority (IFCA), Ilchester Estate, Chesil Bank and the Fleet Nature Reserve
5 Invasive species	Pressure/ Threat	H1150 Coastal lagoons	Monitor and control the spread of invasive species	Defra, Ministry of Defence (MoD), Natural England, Centre for Environment, Fisheries and Aquaculture Science (Cefas), Chesil and The Fleet EMS steering group
6 Natural changes to site conditions	Threat	A195(B) Little tern, H1150 Coastal lagoons, H1210 Annual vegetation of drift lines, H1220 Coastal shingle vegetation outside the reach of waves, H1330 Atlantic salt meadows, H1420 Mediterranean saltmarsh scrub	Monitor changes to the structure of the shingle bank following storm events	Defra, Environment Agency, Teignbridge District Council, Plymouth University, Plymouth Coastal Observatory, Coastal Authorities Groups
7 Air Pollution: risk of atmospheric nitrogen deposition	Threat	H1150 Coastal lagoons, H1330 Atlantic salt meadows, H1420 Mediterranean saltmarsh scrub	Further investigate potential atmospheric nitrogen impacts on the site	Natural England
8 Inappropriate coastal management	Pressure	H1210 Annual vegetation of drift lines, H1220 Coastal shingle vegetation outside the reach of waves, H1330 Atlantic salt meadows, H1420 Mediterranean saltmarsh scrub	Contribute to and implement coastal management plans	Environment Agency, West Dorset District Council, Weymouth And Portland Borough Council

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 Water Pollution

Pollution - mainly of coastal waters - is a key issue. Excess nutrient levels and sediment loads due to intensive farming practices and sewage treatment work discharges are associated with the loss of Lamprothamnium p. (Foxtail stonewort), changes in the distribution and extent of Tasselweed *Ruppia* and Eelgrass *Zostera sp.* in the mid and west Fleet, and the occurrence of algal blooms. More generally pollution incidents are a constant threat that can result in significant impacts to the water, shore and other features (oil and other pollutants or shipping disasters, terrestrial pollution incidents and unconsented discharges from land). Added to this the resulting clean up operations themselves may also carry a risk of impact.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Implement the actions in the Diffuse Water Pollution Plan including 1. establishing a project steering group 2. regular 'operational' monitoring of key SAC lagoon features and WFD biological quality elements 3. sourcing funding and procuring wet weather catchment walkovers 4. analysis of uptake of resource protection measure from AE schemes and voluntary measures 5. seek evidence to establish any effect from swan/wildfowl grazing additional to that of water quality on the presence and abundance of macrophytes 6. improving targeting of AE resource protection measures (with EA) 7. targetting of NELMS advice and uptake on unengaged catchment holdings 8. delivery of CSF capital grant scheme and advice programme	£450,000	2014-21	Diffuse Water Pollution Plan	New Environmental Land Management Scheme (NELMS), Catchment Sensitive Farming (CSF), Wessex Water, Natural England (Marine monitoring)	Natural England	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>
1B	Implement the actions in the Diffuse Water Pollution Plan including 1. modelling of N and P concentrations needed to achieve WFD Good class in the Fleet 2. delivery of catchment walkovers to identify potential sources and pathways behind relatively high suspended sediment concentrations or loads in some catchment stream systems 3. continuing water quality monitoring on Mill Stream (Horsepool) and re-establish monitoring on other catchment streams to inform performance of water pollution / resource protection measures 4.	£35,000	2014-21	Diffuse Water Pollution Plan	Natural England (Freshwater source monitoring)	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>
1C	Implement the actions identified in the Diffuse Water Pollution Plan including establishing the contribution of STWs and other consented point sources to P and DAIN load input to West Fleet and modelling targets for WFD Good class and as necessary then establish water company catchment management approach for land owners and managers to offset STW inputs .	£5,000	2014-21	Investigation / Research / Monitoring	Wessex Water	Not yet determined	Not yet determined
<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	Update the Dorset Coastal Pollution Clearance Plan and ensure pollution contingency plans of partner organisations are aligned.	Staff time	2015	Partnership agreement	No funding required	Dorset County Council	Environment Agency, Ministry of Defence (MoD), Natural England, Portland Harbour Authority

2 Changes in species distributions

Predation, unsuitable nesting habitat and prey availability along with disturbance are threatening the viability of the Little Tern breeding colony.

<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	Implement an Memorandum of Agreement with RSPB and source ongoing funding to support continuation of the Little Tern Recovery Programme beyond 2015.	£100,000	2014 onwards	Partnership agreement	EU LIFE, Heritage Lottery Fund (HLF), Voluntary conservation organisation, Wildlife Trust, RSPB, Crown Estate	Natural England	Dorset Wildlife Trust, RSPB, Crown Estate, Chesil Bank and the Fleet Nature Reserve

3 Public Access/Disturbance

Visitor pressure, events and recreational activities are resulting in disturbance of the SPA features and damage to some SAC features. Disturbance to breeding Little Terns and wintering Wigeon (SPA) is associated with walkers (with and without dogs), anglers, and commercial running events, kayaking and low flying aircraft. Other pressures relate to trampling of shingle vegetation and salt marsh areas by walkers and anglers as well as illegal quad bike and 4WD access. Proposals for enhanced coastal access are a possible threat if not managed appropriately.

<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	Reduce disturbance to sensitive features using wardening to educate the general public in partnership with Dorset Wildlife Trust, Chesil Bank & the Fleet Nature Reserve, National Trust and Dorset County Council (RoW). Bins for rubbish and dog excrement could be provided near the visitor centre to tackle litter left by visitors. Re-establish a Fleet Hinterland Land Managers Group to disseminate information and best practice.	£100,000	2014 onwards	Partnership agreement	Not yet determined	Chesil Bank and the Fleet Nature Reserve	Dorset Wildlife Trust, Ministry of Defence (MoD), Natural England, Wardens, Weymouth And Portland Borough Council

4 Fisheries: Commercial marine and estuarine

Fishing activities are managed by Southern Inshore Fisheries and Conservation Authority (IFCA) and others. There is currently some unconsented fishing activity in the Fleet which needs to be assessed and appropriately managed.

<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	For activities identified as 'Red' (for which management measures are established) ensure compliance with bye-law 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 features and potential condition threats.	Not yet determined	2014-20	Enforcement: Byelaws	Not yet determined	Southern Inshore Fisheries Conservation Authority (IFCA)	Natural England, Ilchester Estate, Chesil Bank and the Fleet Nature Reserve
4B	Where 'Amber' and 'Green' assessments indicate management is required, introduce appropriate measures.	Not yet determined	2016	Regulation: Creation / amendment of byelaws	Not yet determined	Southern Inshore Fisheries Conservation Authority (IFCA)	Environment Agency, Natural England, Ilchester Estate, Chesil Bank and the Fleet Nature Reserve
4C	If management measures are established for 'Amber' / 'Green' activities, ensure compliance with bye-law 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 features and potential condition threats.	Not yet determined	2014-20	Enforcement: Byelaws	Not yet determined	Southern Inshore Fisheries Conservation Authority (IFCA)	Environment Agency, Natural England, Ilchester Estate, Chesil Bank and the Fleet Nature Reserve

5 Invasive species

Invasive species are a concern such as the Pacific oyster farmed in east Fleet and Portland Harbour. The existence of wild settlement and colonisation by this species in these locations is not currently monitored. Japanese wireweed, *Sargassum muticum* is present in The Narrows but may spread if not contained by suitable management. There is a also a risk that ballast water discharge from vessels could potentially result in the introduction of other invasive species.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
5A	Monitor the spread of invasive species in the Fleet and Portland Harbour.	£10,000	2014-20	Investigation / Research / Monitoring	Natural England (Marine monitoring)	Natural England	Defra, Centre for Environment, Fisheries and Aquaculture Science (Cefas)
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
5B	Control the spread of invasive species, including Japanese wireweed <i>Sargassum muticum</i> , through prevention of spreading.	£5,000	2014-20	Invasive Control Plan: Invasive Species Control Programme	Ministry of Defence (MoD)	Ministry of Defence (MoD)	Natural England
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
5C	Development and promotion of a biosecurity plan for the site, and implementation of best practice measures for the activities that occur within the site.	Not yet determined	2016	Invasive Control Plan: Invasive Species Control Programme	Not yet determined	Chesil and The Fleet EMS steering group	n/a

6 Natural changes to site conditions

The Chesil bank is a dynamic shingle ridge and through natural processes is moving inland. It is thought that in time the bank may reach the landward shore cutting off the tidal inlet to the Fleet Lagoon leading to permanent loss of lagoonal species. Sea level rise poses a threat that could result in the sea breaching Chesil bank and in changes to the Fleet lagoon. This is likely to result in significant impacts to the SPA features as a consequence of changes to supporting habitats.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
6A	Implement long-term programme of monitoring of changes to the structure and position of the shingle bank, including following storm events. Changes to the position of the shingle bank and thus the size of the lagoon need to be put into context against the timescales this will take place over. The shingle processes are complex and the monitoring proposed will help understand contemporary changes against the background of previous measurements. The monitoring needs to take account of interventions at the Portland end of the shingle ridge. Long term actions may need to consider potential habitat replacement.	£20,000 per year	2014-26	Investigation / Research / Monitoring	Defra	Plymouth Coastal Observatory	Defra, Environment Agency, Teignbridge District Council, Plymouth University, Coastal Authorities Groups

7 Air Pollution: risk of atmospheric nitrogen deposition

Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection and hence there is a risk of harmful effects. The impact of air pollution could be a contributing factor to poor water quality.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
7A	Further investigate potential atmospheric nitrogen impacts on the site based on application of guidance from Chief Scientist Group Nitrogen Task and Finish Group	Not yet determined	2014-17	Investigation / Research / Monitoring	Not yet determined	Natural England	n/a

8 Inappropriate coastal management

Flood and erosion risk management including hard structures and shingle beach reprofiling can contribute to changes in the shingle vegetation. Coastal change may lead to demands for new or improved structures.

<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>
8A	Review Beach Management Plans at Chiswell Cove, Freshwater and West Bay to establish more sustainable management to meet both objectives ie. Flood defence and SAC feature recovery or mitigation. In part to be informed by the monitoring detailed in issue 6 above.	£747,000 per year to maintain the flood defences in the SMP	2015	Shoreline Management Plan and Strategies	Defra	Environment Agency	West Dorset District Council, Weymouth And Portland Borough Council

Site details

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

Qualifying features

#UK Special responsibility

Chesil & The Fleet SAC

H1210 Annual vegetation of drift lines

H1220 Perennial vegetation of stony banks

H1150# Coastal lagoons

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

H1420 Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*)

Chesil Beach & the Fleet SPA

A195(B) *Sterna albifrons*: Little tern

A050(NB) *Anas penelope*: Eurasian wigeon

Site location and links

Chesil & The Fleet SAC

Area (ha) **1631.63** Grid reference **SY630795** [Map link](#)

Local Authorities Dorset

Site Conservation Objectives [European Site Conservation Objectives for Chesil & The Fleet SAC](#)

European Marine Site conservation advice [Chesil and the Fleet EMS](#)

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

Marine Management Organisation site plan [n/a](#)

Chesil Beach & the Fleet SPA

Area (ha) **748.11** Grid reference **SY633792** [Map link](#)

Local Authorities Dorset

Site Conservation Objectives [European Site Conservation Objectives for Chesil Beach & the Fleet SPA](#)

European Marine Site conservation advice [Chesil and the Fleet 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.

Chesil & The Fleet SAC

River basin	South West RBMP
WFD Management catchment	Dorset
WFD Waterbody ID (Cycle 2 draft)	GB108044009550

Chesil Beach & the Fleet SPA

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

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Chesil & The Fleet SAC	Portland Harbour Shore SSSI Chesil Beach & The Fleet SSSI West Dorset Coast SSSI Isle of Portland SSSI
Chesil Beach & the Fleet SPA	Chesil Beach & The Fleet SSSI
National Nature Reserve (NNR)	
Chesil & The Fleet SAC	n/a
Chesil Beach & the Fleet SPA	n/a
Ramsar	
Chesil & The Fleet SAC	Chesil Beach & the Fleet
Chesil Beach & the Fleet SPA	Chesil Beach & the Fleet
Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Chesil & The Fleet SAC	Chesil Beach & the Fleet SPA
Chesil Beach & the Fleet SPA	Chesil & The Fleet SAC

<i>Version</i>	<i>Date</i>	<i>Comment</i>
1.1	30/04/2018	features updated

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