**SHOREHAM BEACH**

**Local Nature Reserve**

**MANAGEMENT PLAN**

**2016-2021**

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**1.1 Location**

**1. Site Details**

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Shoreham Beach Local Nature Reserve lies on the seaward side of a shingle spit, created by longshore drift, at the mouth of the River Adur on the West Sussex coast. The beach supports several large areas of vegetated shingle - an extremely rare and fragile habitat with a very limited distribution in Great Britain.

**Area:** 11.2 Ha

**Grid Reference:** TQ 217044

**Owner:** Adur District Council

**Planning Authority:** Adur District Council

**District:** Adur in West Sussex

**Conservation Status:** Statutory Local Nature Reserve

Site of Nature Conservation Importance in Adur District Council Local Plan

**Nature of Legal Interest:** Freehold by Adur District Council

Environment Agency have access rights for sea defence works

**Access:** There is full, free public access to the entire site via the

access points listed in section 1.5.

**1.2 Site Conservation Interest**

The site, a vegetated shingle beach, was identified and designated as a Site of Nature Conservation Importance (SNCI) in May of 1992. The main interest of the site is its specialised shingle flora, which is a nationally rare habitat type.

Further to the Rio de Janeiro Convention on Biological Diversity (1992), the UK Biodiversity Strategy and Action Plan was published in 1994 and the Vegetated Shingle Habitat Action Plan in 1999.

**1.3 Local Nature Reserve Status**

The designation of Shoreham Beach as a Local Nature Reserve (LNR) in July 2002 and its declaration in July 2006 acknowledges its high natural interest and local importance, and ensures that the site is managed so that the features that convey its special interest are maintained for future generations.

However, the Local Nature Reserve is as much about people as wildlife and there is a great opportunity for people to become involved in the management of their local environment and for educational events and public open days.

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**1.4 Site Use**

The site is used by many groups, for many purposes, including the following:

* Beach huts / owners
* Water sports including windsurfing, kite-surfing and paddle boarding
* Walking (including dog walking)
* Bird watching
* Wildlife / plant interest
* Summer beach users (bathing, picnic, family)

**1.5 Access**

There is full, free public access to the entire site. Local residents generally visit the site on foot, via rear gardens and the following pedestrian access points:

* Fort Haven, at the Eastern end.
* Along Old Fort Road, opposite The Burrells\*, Winterton Way and Shingle Road\*.
* From Beach Road, opposite Ferry Road\* and Flag Square.
* From Weald Dyke\* to Widewater lagoon there is continuous pedestrian access. All access marked \* has disabled access to the beach also.

Other residents and visitors travel by car and parking and public conveniences are available at Fort Haven (Old Fort), Beach Green and Widewater car parks. Free weekday parking is available from Weald Dyke to Widewater Lagoon.

There are no proposals to close any of the existing access points. There are no current restrictions relating to access for dogs.

The Environment Agency has access for necessary sea defence work along the entire site.

**1.6 Site Boundary**

A plan showing the boundary of the beach designated as a Local Nature Reserve is shown on in Appendix D.

**2.1 Biological Importance**

**2. Site Description**

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Vegetated shingle is recognised as an important habitat for conservation within the UK (UK Biodiversity Steering Group Report 1995) and is listed in Annex 1 of the EC Habitats Directive as a Habitat of International Conservation Importance.

**2.2 Plant Communities**

The plant communities within Shoreham Beach vary with the amount of disturbance and the relative stability of the shingle. Due to the change of habitat from water level to northern boundary, they are generally found in three bands parallel with the foreshore.

On the seaward edge, the shingle is less stable as movement of the shingle occurs due to wave action (longshore drift). This habitat favours the orache species (*Atriplex*) which are fast growing annuals that rapidly re-grow after disturbance, and Bittersweet (Solanum dulcamara).

Behind this band of annuals lie moderately stable areas of shingle. The predominant species, described as the pioneer community since they have colonised the harsh territory above the strandline, are sea kale (*Crambe maritima*), sea beet (*Beta vulgaris*) and curled dock (*Rumex crispus*).

Further inland, the shingle becomes more stable and there is a corresponding increase in the number of species. The ‘maritime’ species include; sea campion (*Silene maritima*), Danish scurvy-grass (*Cochlearia danica*), buck’s-horn plantain (*Plantago coronopus*) yellow horned poppy *(Glaucium flavum*), and english stonecrop (*Sedum anglicum*). On stable shingle between houses and along property bounding the northern edge, grasses including soft brome (*Bromus mollis*), red fescue (*Festuca rubra*), cock’s foot (*Dactylis glomerata*) and barren brome *(Bromus steilis*) have established. Other important species include Viper’s Bugloss (Echium vulgare), Bristly Oxtongue (Picris Echiodes) and Italian Catchfly (Silene italica).

Also tolerant ‘land’ herbs such as ribwort plantain (*Plantago lanceolate*) and those adapted to dry, bare places, such as ivy-leaved toadflax (*Cymbalaria muralis*) red valerian *(Centranthus ruber*) have established. There are many other species not named. The distribution is variable along the length of the site, with the most dense area of vegetation at the eastern end, adjacent to the properties on Old Fort Road and the Old Fort. Contributary to this density is over-enrichment from properties adjacent to the northern border.

Of particular interest is Childing pink, a Red List species, and several colonies of starry clover (*Trifolium stellatum*), an attractive visitor to these shores.

**2.3 Bird Communities**

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The site is in close proximity to the RSPB reserve in the Adur Estuary SSSI and Shoreham Beach represents an important high tide roosting area for wading birds that have fed on the mud flats within the reserve. The beach also offers good breeding habitat for species such as the ringed plover and little tern, but few nest sites have been identified in the last decade, possibly due to the high levels of disturbance from dogs and people in early spring and summer.

**2.4 Other Fauna**

There are many invertebrates associated with vegetated shingle that are rare or endangered through habitat destruction. Notable moth species include Tinagma ocnerostomella, Coleophora pennella, Ethmia terminella, Dolicharthria punctalis, all recorded in 2013.

**2.5 Threats**

The main threats to this habitat are:

1. Loss of beach to structures and development.
2. Predicted future loss of beach due to rise in sea level and increased storm weather as a result of climate change.
3. Degradation of and damage to habitat and species by:

* Introduction of alien species
* Nutrient enrichment - mainly caused by dumping of garden waste and the residue of fires
* Disturbance, including vegetation stripping
* Compaction
* Recreational use, if not sympathetic to the site

1. Future sea defence operations being undertaken without consideration for the sensitivity of the ecology of the site.
2. Use of the beach as a leisure facility, for the community or commercially, if not well managed or used considerately.

**2.6 Site Protection**

Shoreham Beach has been identified as a Local Nature Reserve (LNR) and Site of Nature Conservation Importance (SNCI) on the basis of its shingle flora. As a LNR the site has no statutory protection, but should be subject to byelaws, which will be used to help protect the shingle.

The area is covered by the Beachy Head to Selsey Bill Shoreline Management Plan 2006 and the resulting Rivers Arun to Adur Flood and Erosion Management Strategy 2010-2020.

**3. Community Involvement**

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**3.1 Project Background**

In 1997 the ‘Shoreham Beach Conservation Liaison Group’ was set up to consider the management and future of the vegetated shingle beach and the Old Fort and Lookout Tower. The group comprised members of the Shoreham Beach Residents’ Association, Adur District Council, West Sussex County Council with input from other bodies and individuals such as the Environment Agency, Maritime Volunteer Service, Sussex Wildlife Trust, and Shoreham District Ornithological Society. From the outset it was the philosophy of Adur District Council and West Sussex County Council that the initiative should be developed as a local community project with residents and local groups taking the lead. In 2002 the steering group disbanded as the boundary disputes proved more intractable than expected. In October 2005 a clearance of old sea defences and other obstacles from the beach resulted in the boundary disputes being resolved. This brings us to the declaration in July 2006.

**3.2 Survey and Public Consultation - Phase 1**

In January of 1998 Dolphin Ecological Surveys undertook a research project to assemble available data about the site with a view to developing a management strategy for the habitat.

A public survey about Shoreham Beach was published in Adur Outlook (delivered to every home and business in the district) during 1999. 78% supported Local Nature Reserve status for the beach.

**3.3 Shoreham Old Fort and Beach Conservation Project - Phase 2**

This phase commenced in August 2000 as part of the Shoreham Maritime Project. The involvement of local residents and local organisations was given a high priority. Project Manager(s) were employed to implement the aims.

A group comprised of local residents, council officers and interest groups was established in January 2001 with the aim of taking an active role in the management and sustainability of the overall project for the Old Fort and Beach.

A series of public meetings, to consider the impact of LNR status, were held with representatives of the local community. A survey at an open meeting in June 2001 found 89% supported the objectives and stated the following as of high importance:

* Better protection for the vegetated shingle beach through Local Nature Reserve designation.
* Better information should be provided to encourage a better understanding of the beach - in particular its wildlife and plant life. This could be in the form of information boards, leaflets, guided walks etc.

**3.4 Committee Approval**

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A report regarding the beach was placed before the Leisure and Amenities Committee at their meeting of 21st July 1998 and the Committee approved in principle the eventual designation of Shoreham Beach SNCI as a Local Nature Reserve.

A further report to the Community Services Committee of 4th December 2001 gained approval for the designation to proceed. Full Council ratified this on 16th April 2002. The updated management plan was approved in committee on 20 June 2006.

**4. Site Management**

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**4.1 Management Objectives:**

1. To protect the habitat from encroachment and development.
2. To maximise the specialised plant communities of the shingle beach habitat.
3. To protect the specialised plant communities from damage caused by:

* the stripping of vegetation;
* the enrichment of the growing medium due to dumping of garden and other waste.

1. To protect rare species of plants and invertebrates.
2. To protect the interests of breeding, nesting and roosting birds.
3. To support the educational use of the site.
4. To further address issues of access for less able bodied visitors.
5. To support continued leisure use of the beach and to minimise conflict with nature conservation issues.
6. To halt the advance of and to progress towards the control of invasive species which are threatening to the habitat of the specialised shingle beach plant communities.
7. To protect the site from unnecessary damage caused by heavy vehicle damage e.g. during sea defence operations.
8. To minimise adverse effects upon the ecology and of the site due to possible future sea defence operations.
9. To minimise the impact of bonfire and fire sites across the beach.

All the above objectives to be carried out whilst recognising the Environment Agency’s permissive and emergency powers, to ensure adequate coastal defence to protect both built property and human life, and without compromising any overriding need for current, proposed or future coastal defence works.

As regards shingle removal, it is considered that any proposed shingle removal should not take place from within the boundary of the Local Nature Reserve.

**4.2 Main Management Operations**

1. Monitor and act upon the presence of invasive plant species damaging to the specialised shingle plant communities.
2. Monitor and act upon damage caused by:

* the stripping of vegetation;
* the over enrichment of the growing medium due to dumping of garden and other waste.

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1. Support the re-vegetation of areas of shingle that have been subject to previous disturbance, clearance or enrichment by appropriate specialised shingle plant communities.
2. Establish a programme of species monitoring with botanical, ornithological and invertebrate societies.
3. Monitor beach profile and accretion rates (build up from long shore drift).
4. To liaise with the Environment Agency regarding any potential future sea defence operations.
5. Erect signage and demarcation at sensitive periods to identify and protect nesting bird sites.
6. Provide interpretation describing the plant, insect and bird habitat, including advice for conserving the habitat.
7. Co-ordinate educational visits to the beach and act as a contact for other information relating to the beach.
8. Make available resources for use in schools and for interpretation on site.
9. Disseminate information via Adur & Worthing Councils Internet site and support and promote the internet site being developed by the West Sussex vegetated shingle project.
10. Support existing beach litter clearance operations with volunteer task days.
11. Raise awareness of the value of the beach and the sensitivity of the species and habitat to leisure users of the site and to encourage willingness to accept a code of conduct.
12. To designate authorised bonfire sites and establish guidelines for their use.
13. Ensure appropriate control measures for leisure uses
14. Ensure that the Shoreham Beach LNR Management Plan influences relevant policies in emerging plans such as the Adur Local Plan and the Shoreham Beach Neighbourhood Plan

While the aim is to fulfil all the above, a number of factors will influence the timescale, including building partnerships with others and seeking finance.

**5.1 LNR Management Group**

**5. Management Plan - Implementation and Direction**

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The LNR Management Group has now been running for 9 years and it is proposed that the management of the beach continues to be led by this Management Group. It is also considered that the group should continue to include representatives from the following interest groups and organisations;

* Shoreham Beach Residents Association
* Friends of Shoreham Beach
* An Adur District Council Officer
* A Councillor representing Marine Ward
* Port Authority
* Such individuals as may be invited

**5.3 Management Plan Review**

It is proposed that the Shoreham Beach Management Plan be reviewed on an annual basis. The Management Group will designate the authors of future Management Plans. This annual review should also identify a list of priority actions for the following year. This action plan will be an appendices to the main Management Plan.

**Appendix A**

**Records of Vascular Plants for Shoreham Beach**

\*Source: Sussex Biodiversity Record Centre 2001 (1978-2000?)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Scientific name:** | **Common Name:** | **Species Status:** | **Local Status:** | **Locality:** |
| *Achillea millefolium* | Yarrow |  |  | Shoreham beach |
| *Anagallis arvensis* | Scarlet pimpernel |  |  | Shoreham beach |
| *Anthriscus sylvestris* | Cow parsley |  |  | Shoreham beach |
| *Armeria maritima* | Thrift |  |  | Shoreham beach |
| *Atriplex glabriscula* | Babington's Orache |  |  | Shoreham beach |
| *Atriplex*  *portulacoides* | Sea Purslane |  |  | Shoreham beach |
| *Atriplex prostrara sens.str.* | Spear-leaved Orache |  |  | Shoreham beach |
| *Barbarea intermedia* | Medium-flowered Winter cress |  |  | Shoreham beach |
| *Bellis perennis* | Daisy |  |  | Shoreham beach |
| *Beta vulgaris ssp. Maritima* | Sea Beet |  |  | Shoreham beach |
| *Calystegia soldanella* | Sea Bindweed |  |  | Shoreham beach |
| *Cardamine hirsuta* | Hairy Bittercress |  |  | Shoreham beach |
| *Carduus crispus* | Welted Thistle |  |  | Shoreham beach |
| *Carduus tenuiflorus* | Slender Thistle |  |  | Shoreham beach |
| *Centranthus ruber* | Red Valerian |  |  | Shoreham beach |
| *Cerastium diffusm* | Dark-green Mouse- ear |  |  | Shoreham beach |
| *Cerastium fontanum* | Common Mouse- ear |  |  | Shoreham beach |
| *Chenopodium bonushenricus* | Good King Henry |  |  | Shoreham beach |
| *Cirsium arvense* | Creeping Thistle |  |  | Shoreham beach |
| *Cirsium palustra* | Marsh Thistle |  |  | Shoreham beach |
| *Cochlearia danica* | Danish Survey Grass |  |  | Shoreham beach |
| *Conium maculatum* | Hemlock |  |  | Shoreham beach |
| *Crambe maritima* | Sea-kale |  |  | Shoreham beach |
| *Crataegus monogyna* | Hawthorn |  |  | Shoreham beach |
| *Crepis vesicaria* | Beaked Hawk's- beard |  |  | Shoreham beach |
| *Crithmum maritimum* | Rock Samphire |  |  | Shoreham beach |
| *Echium vulgare* | Viper's Bugloss |  |  | Shoreham beach |
| *Epilobium hirsutum* | Great Willowherb |  |  | Shoreham beach |
| *Eupatorium ncannabinum* | Hemp agrimony |  |  | Shoreham beach |
| *Galium aparine* | Cleavers |  |  | Shoreham beach |
| *Galium mollugo* | Hedge Bedstraw |  |  | Shoreham beach |
| *Galium verum* | Lady's Bedstraw |  |  | Shoreham beach |
| *Geranium dissectum* | Cut-leaved Crane's- bill |  |  | Shoreham beach |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Glaucium flavum* | Yellow Horned Poppy |  |  | Shoreham beach |
| *Hypochaeris radicata* | Cat's-ear |  |  | Shoreham beach |
| *Lamium album* | White Dead-nettle |  |  | Shoreham beach |
| *Lamium purpureum* | Red Dead-nettle |  |  | Shoreham beach |
| *Lepidium draba* | Hoary Cress |  |  | Shoreham beach |
| *Ligustrum vulgare* | Wild Privet |  |  | Shoreham beach |
| *Linaria vulgare* | Common Toadflax |  |  | Shoreham beach |
| *Lotus corniculatus* | Common Bird's- foot-trefoil |  |  | Shoreham beach |
| *Malva sylvestris* | Common Mallow |  |  | Shoreham beach |
| *Matricaria discoidea* | Pineapple Weed |  |  | Shoreham beach |
| *Medicago lupulina* | Spotted Medick |  |  | Shoreham beach |
| *Medicago polymorpha* | Black Medick |  |  | Shoreham beach |
| *Medicago polymorpha* | Toothed Medick | Nationally scarce |  | Shoreham beach |
| *Papaver rhoeas* | Common Poppy |  |  | Shoreham beach |
| *Petrorhagia nanteuillii* | Childing Pink | Endangered | Protected  Biodiversity UK Long List and W&C Act Schedule 8 | Shoreham beach |
| *Picris hieracioides* | Hawkweed Oxtongue |  |  | Shoreham beach |
| *Pilosella officinarum* | Mouse-ear Hawkweed |  |  | Shoreham beach |
| *Plantago coronopus* | Buck's-horn Plantain |  |  | Shoreham beach |
| *Plantago lanceolata* | Ribwort Plantain |  |  | Shoreham beach |
| *Plantago media* | Hoary Plantain |  |  | Shoreham beach |
| *Pontentilla reptans* | Creeping Cinquefoil |  |  | Shoreham beach |
| *Primula veris* | Cowslip |  |  | Shoreham beach |
| *Ranunculus ficaria* | Lesser Celandine |  |  | Shoreham beach |
| *Rubus fruiticosus agg.* | Bramble |  |  | Shoreham beach |
| *Rumex crispus* | Curled dock |  |  | Shoreham beach |
| *Sagina apetala* | Annula Pearlwort |  |  | Shoreham beach |
| *Sagina maritima* | Sea Pearlwort |  |  | Shoreham beach |
| *Sedum acre* | Biting Stonecrop |  |  | Shoreham beach |
| *Sedum album* | White Stonecrop |  |  | Shoreham beach |
| *Sedum anglicum* | English Stonecrop |  |  | Shoreham beach |
| *Senecio cineraria* | Silver Ragwort |  |  | Shoreham beach |
| *Senecio erucifolius* | Hoary Ragwort |  |  | Shoreham beach |
| *Senecio jacobaea* | Common Ragwort |  |  | Shoreham beach |
| *Senecio squalidus* | Oxford Ragwort |  |  | Shoreham beach |
| *Senecio viscosus* | Sticky Groundsel |  |  | Shoreham beach |
| *Senecio vulgaris* | Groundsel |  |  | Shoreham beach |
| *Silene nutans* | Nottingham Catchfly | Nationally scarce |  | Shoreham beach |
| *Silene uniflora* | Sea Campion |  |  | Shoreham beach |
| *Sisymbrium officinale* | Hedge Mustard |  |  | Shoreham beach |
| *Smyrnium olusatrum* | Alexanders |  |  | Shoreham beach |
| *Solanum dulcamara* | Bittersweet |  |  | Shoreham beach |
| *Sonchus arvensis* | Perennial Sow- thistle |  |  | Shoreham beach |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Sonchus asper* | Prickly Sow-thistle |  |  | Shoreham beach |
| *Sonchus oleraceus* | Smooth Sow-thistle |  |  | Shoreham beach |
| *Suaeda maritima* | Annual Sea Blite |  |  | Shoreham beach |
| *Taraxacum officinale* | Dandelion |  |  | Shoreham beach |
| *Trifolium stellatum* | Starry Clover | Introduced Endangered |  | Shoreham beach |
| *Tripleurospermum indorum* | Scentless Mayweed |  |  | Shoreham beach |
| *Ulex europaeus* | Gorse` |  |  | Shoreham beach |
| *Urtica dioica* | Common Nettle |  |  | Shoreham beach |
| *Valerianella locusta* | Common Cormsalad |  |  | Shoreham beach |
| *Veronica hederifolia* | Ivy-leafed Speedwell |  |  | Shoreham beach |
| *Vicia lutea* | Yellow Vetch | Nationally scarce |  | Shoreham beach |
| *Anisantha sterils* | Barren Brome |  |  | Shoreham beach |
| *Bromus hordeaceus* | Soft Brome |  |  | Shoreham beach |
| *Dactylis glomerata* | Cock's Foot |  |  | Shoreham beach |
| *Festuca rubra sens.str.* | Red Fescue |  |  | Shoreham beach |
| *Horeum murinum* | Wall Barley |  |  | Shoreham beach |
| *Lolium perenne* | Perennial Rye- grass |  |  | Shoreham beach |
| *Poa annua* | Annual Meadow grass |  |  | Shoreham beach |

**Appendix B**

**Records of Fauna for Shoreham Beach**

\*Source:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Species Status:** |  | **Locality:** |
| **BIRDS** | | | | |
|  | Ringed plover |  |  | Shoreham beach |
|  | Dunlin |  |  | Shoreham beach |
|  | Greenfinch |  |  | Shoreham beach |
|  | Linnet |  |  | Shoreham beach |
|  | Reed Bunting |  |  | Shoreham beach |
|  | Snow Bunting |  |  | Shoreham beach |
|  | Wheatear |  |  | Shoreham beach |
|  | Black Redstart |  |  | Shoreham beach |
|  | Rock Pipit |  |  | Shoreham beach |
|  | Meadow Pipit |  |  | Shoreham beach |
|  | Turnstone |  |  | Shoreham beach |
|  | Grey Wagtail |  |  | Shoreham beach |
|  | Stonechat |  |  | Shoreham beach |
|  | Chiffchaff |  |  | Shoreham beach |
| **REPTILES** | | | | |
| *Lacerta vivipara* | Common Lizard |  |  | Shoreham beach |
| *Prodarcis muralis* | Italian Wall Lizard | Introduced 1974 |  | Shoreham beach |
| **BUTTERFLIES** | | | | |
| *Cynthia cardui* | Painted Lady |  |  | Shoreham beach |
| *Aglais urticae* | Small Tortoiseshell |  |  | Shoreham beach |
| *Polygonia c-album* | Comma |  |  | Shoreham beach |
| *Inachis io* | Peacock |  |  | Shoreham beach |
| *Thymelicus sylvestris* | Small Skipper |  |  | Shoreham beach |
| *Vanessa atalanta* | Red Admiral |  |  | Shoreham beach |
| *Lycaena phlaeas* | Small Copper |  |  | Shoreham beach |
| **MOTHS** | | | | |
| *Cerura vinula* | Puss Moth |  |  | Shoreham beach |
| *Plusia gamma* | Silver-Y |  |  | Shoreham beach |
| **MOLLUSCS** | | | | |
| *Vallonia excentrica* | Eccentric Grass Snail |  |  | Shoreham beach |
| *Pupilla muscorum* | Moss Snail |  |  | Shoreham beach |
| *Ceciloides acicula* | Blind Snail |  |  | Shoreham beach |
| *Monacha cantiana* | Kentish Snail |  |  | Shoreham beach |
| *Cernuella virgata* | Banded Snail |  |  | Shoreham beach |