

Site Improvement Plan

River Itchen

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)

UK0012599 River Itchen SAC

Site description

The River Itchen is one of the `classic` chalk rivers of southern England, drawing most of its character from this geological stratum. The Itchen supports an abundant and exceptionally species rich aquatic flora. It has a primary notification for its river habitat, at SSSI level (chalk river type) and also under Habitats Directive Annex I (Code H3260, watercourses with *Ranunculion* and *Batrachion* vegetation). This habitat notification comprises the river channel, its banks and parts of its riparian zone. In addition, parts of the floodplain are notified for their wetland habitat, and the river discharges via Southampton Water into the Solent which has a range of habitat designations.

The site is additionally notified for a number of SSSI and Habitats Directive Annex II species features, including invertebrate assemblages and a key breeding population of the nationally rare southern damselfly *Coenagrion mercuriale*, white-clawed crayfish *Austropotamobius pallipes* (one of the last remaining strongholds in central southern England), Atlantic salmon *Salmo salar*, Bullhead *Cottus gobio* and Brook lamprey *Lampetra planeri*, and an expanding population of Otter *Lutra lutra*.

The Itchen faces numerous pressures from water abstraction and flow diversions, discharges, agricultural runoff, channel modifications, fisheries management and human impacts associated with the urbanisation alongside much of the river's valley.

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	H3260 Rivers with floating vegetation often dominated by water-crowfoot, S1044 Southern damselfly, S1092 White-clawed (or Atlantic stream) crayfish, S1096 Brook lamprey, S1106 Atlantic salmon, S1163 Bullhead	Environment Agency to implement actions from: DWP plans; review of consents, and any identified from the investigation into waste water treatment	Environment Agency, Hampshire and Isle of Wight Wildlife Trust, Hampshire County Council, Highways Agency, Natural England, Wildlife Trust, Catchment partnership, Upper Itchen Initiative, Wessex Chalk Streams and Rivers Trust, Parish Council(s), Test and Itchen Catchment Partnership
2 Physical modification	Pressure	H3260 Rivers with floating vegetation often dominated by water-crowfoot, S1044 Southern damselfly, S1092 White-clawed (or Atlantic stream) crayfish, S1096 Brook lamprey, S1106 Atlantic salmon, S1163 Bullhead	Implement River Restoration Strategy	Environment Agency, Hampshire and Isle of Wight Wildlife Trust, Natural England
3 Siltation	Pressure	H3260 Rivers with floating vegetation often dominated by water-crowfoot, S1092 White-clawed (or Atlantic stream) crayfish, S1096 Brook lamprey, S1106 Atlantic salmon, S1163 Bullhead	Implement diffuse water pollution plan actions and River Restoration Strategy actions along with land management advice	Environment Agency, Hampshire and Isle of Wight Wildlife Trust, Natural England

4	Overgrazing	Pressure	H3260 Rivers with floating vegetation often dominated by water-crowfoot, S1044 Southern damselfly, S1092 White-clawed (or Atlantic stream) crayfish, S1096 Brook lamprey, S1106 Atlantic salmon, S1163 Bullhead	Establish favourable grazing throughout the floodplain and riparian corridor	Hampshire and Isle of Wight Wildlife Trust, Natural England
5	Water abstraction	Pressure	H3260 Rivers with floating vegetation often dominated by water-crowfoot, S1044 Southern damselfly, S1092 White-clawed (or Atlantic stream) crayfish, S1096 Brook lamprey, S1106 Atlantic salmon, S1163 Bullhead, S1355 Otter	Reduce water abstraction to sustainable levels	Environment Agency, Natural England, Southern Water Services Ltd
6	Inappropriate weed control	Pressure	H3260 Rivers with floating vegetation often dominated by water-crowfoot	Quantify impacts of weed-cutting, assess whether a weed management plan is required and liaise with fisheries on appropriate management	Environment Agency, Natural England, Test and Itchen Association, Wessex Chalk Streams and Rivers Trust
7	Hydrological changes	Threat	S1044 Southern damselfly	Investigate causes of floodplain dryness in particular impacts of boreholes (see Issue 6) but also water level management	Environment Agency, Natural England
8	Inappropriate water levels	Pressure	S1044 Southern damselfly	Implement viable Water Level Management Plan projects after appraisal of options (see Issue 7)	Environment Agency, Natural England
9	Change in land management	Threat	H3260 Rivers with floating vegetation often dominated by water-crowfoot, S1016 Desmoulin's whorl snail, S1044 Southern damselfly, S1092 White-clawed (or Atlantic stream) crayfish, S1096 Brook lamprey, S1106 Atlantic salmon, S1163 Bullhead, S1355 Otter	Monitor HLS compliance with grazing prescriptions, and amend if necessary	Hampshire and Isle of Wight Wildlife Trust, Natural England
10	Inappropriate cutting/mowing	Pressure	H3260 Rivers with floating vegetation often dominated by water-crowfoot, S1044 Southern damselfly, S1092 White-clawed (or Atlantic stream) crayfish, S1096 Brook lamprey, S1106 Atlantic salmon, S1163 Bullhead	Quantify the impacts of fisheries riverbank management and liaise with fisheries on appropriate management, through the River Restoration Strategy	Environment Agency, Natural England, Test and Itchen Association, Wessex Chalk Streams and Rivers Trust, Test and Itchen Catchment Partnership
11	Invasive species	Pressure	S1092 White-clawed (or Atlantic stream) crayfish, S1106 Atlantic salmon	Implement control measures for invasive non-native Species (INNS)	Environment Agency, Hampshire and Isle of Wight Wildlife Trust, Natural England

12 Undergrazing	Pressure	S1044 Southern damselfly	Establish favourable grazing via existing local mechanisms and agri-environment agreements and	Hampshire and Isle of Wight Wildlife Trust, Natural England
13 Inappropriate ditch management	Pressure	S1044 Southern damselfly	Establish appropriate management of ditches through agri-environment agreements and advice	Hampshire and Isle of Wight Wildlife Trust, Natural England
14 Inappropriate scrub control	Pressure	S1044 Southern damselfly	Manage scrub appropriate for southern damselfly through (amending) agri-environment agreements	Hampshire and Isle of Wight Wildlife Trust, Natural England
15 Forestry and woodland management	Pressure	H3260 Rivers with floating vegetation often dominated by water-crowfoot	Implement the river restoration strategy	Environment Agency, Hampshire and Isle of Wight Wildlife Trust, 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 Water Pollution

The Diffuse Water Pollution Plan identifies numerous issues with water quality, in addition to point sources from Waste Water Treatment Works. The Plan is a critical document to achieve favourable condition, and action-owners were consulted as part of the process of revising the plan. Pollution causes excessive algal growth, smothering macrophytes, and increased BOD, decreasing oxygen availability for spawning gravels used by salmon and trout. Reducing road run off can build on the existing Environment Agency and Highways Agency project assessing priority outfalls, and use existing Memorandum of Understanding to highlight any known issues with trunk roads for potential remedial funding. Work is needed with the Environment Agency to quantify any impacts. Possible role for Test and Itchen Catchment Partnership (TICP) through the Catchment Action Plan, to focus on non-trunk roads with Hampshire County Council. Environment Agency (EA) Review of Consents (RoC) process has been completed, but phosphate standards used conform to previous Common Standards Monitoring (CSM) guidance (used for setting SSSI and SAC targets). There is a risk of permitting several years of non-compliance from affected discharges. Revised CSM targets may impact on all discharges.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Diffuse Water Pollution Plan action: reduce road runoff (both as pathway for sediment from elsewhere, and as source from roadside) and review settling pond maintenance, both trunk roads and other public roads. This includes investigations to quantify the extent of issue, and time taken to train staff in new procedures.	Not yet determined	2015-27	Diffuse Water Pollution Plan	Local Authority, Highways Agency	Hampshire County Council	Environment Agency, Highways Agency, Wessex Chalk Streams and Rivers Trust, Test and Itchen Catchment Partnership
1B	Diffuse Water Pollution Plan action: quantify the extent of the problem, through systematic catchment-wide risk appraisal, and address septic tank phosphate input. e.g. Compulsory registration of septic tanks and small package plants, to quantify inputs to the system and help reduce them	Not yet determined	2015	Regulation: Issue Appropriate Notice/Consent	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>
1C	Diffuse Water Pollution Plan action: agree and consult on the preferred restoration option for Alresford Pond (suspected of impacting on downstream SAC). Then implement the proposal, with involvement from the Test and Itchen Catchment Partnership if this is selected as priority project in Catchment Action Plan.	£200,000	2015	Diffuse Water Pollution Plan	Not yet determined	Natural England	Environment Agency, Local partnership
1D	Diffuse Water Pollution Plan action: ensure best practice management of septic tanks/package plants is adhered to, to ensure they operate within capacity. e.g. through an awareness campaign by local groups/town/parish councils. Possible role for Test and Itchen Catchment Partnership (TICP) through Catchment Action Plan	Not yet determined	2015	Diffuse Water Pollution Plan	Catchment Partnership Funding	Catchment partnership	Local partnership, Catchment partnership, Upper Itchen Initiative, Parish Council(s), Test and Itchen Catchment Partnership
1E	Review discharge consents for water cress and fish farms based on revised phosphate standards for the SAC.	Not yet determined	2015	Regulation: Issue Appropriate Notice/Consent	Environment Agency	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>
1F	Ensure existing HLS agreements continue to benefit water quality (particularly through control and monitoring of stocking densities where grazed) and southern damselfly habitat. Set up new agreements on relevant landholdings under the 2014 transition arrangements. Target future NELMS funding to address areas where a change in land management is required to achieve favourable SAC condition, including renewing expiring HLS agreements.	£400,000 over 5 years	2014-2020	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	Hampshire and Isle of Wight Wildlife Trust
1G	Itchen Valley Grazing project: allocate funds to support project advice on land management of existing HLS agreements, and non-HLS grazed land, in lieu of new HLS/NELMS payments. Agri-environment schemes do not fully cover the delivery of the project, joining up fragmented habitats throughout the floodplain.	£60,000 over 6 years	2014 -2020	Partnership agreement	SSSI partnership funding (NE)	Natural England	Hampshire and Isle of Wight Wildlife Trust
1H	Diffuse Water Pollution Plan action - address diffuse pollution from agriculture through a catchment based approach, providing advice and support for capital items to farmers to voer both on farm issue and adjacent tracks.	£360,000 over 6 years	2015 - 2020	England Catchment Sensitive Farming (CSF)	Rural Development Programme (RDPE)	Natural England	Environment Agency

2 Physical modification

A range of physical modifications affect the Annex I river habitat, which have adverse consequences for characteristic biological communities of the habitat including specifically notified species. Modifications include weirs and other in-channel structures causing impoundment, siltation and interruptions to biological movements, over-deepening, over-widening and straightening of channels, and bank re-sectioning and reinforcement.

<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 River Restoration Strategy projects on prioritised reaches where feasible (e.g. not damaging property). Details of timing and costs are in the River Restoration Strategy. Where obstacles cannot be overcome, install fish passes in line with Solent Fish (and eel) Pass Strategy	£7,000,000	2015-27	River Restoration Plan: Restoration Project	Environment Agency, Heritage Lottery Fund (HLF), Water Framework Directive (WFD), HLS/NELMS, Flood and Coastal Erosion Risk Management (FCERM) 2015-21	Environment Agency	Hampshire and Isle of Wight Wildlife Trust, Natural England, Landowner(s)

3 Siltation

Siltation resulting from a variety of factors (direct inputs of silt into the system from land use, runoff from diffuse sources, deposition arising from impoundments and over-wide channels) is a widespread problem affecting the Annex I river habitat, with consequences for macrophytes, southern damselfly habitat (where in ditches) and spawning gravels for fish.

<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	see Action 2A	see costs for Action 2A	2015-2027	River Restoration Plan: Restoration Project	Environment Agency, Natural England, Heritage Lottery Fund (HLF), Water Framework Directive (WFD), HLS/NELMS, Flood and Coastal Erosion Risk Management (FCERM) 2015-21	Environment Agency	Hampshire and Isle of Wight Wildlife Trust, 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>
3B	see Action 1F	£400,000 over 5 years	2014-2020	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Rural Development Programme (RDPE)	Natural England	Hampshire and Isle of Wight Wildlife Trust

<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>
3C	see Action 1G	£60,000 over 6 years	2014-2020	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	SSSI partnership funding (NE)	Natural England	Hampshire and Isle of Wight Wildlife Trust
<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>
3D	see Action 1H	£360,000 over 6 years	2015-2020	England Catchment Sensitive Farming (CSF)	Rural Development Programme (RDPE)	Natural England	Environment Agency

4 Overgrazing

Impacts of over-grazing on river banks and wet meadow systems, removing riparian and meadow habitat and causing runoff into watercourses.

<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	see Action 1F: Ensure existing HLS agreements continue to benefit water quality (particularly through control and monitoring of stocking densities where grazed) and southern damselfly habitat. Set up new agreements on relevant landholdings under the 2014 transition arrangements. Target future NELMS funding to address areas where a change in land management is required to achieve favourable SAC condition, including renewing expiring HLS agreements.	£400,000 over 5 years	2014-2020	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	Hampshire and Isle of Wight Wildlife Trust

<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>
4B	see Action 1G: Itchen Valley Grazing project: allocate funds to support project advice on land management of existing HLS agreements, and non-HLS grazed land, in lieu of new HLS/NELMS payments. Agri-environment schemes do not fully cover the delivery of the project, joining up fragmented habitats throughout the floodplain.	£60,000 over 6 years	2014 -2020	Partnership agreement	SSSI partnership funding (NE)	Natural England	Hampshire and Isle of Wight Wildlife Trust

5 Water abstraction

Abstraction modifies the natural flow regime on which the Annex I river habitat depends for its proper functioning. Impacts may occur on habitat character and habitat extent, within the channel or in riparian wetland areas. All parts of the flow regime may be affected but low-to-intermediate flows are most likely to be significantly impacted. Abstraction should not impact on floodplain SAC features such as southern damselfly, as well as riverine features such as salmon. Effects on the habitat can have various effects on individual notified species. Activities outside of the SAC may also have detrimental impacts on site features and habitats. Natural England does not endorse any particular solution at this time.

<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	Amend water company abstraction licence identified through the Review of Consent process. These will find alternatives to the large water company abstraction on the River Itchen. This links with the Restoring Sustainable Abstraction (RSA) programme.	Not yet determined	2015-18	Water Industry Asset Management Plan (AMP): Abstraction Licence - Revoke/Amend	Price Review, AMP process, WRMP process	Environment Agency	Natural England, 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>
5B	Amend/ revoke Environment Agency permits to abstract and then augment river (Candover and Arle schemes respectively) and linked Water Resource Management Plan process.	Not yet determined	2015	Water Industry Asset Management Plan (AMP): Abstraction Licence	Not yet determined	Environment Agency	Natural England, Southern Water Services Ltd

6 Inappropriate weed control

Management of aquatic weed for fishery activities affects protected habitats e.g. *Ranunculus*. This activity is currently exempted under the OLD's list (Operations Likely to Damage), and the extent and level of impacts on the watercourse is not conclusively known.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
6A	Investigate and quantify the extent of impacts of fisheries management practices which are currently exempted under the OLD's list. The resulting evidence base will direct any future actions and appropriate mechanisms in order to fulfil the River Restoration Strategy and progress towards favourable condition of the designated sites.	Not yet determined	2015-18	Investigation / Research / Monitoring	Not yet determined	Natural England	Environment Agency, Test and Itchen Association, Wessex Chalk Streams and Rivers Trust

7 Hydrological changes

Some locations on the floodplains are too dry, with reasons not clear - impacts on ditches (decreased flowing water) for southern damselfly and meadow flora.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
7A	Investigate causes of apparent drying on floodplain meadows, with a focus on abstractions (if not covered by RoC) and water level management issues. Implement any changes identified through existing mechanisms. Affects discrete areas of the SAC floodplain.	£30,000	2015	Investigation / Research / Monitoring	Not yet determined	Natural England	Environment Agency

8 Inappropriate water levels

Water levels are not appropriate. The Water Level Management Plan (Natural England with Environment Agency) agreed options to re-wet the floodplain, benefitting flora and connecting habitat for southern damselfly. These need re-appraisal and implementation where possible.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
8A	Water Level Management Plan actions: quantify the need for alterations to water levels, and re-appraise remaining proposals to establish appropriate water levels on the site, linked with investigations into hydrological impacts, and River Restoration Strategy implementation.	£50,000	2015	Water Level Management Plan	Not yet determined	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>
8B	Water Level Management Plan actions: implement any viable remaining projects once options appraisals are carried out, to establish appropriate water levels on the site.	£100,000	2015-27	Water Level Management Plan	Not yet determined	Natural England	Environment Agency

9 Change in land management

Risk of non-compliance with HLS agreements may be affecting water quality of the river and floodplain carriers.

<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	see Action 1F: Ensure existing HLS agreements continue to benefit water quality (particularly through control and monitoring of stocking densities where grazed) and southern damselfly habitat. Set up new agreements on relevant landholdings under the 2014 transition arrangements. Target future NELMS funding to address areas where a change in land management is required to achieve favourable SAC condition, including renewing expiring HLS agreements.	£400,000 over 5 years	2014-2020	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	Hampshire and Isle of Wight Wildlife Trust

10 Inappropriate cutting/mowing

There are some instances of inappropriate management of riverbanks, which impacts on marginal habitat, with consequences for riparian and in-channel biota. These affect the biota using the riparian zone directly, and the biota of the river channel in terms of reducing bankside cover and enhancing silt inputs. Better bankside management can help prevent runoff from adjacent fields into the river, protecting water quality.

<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	Investigate and quantify the extent of impacts of fisheries management practices which are currently exempted under the OLDs list. The resulting evidence base will direct any future actions and appropriate mechanisms in order to fulfil the River Restoration Strategy and progress towards favourable condition of the designated sites.	Not yet determined	2015	Investigation / Research / Monitoring	Not yet determined	Natural England	Environment Agency, Test and Itchen Association, Wessex Chalk Streams and Rivers Trust, Test and Itchen Catchment Partnership

11 Invasive species

The presence of signal crayfish in parts of the catchment is suspected posing a significant risk to the white-clawed crayfish population through crayfish plague. However, white-clawed crayfish populations are fragmented, and therefore direct impacts from signals suspected not to be significant. Also there are widespread issues with Himalayan and orange balsam along the riparian corridor but the extent of the problem is 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>
11A	Encourage biosecurity and invasive species control through support for Southern Chalkstreams Project to continue provision of advice to landowners (including biosecurity), captive rearing and breeding project for white-clawed crayfish, and monitoring of signal crayfish sightings. Creation of catchment strategy for future of native crayfish population, including identification of release sites. Links with EA fish stocking process review.	£240,000 over 6 years	2014 -2020	Partnership agreement	Not yet determined	Natural England	Environment Agency, Hampshire and Isle of Wight Wildlife Trust

<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	Control invasive plant species (Himalayan balsam is a localised issue and orange balsam is expanding and could become a problem).	£60,000 over 6 years	2014 -2020	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	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>
11C	Investigate the spread and impacts of orange balsam. Use available mechanisms to implement any recommendations.	£20,000	2016	Investigation / Research / Monitoring	Not yet determined	Natural England	n/a

12 Undergrazing

Undergrazing impacts on wet meadow systems, causing degradation of southern damselfly habitat in particular. Bridges are required to access and manage sites and prevent SAC condition to deteriorate. This requires special project funding, which is currently prohibited in HLS agreements.

<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	see Action 4A: Ensure existing HLS agreements continue to benefit water quality (particularly through control and monitoring of stocking densities where grazed) and southern damselfly habitat. Set up new agreements on relevant landholdings under the 2014 transition arrangements. Target future NELMS funding to address areas where a change in land management is required to achieve favourable SAC condition, including renewing expiring HLS agreements.	£400,000 over 5 years	2014-2020	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	Hampshire and Isle of Wight Wildlife Trust

<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>
12B	NELMS: ensure new agreements adequately resolve issues	£16,000	2014	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Rural Development Programme (RDPE)	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>
12C	HLS amendments: support access bridge for cattle grazing and vehicular access for tree/scrub removal	£80,000	2014 - 2020	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	n/a

13 Inappropriate ditch management

Some ditches are not managed, leading to reed encroachment, reducing flow and therefore prohibiting southern damselfly breeding habitat.

<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	Ensure existing HLS agreements continue to benefit water quality (particularly through control and monitoring of stocking densities where grazed) and southern damselfly habitat. Set up new agreements on relevant landholdings under the 2014 transition arrangements. Target future NELMS funding to address areas where a change in land management is required to achieve favourable SAC condition, including renewing expiring HLS agreements.	£400,000 over 5 years	2014-2020	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	Hampshire and Isle of Wight Wildlife Trust

14 Inappropriate scrub control

Inappropriate scrub control impacts particularly around ditches for southern damselfly, where scrub shades some ditches, preventing growth of marginal plants for egg-laying, and reduce flow in ditches.

<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	Remove scrub along ditches through HLS agreements (see also Action 1F).	£10,000	2014	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Rural Development Programme (RDPE)	Natural England	Hampshire and Isle of Wight Wildlife Trust, n/a

15 Forestry and woodland management

Some parts of channel are excessively shaded by wet woodland, impacting on the macrophyte community. The River Restoration Strategy identifies some stretches where excessive shading is causing a problem, but it is important to look at whole catchment, and assess against all SAC features when reviewing locations/actions. Some stretches may benefit from tree planting to reduce water temperatures, particularly in light of climate change, but must again be carefully assessed.

<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	Assess shading/lack of shading of ditches and watercourses, and where necessary, address through woodland management. Address the need for additional shading through local implementation/ version of joint NE/EA Keeping Rivers Cool Project.	Not yet determined	Not yet determined	Mechanism not identified / develop mechanism	Not yet determined	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>
15B	(also Action 2A) Implement River Restoration Strategy projects on prioritised reaches where feasible (e.g. not damaging property). Details of timing and costs are in the River Restoration Strategy. Where obstacles cannot be overcome, install fish passes in line with Solent Fish (and eel) Pass Strategy	£7,000,000	2015-27	River Restoration Plan: Restoration Project	Environment Agency, Heritage Lottery Fund (HLF), Water Framework Directive (WFD), HLS/NELMS, Flood and Coastal Erosion Risk Management (FCERM) 2015-21	Environment Agency	Hampshire and Isle of Wight Wildlife Trust, Natural England, Landowner(s)

Site details

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

Qualifying features

#UK Special responsibility

River Itchen SAC

H3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion*

S1044 *Coenagrion mercuriale*: Southern damselfly

S1092 *Austropotamobius pallipes*: White-clawed (or Atlantic stream) crayfish

S1096 *Lampetra planeri*: Brook lamprey

S1106 *Salmo salar*: Atlantic salmon

S1163 *Cottus gobio*: Bullhead

S1355 *Lutra lutra*: Otter

Site location and links

River Itchen SAC

Area (ha) **309.26** Grid reference **SU467174** [Map link](#)

Local Authorities City of Southampton; Hampshire

Site Conservation Objectives [European Site Conservation Objectives for River Itchen SAC](#)

European Marine Site conservation advice [n/a](#)

Regulation 33/35 Package [n/a](#)

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.

Additional information is provided on targets for flow and some water quality parameters, in order to meet the conservation objectives for certain Natura 2000 sites. The relevant targets are identified in the revised conservation objectives document (see link to PDF below).

These targets have been revised for a number of Natura 2000 rivers and lakes, following a review by the conservation agencies of Common Standards Monitoring Guidance. For rivers, this is done through local discussions between Natural England and Environment Agency staff. For lake sites, the only parameter where alignment of standards was reviewed was phosphorus and so this work was undertaken jointly at a national level.

The linked PDF documents include the proposed target values, and also set out an 'interim progress goal', that will need to be achieved by 2021. Where sufficient information is available the document also identifies a timescale for achievement of the longer-term target. For any sites where it has not been possible to agree specific targets, usually because further technical work is required, these will be indicated in the documents by an asterisk. For further information please see Part 2 of the River Basin Plan

River Itchen SAC

River basin

South East

[South East RBMP](#)

WFD Management catchment

Test & Itchen

<i>WFD Waterbody ID (Cycle 2 draft)</i>	GB107042016650, GB107042016670, GB107042022580, GB107042022610, GB107042022620
<i>Locally revised Conservation Objectives</i>	Moving towards common standards monitoring guidance targets for SAC rivers
<i>Additional information on locally revised Conservation Objectives</i>	Progress goals and selected targets for N2K rivers: Recording table and Record of decision
<i>EA/ NE agreed RBMP lake SAC targets</i>	n/a
River Restoration Plan	
<i>Source of information on river restoration plans for SAC rivers where these are in place or planned, with links to documentation where this is available.</i>	
<i>Webpage link: Restoring Designated Rivers</i>	n/a
<i>River Restoration Plan document</i>	n/a

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
River Itchen SAC	River Itchen SSSI

National Nature Reserve (NNR)	
River Itchen SAC	n/a

Ramsar	
River Itchen SAC	n/a

Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
River Itchen SAC	n/a

<i>Version</i>	<i>Date</i>	<i>Comment</i>
1.0	06/10/2014	

www.naturalengland.org.uk/ipens2000

