Improvement Programme for England's Natura 2000 Sites (IPENS) Planning for the Future

# Site Improvement Plan Braunton Burrows

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)

UK0012570 Braunton Burrows SAC

## **Site description**

This large site has one of the largest virtually intact dune sites in the UK and is representative of dunes with *Salix repens ssp. Argentea* in the south-west. It also contains a substantial area of mobile dune vegetation, including representative examples of most of the main variants found in the south-west of the UK. Transitions to dune slack and fixed dune are also a prominent feature of this site.

In addition the site supports a significant population of Petalwort, *Petalophyllum ralfsii*, as well as areas of mudflats and sandflats not covered by water at high tide.

# 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<br>or Threat | Feature(s) affected                                                                                                                      | Measure                                                             | Delivery Bodies                                                          |
|------------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------------|
| 1 Inappropriate coastal management                         | Pressure              | H2120 Shifting dunes with marram                                                                                                         | Restore naturalised coastal processes                               | Environment Agency, Natural<br>England                                   |
| 2 Hydrological changes                                     | Pressure/<br>Threat   | H2170 Dunes with creeping willow, H2190 Humid dune slacks, S1395 Petalwort                                                               | Improve the understanding of the site's eco-hydrology               | Centre for Ecology and<br>Hydrology (CEH), Natural<br>England, Plantlife |
| 3 Inappropriate scrub<br>control                           | Threat                | H2120 Shifting dunes with marram, H2130 Dune grassland,<br>H2170 Dunes with creeping willow, H2190 Humid dune slacks,<br>S1395 Petalwort | Sustained control<br>programme for sea<br>buckthorn and other scrub | Natural England                                                          |
| 4 Air Pollution: impact of atmospheric nitrogen deposition | Pressure/<br>Threat   | S1395 Petalwort                                                                                                                          | Reduce the impact of<br>atmospheric nitrogen<br>deposition          | Natural England, University(ies)                                         |
| 5 Agricultural management<br>practices                     | Threat                | H2120 Shifting dunes with marram, H2130 Dune grassland,<br>H2170 Dunes with creeping willow, H2190 Humid dune slacks,<br>S1395 Petalwort | Ensure appropriate grazing management                               | Natural England                                                          |
| 6 Public<br>Access/Disturbance                             | Threat                | H2120 Shifting dunes with marram, H2130 Dune grassland,<br>H2170 Dunes with creeping willow, H2190 Humid dune slacks,<br>S1395 Petalwort | Better manage public use of the site                                | Natural England, University(ies)                                         |

### **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 Inappropriate coastal management

Rock armouring at Crow Point is impacting on the natural coastal processes and specifically on dune formation and sediment transportation.

|       |                                                                                                                                              |                       |           |                                                |                       | -                  |                                        |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------|------------------------------------------------|-----------------------|--------------------|----------------------------------------|
| Actio | n Action description                                                                                                                         | Cost estimate         | Timescale | Mechanism                                      | Funding option        | Delivery lead body | Delivery partner(s)                    |
| 1A    | Agree a joint EA/NE plan to reduce<br>and negate the negative effects on<br>the SAC of the rock armouring at<br>Crow Point.                  | Not yet<br>determined | 2014      | Shoreline<br>Management Plan<br>and Strategies | Not yet<br>determined | Environment Agency | Natural England                        |
| Actio | n Action description                                                                                                                         | Cost estimate         | Timescale | Mechanism                                      | Funding option        | Delivery lead body | Delivery partner(s)                    |
| 1B    | Implement (when agreed) the joint<br>EA/NE plan to reduce/negate the<br>negative effects on the SACs of the<br>rock armouring at Crow Point. | £100,000              | 2015-20   | Shoreline<br>Management Plan<br>and Strategies | Not yet<br>determined | Not yet determined | Environment Agency,<br>Natural England |

#### 2 Hydrological changes

Despite previous work undertaken on this topic there is uncertainty regarding the eco-hydrology of the dune slack areas and the most effective conservation management approach. There is a need to review existing information including on hydrological connectivity and pathways.

| Action | Action description                                                                                                                                                                            | Cost estimate | Timescale | Mechanism                                                                                                          | Funding option                 | Delivery lead body | Delivery partner(s) |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------|--------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------|---------------------|
| 2A     | Re-create early-stage dune<br>succession (scraping most likely).<br>Seek to pilot scape creation with<br>Plantlife and then roll out with the<br>agreement of the landowner if<br>successful. | £70,000       | 2014-15   | Rural Development<br>Programme for<br>England (RDPE):<br>Environmental<br>Stewardship Higher<br>Level Scheme (HLS) | Agri-<br>environment<br>scheme | Natural England    | Plantlife           |

| Action<br><b>2B</b> | Action description<br>Investigate the drivers of<br>hydrological change and the impacts<br>on SAC features. This needs to<br>include an investigation of the                                                                                                           | <i>Cost estimate</i><br>£15,000 | <i>Timescale</i><br>2014-15 | <i>Mechanism</i><br>Investigation /<br>Research /<br>Monitoring                                                    | <i>Funding option</i><br>Not yet<br>determined | <i>Delivery lead body</i><br>Natural England | <i>Delivery partner(s)</i><br>Centre for Ecology and<br>Hydrology (CEH) |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------|
|                     | ecology and drivers of change in<br>humid dune slacks.<br>appropriate scrub control<br>buckthorn threatens the whole site via s                                                                                                                                        | hading and soil 6               | enrichment effec            | ts. It is most problemati                                                                                          | cal in the north. V                            | Vhilst work to control it is u               | underway there is                                                       |
| uncer               | tainty as to whether or not this will be s                                                                                                                                                                                                                             | ufficient to mana               | ge it and stop it           | spreading.                                                                                                         |                                                |                                              |                                                                         |
| Action              | n Action description                                                                                                                                                                                                                                                   | Cost estimate                   | Timescale                   | Mechanism                                                                                                          | Funding option                                 | Delivery lead body                           | Delivery partner(s)                                                     |
| 3А                  | Eradicate sea buckthorn <i>Hippophae</i><br><i>rhamnoides by</i> mechanical and<br>chemical control and follow-up<br>monitoring and treatment. Augment<br>management activity supported via<br>agri-envronment funding and NE's<br>Conservation Enhancement<br>Scheme. | Not yet<br>determined           | 2015-20                     | Invasive Control<br>Plan: Invasive<br>Species Control<br>Programme                                                 | Grant in aid                                   | Natural England                              | n/a                                                                     |
| Actio               | Action description                                                                                                                                                                                                                                                     | Cost estimate                   | Timescale                   | Mechanism                                                                                                          | Funding option                                 | Delivery lead body                           | Delivery partner(s)                                                     |
| 3В                  | Undertake scrub control. Funding is required for agri-environment capital works beyond 2016.                                                                                                                                                                           | £50,000                         | 2016-20                     | Rural Development<br>Programme for<br>England (RDPE):<br>Environmental<br>Stewardship Higher<br>Level Scheme (HLS) | Agri-<br>environment<br>scheme                 | Natural England                              | n/a                                                                     |

| Action                                                                                                                                                                                                                                                                                                 | Action description                                                                                                                                                 | Cost estimate         | Timescale | Mechanism                                                                                                          | Funding option                 | Delivery lead body | Delivery partner(s) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------|--------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------|---------------------|
| 4A                                                                                                                                                                                                                                                                                                     | Control, reduce and ameliorate atmospheric nitrogen impacts.                                                                                                       | Not yet<br>determined | 2014-20   | Site Nitrogen Action<br>Plan                                                                                       | Not yet<br>determined          | Natural England    | University(ies)     |
| 5 Agricultural management practices Scrub encroachment including by willow, birch and privet is judged to be the main threat: i.e. if insufficient management occus. However as well as management to remove scrub, appropriate grazing is necessary to help control and prevent its re-establishment. |                                                                                                                                                                    |                       |           |                                                                                                                    |                                |                    |                     |
|                                                                                                                                                                                                                                                                                                        | Action description                                                                                                                                                 | Cost estimate         | Timescale | Mechanism                                                                                                          | Funding option                 | Delivery lead body | Delivery partner(s) |
| 2 <b>A</b>                                                                                                                                                                                                                                                                                             | Ensure appropriate grazing levels are achieved and maintained.                                                                                                     | £100,000              | 2015-20   | Rural Development<br>Programme for<br>England (RDPE):<br>Environmental<br>Stewardship Higher<br>Level Scheme (HLS) | Agri-<br>environment<br>scheme | Natural England    | n/a                 |
| 6 Pu                                                                                                                                                                                                                                                                                                   | blic Access/Disturbance                                                                                                                                            |                       |           |                                                                                                                    |                                |                    |                     |
| summ                                                                                                                                                                                                                                                                                                   | use is heavy and may affect all SAC f<br>er. As a result there is localised erosio<br>ological effects of these on the SAC.                                        |                       |           |                                                                                                                    |                                |                    |                     |
| Action                                                                                                                                                                                                                                                                                                 | Action description                                                                                                                                                 | Cost estimate         | Timescale | Mechanism                                                                                                          | Funding option                 | Delivery lead body | Delivery partner(s) |
| 6A                                                                                                                                                                                                                                                                                                     | Investigate the effects of<br>eutrophication (severity) caused by<br>dog fouling on sand dunes, perhaps<br>in conjunction with atmospheric<br>nitrogen deposition. | £2,500                | 2016      | Investigation /<br>Research /<br>Monitoring                                                                        | Not yet<br>determined          | Natural England    | University(ies)     |

# Site details

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

| Qualifying features                       |                                                                                  |
|-------------------------------------------|----------------------------------------------------------------------------------|
| #UK Special responsibility                |                                                                                  |
| Braunton Burrows SAC                      | H1140 Mudflats and sandflats not covered by seawater at low tide                 |
|                                           | H2120 Shifting dunes along the shoreline with Ammophila arenaria ("white dunes") |
|                                           | H2130# Fixed dunes with herbaceous vegetation ("grey dunes")                     |
|                                           | H2170 Dunes with Salix repens ssp argentea (Salicion arenariae)                  |
|                                           | H2190 Humid dune slacks                                                          |
|                                           | S1395 Petalophyllum ralfsii: Petalwort                                           |
| Site location and links                   |                                                                                  |
| Braunton Burrows SAC                      |                                                                                  |
| Area (ha) 1346.64 Grid reference SS451348 | Map link                                                                         |
| Local Authorities                         | Devon                                                                            |
| Site Conservation Objectives              | European Site Conservation Objectives for Braunton Burrows SAC                   |
| European Marine Site conservation advice  | <u>n/a</u>                                                                       |
| Regulation 33/35 Package                  | <u>n/a</u>                                                                       |
| Marine Management Organisation site plan  | <u>n/a</u>                                                                       |
|                                           |                                                                                  |

#### 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 (RMBP) 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.

#### **Braunton Burrows SAC**

| River basin                      | South West RBMP |
|----------------------------------|-----------------|
| WFD Management catchment         | North Devon     |
| WFD Waterbody ID (Cycle 2 draft) | n/a             |

### Overlapping or adjacent protected sites

| Site(s) of Special Scientific Interest (SSSI) |                                |
|-----------------------------------------------|--------------------------------|
| Braunton Burrows SAC                          | Taw-Torridge Estuaries SSSI    |
|                                               | Braunton Burrows SSSI          |
| National Nature Reserve (NNR)                 |                                |
| Braunton Burrows SAC                          | n/a                            |
|                                               |                                |
| Ramsar                                        |                                |
| Braunton Burrows SAC                          | n/a                            |
|                                               |                                |
| Special Areas of Conservation (SAC) and       | Special Protection Areas (SPA) |
| Braunton Burrows SAC                          | n/a                            |

| Version | Date       | Comment |
|---------|------------|---------|
| v1.0    | 01/12/2014 |         |



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