

Natural England Evidence Register

December 2011

Research

Access and engagement Research

ID	Title	Description	Contact
RP0419	Accessible green space: map based evidence	<p>Natural England holds data on c80% of accessible land. This project aims to combine data held across Natural England in a consistent way; clean data; assess the actual coverage; identify where there are data gaps and assess the potential to make data available to share with partners. The project will also develop applications for the evidence base including: analysis to present visual evidence relating to green space and health; deprivation and other indices; monitoring to measure the provision of green space; and assessment of using data/maps to support a calculator/tool for local communities. The outputs will be a report and maps on WebMap.</p> <ul style="list-style-type: none"><li data-bbox="824 997 1234 1034">• Spatial data (30/03/2012) <p>Natural England's financial contribution to this project is: £3,000.00</p>	Andrew Gale
RP0435	Walking for Health economic benefits: Economic cost data collection and Analysis	Walking for Health (WfH) encourages people to become physically active in their local communities. It comprises a network of schemes across England that offer regular short walks over easy terrain with trained walk leaders. The purpose of this project is to gather data on the costs involved in six	Dave Stone

		<p>representative Walking for Health schemes. Data on external partner and Natural England's costs will be collected and used to evaluate Walking for Health cost effectiveness using a Cost Benefit model. The cost benefit analysis will provide critical evidence on socio-economic benefits.</p> <ul style="list-style-type: none"> Natural England Technical Publication (31/03/2012) <p>Natural England's financial contribution to this project is: £78,151.00</p>	
RP0436	Criterion validity and responsiveness of the Single Item Physical Activity measure.	<p>Self reporting tools have the capacity to over or under estimate true physical activity levels. The purpose of this Loughborough University study is to validate whether the results of self assessment based on the question below can be used to detect changes in physical activity. The study tests a persons recall of the amount and change in physical activity levels they think they have performed against their actual activity as measured by an accelerometer. <i>In the past week, on how many days have you done a total of 30 minutes or more of physical activity, which was enough to raise your heart rate?</i></p> <p>Natural England's financial contribution to this project is: £35,252.00</p>	Alan Pearsons

Biodiversity Research

ID	Title	Description	Contact
RP0068	Freshwater pearl mussel recovery project	To create a national holding facility at Windermere, Cumbria, to maintain and breed threatened populations of freshwater pearl mussel <i>Margaritifera margaritifera</i> from rivers across England. Research into captive rearing	Gavin Measures

		<p>techniques, juvenile survival and populations genetics will be carried out (PhD with Cumbria University). The Freshwater Pearl Mussel "Ark" Project is a partnership between Natural England, the Environment Agency and Freshwater Biological Association</p> <ul style="list-style-type: none"> • Other report/publication (Completed) • Captive rearing release (Completed) • Other report/publication (20/03/2012) <p>Natural England's financial contribution to this project is: £36,500.00</p>	
RP0091	Action for Birds in England: corn bunting solution testing	<p>Testing of new management solutions for corn buntings in arable landscapes across eastern England. Project in partnership with RSPB and part of Action for Birds in England (AfBiE).</p> <ul style="list-style-type: none"> • Other report/publication (30/03/2012) • Natural England Technical Publication (29/03/2013) <p>Natural England's financial contribution to this project is: £15,000.00</p>	Phil Grice
RP0151	Ex situ bryophyte cryopreservation project	<p>Conservation and propagation of threatened bryophyte species ex-situ at Royal Botanic Gardens, Kew - the bryophyte equivalent of a seed bank. in partnership with Royal Botanical Gardens, Kew RBG</p>	Mike Sutcliffe

		<ul style="list-style-type: none"> Biodiversity Action Plan Reporting (31/03/2012) <p>Natural England's financial contribution to this project is: £20,000.00</p>	
RP0197	Ecosystem effects of elevated organic matter loads in upland streams (NERC CASE PhD)	<p>Levels of particulate and dissolved organic matter in upland streams have increased in recent decades. The effects of this on the biota of upland streams is poorly understood. This PhD will undertake strategic monitoring and experimental manipulations to evaluate effects on microbial, algal and invertebrate communities. The findings will be used to inform the definition of environmental targets for upland river SSSIs and SACs. NERC CASE PhD student: Katie Aspray, Leeds University.</p> <ul style="list-style-type: none"> PhD thesis (30/03/2012) <p>Natural England's financial contribution to this project is: £9,000.00</p>	Chris Mainstone
RP0248	Ecological study of bee, wasp and ant species	<p>Autecological studies, monitoring and trial management for 13 Biodiversity Action Plan aculeate species, including: work to be done under 4 main headings, with the species research embedded underneath. Project in partnership with Hymettus</p>	David Heaver

		<ul style="list-style-type: none"> Evidence published by a partner (06/01/2012) <p>Natural England's financial contribution to this project is: £20,000.00</p>	
RP0261	Determining historic ecological conditions in lowland rivers: applying palaeoecological techniques to river restoration planning (NERC CASE PhD)	<p>River restoration needs to be underpinned by an understanding of how biological communities have changed as a result of physical habitat modifications and how they would benefit from restoration measures. This project will characterise contemporary and historical faunas in lowland river SSSIs in relation to physical habitat modification. The results will be used to help underpin restoration efforts on river SSSIs and other rivers. NERC CASE PhD student: Emma Seddon, Loughborough University.</p> <ul style="list-style-type: none"> PhD thesis (30/09/2012) <p>Natural England's financial contribution to this project is: £6,000.00</p>	Chris Mainstone
RP0262	The role of nutrients and hydrological disturbance in determining the status of attached algal communities in rivers (NERC CASE PhD)	<p>Strategic monitoring, experimental manipulations and modelling to clarify how nutrient availability interacts with other environmental factors in influencing algal growth in rivers. The work will be used in future refinements to the definition of nutrient targets for controlling eutrophication impacts on river SSSIs and SACs, and for informing views on the wider river network in relation to the Water</p>	Chris Mainstone

		<p>Framework Directive and the UK BAP. NERC CASE PhD student: Rosie Law, Lancaster University.</p> <ul style="list-style-type: none"> • PhD thesis (30/09/2012) <p>Natural England's financial contribution to this project is: £6,000.00</p>	
RP0270	Marl lakes: defining conservation objectives (NERC CASE PhD)	<p>Use of palaeolimnological techniques (plant and animals remains in lake sediment cores) to determine historic reference conditions and patterns of change in three marl (limestone) lakes - Malham Tarn, Hawes Water and Cunswick Tarn. The results will increase our understanding of how marl lakes respond to natural and human-induced pressures and the findings will be applicable to other marl lakes. NERC CASE PhD student: Emma Wiik, University College, London.</p> <ul style="list-style-type: none"> • PhD thesis (30/09/2012) <p>Natural England's financial contribution to this project is: £8,000.00</p>	Stewart Clarke
RP0293	High resolution remote sensing for landscape-scale restoration of peat (NERC CASE PhD)	<p>To evaluate the ability of high spatial and spectral resolution remote sensing to distinguish between moorland restoration treatments and monitor changes with the objective of being able to monitor restoration of landscape-scale peat. NERC CASE PhD student: Elizabeth Lowe, Manchester</p>	Mick Rebane

		<p>University.</p> <ul style="list-style-type: none"> • PhD thesis (31/12/2011) <p>Natural England's financial contribution to this project is: £6,000.00</p>	
RP0294	The ecology of hen harriers outside the breeding season (PhD)	<p>The hen harrier is a Red-listed Bird of Conservation Concern. Little is known of the birds' whereabouts outside the breeding season, nor of the ecology of English-breeding birds at this time of year. This project explores the movements, habitat selection, survivorship and fate of radio- and satellite-tagged hen harriers of known breeding provenance. Natural England-funded PhD student: Stephen Murphy, John Moores University, Liverpool.</p> <ul style="list-style-type: none"> • PhD thesis (31/03/2012) <p>Natural England's financial contribution to this project is: £10,230.00</p>	Andrew Brown
RP0295	Are the population dynamics of seabirds in the west of Britain driven by climate change? (PhD)	<p>Seabird populations are changing very rapidly across the UK. This study will disentangle the effects of climate change (and consequent changes in plankton and fish populations) and other changes, including fishing effort, in driving the population dynamics of seabirds nesting in south-western Britain. NERC/Sir Alistair Hardy Foundation PhD student: Valentina Lauria, Plymouth University.</p>	Andrew Brown

		<ul style="list-style-type: none"> • PhD thesis (01/10/2011) <p>Natural England's financial contribution to this project is: £9,000.00</p>	
RP0296	Impacts of climate and land use change on the UK cuckoo population (PhD)	<p>To disentangle the effects of climate in different forms of land use, and focus on the key mechanisms affecting the cuckoo population in the UK, and the implications of future change. This long-term project is a combination of long-term data, field observation, experimentation and modelling. The results will guide Natural England and RSPB in developing appropriate mitigation measures for this iconic species. Natural England/RSPB funded PhD student: Chloe Denerley, Aberdeen University.</p> <ul style="list-style-type: none"> • PhD thesis (01/10/2012) <p>Natural England's financial contribution to this project is: £15,000.00</p>	Phil Grice
RP0305	Bats and roofing membranes (PhD)	<p>(1) To gain an understanding of the impacts of the use of breathable membranes on bat roosts where these occur in roofs and (2) to disseminate findings and recommendations as a guidance document for use by both the building industry and conservation organisations. Engineering and Physical Sciences Research Council/Natural England/Technologies for Sustainable Built</p>	Judy Stroud

		<p>Environments (TSBE)/Bat Conservation Trust PhD student: Stacey Waring, Reading University.</p> <ul style="list-style-type: none"> • PhD thesis (30/09/2013) <p>Natural England's financial contribution to this project is: £10,000.00</p>	
RP0365	Establishing a monitoring protocol for violet click beetle	<p>The violet click beetle is a very restricted red-listed species and a Biodiversity Action Plan (BAP) priority species. This project supports the work carried out by Royal Holloway College in trying to develop chemical and auditory tracking techniques to establish the presence of violet click beetles in old trees, as a necessary precursor for reporting on this Special Area of Conservation (SAC) species to Europe.</p> <p>Project in partnership with People's Trust for Endangered Species</p> <ul style="list-style-type: none"> • Evidence published by a partner (29/02/2012) <p>Natural England's financial contribution to this project is: £3,200.00</p>	David Heaver
RP0374	Action for Birds in England: turtle dove	<p>The turtle dove is a red-listed bird of conservation concern and a Biodiversity Action Plan (BAP) priority species which has declined by 89% in the period 1970-2008. This is a project to research optimal land management solutions for turtle doves. Prior research has indicated that the provision</p>	Phil Grice



		<p>of seed rich habitats during the breeding season delivered through agri-environment schemes would be the key measure for recovering the species, this project will investigate this and trial optimal land management solutions. Project in partnership with RSPB and part of Action for Birds In England (AfBiE).</p> <ul style="list-style-type: none"> • Trial management of habitat or species (30/03/2012) • Natural England Technical Publication (29/03/2013) <p>Natural England's financial contribution to this project is: £40,000.00</p>	
RP0387	Adder conservation genetics	<p>To investigate whether there are problems for small, isolated populations of adders due to genetic impoverishment. Project will involve field sampling, to collect DNA from small, possibly inbred populations and compare this with large, potentially outbred populations. Project in partnership with the Institute of Zoology and the University of Oxford, linking in with volunteers who have studied adders at a range of sites in England.</p> <ul style="list-style-type: none"> • Other report/publication (15/12/2011) <p>Natural England's financial contribution to this project is: £8,000.00</p>	Paul Edgar
RP0401	Exploration and extension over time of the	ISIS is a habitat-based invertebrate assemblage	David

	shaded field layer ISIS assemblage	<p>classification system for assessing conservation interest. The original ISIS assemblage for the shaded field lay in woodlands was based on July sampling. This limits the assessmblage to this time of year, despite the fact that the cranefly and fungus gnats species diversity increases in autumn. To enable the assemblage to have a valid expression in autumn this project will gather the base data with a view to statistically analysing it to establish the end-groups. It is then expected that the new species lists will be merged to form a season wide shaded field layer assemblage.</p> <ul style="list-style-type: none"> • Evidence published/used in some other format (28/02/2011) <p>Natural England's financial contribution to this project is: £2,400.00</p>	Heaver
RP0417	Disease risk and health screening analysis for a number of reintroduction programmes in England.	<p>Support to a number of existing Species Recovery Programme re-introduction projects by undertaking disease risk analysis, providing advice and support for effective disease risk management and setting out clear reintroduction planning strategies for species based on this evidence. This enables Natural England to meet it's obligations under the IUCN re-introduction guidelines.</p> <p>Partnership project with the Zoological Society of London.</p> <ul style="list-style-type: none"> • Biodiversity Action Plan Reporting (Completed) • Captive rearing release (Completed) 	Katherine Walsh

		<ul style="list-style-type: none"> • Biodiversity Action Plan Reporting (31/03/2012) • Captive rearing release (31/03/2012) <p>Natural England's financial contribution to this project is: £85,000.00</p>	
RP0428	Valuing biodiversity: developing criteria for use in biodiversity offsetting implementation and monitoring	<p>A key element of biodiversity offsetting schemes is a metric to measure biodiversity loss and gain. At its most basic a metric may simply be area but more complex measures are normally desirable. This project seeks to devise a metric applicable to the UK situation which, whilst being a practical to implement, also gives a good description of the biodiversity value of a site. This project is a CASE studentship with Essex university.</p> <ul style="list-style-type: none"> • PhD thesis (30/09/2014) <p>Natural England's financial contribution to this project is: £3,000.00</p>	Adrian Jowitt
RP0459	Conservation of the Croston worm <i>Prostoma jenningsi</i>	<p>A project to aid the recovery of the Croston worm, a nemertean worm globally endemic to the UK and at 1 site in Lancashire. The project will: 1. widen the taxonomic expertise which is currently founded in 1 retired academic 2. Re-survey the pool, establish water quality parameters over the year 3. explore establishment of a new population nearby, to reduce risk of random extinction events 4. raise the profile of this most unloved group of animals A project</p>	David Heaver

		<p>in conjunction with Lancashire Wildlife trust & University of Lancaster</p> <ul style="list-style-type: none"> Evidence published by a partner (24/02/2012) <p>Natural England's financial contribution to this project is: £4,500.00</p>	
RP0482	Campanula patula (spreading bellflower) - conservation genetics, demographic trends and ecological requirements	<p>A joint project with CCW on the conservation genetics of this species, including a review of current distribution and population trends in England and Wales, and identifying conservation management requirements of key English populations. in partnership with Countryside Council for Wales and National Botanical Gardens Wales</p> <ul style="list-style-type: none"> Other report/publication (29/02/2012) <p>Natural England's financial contribution to this project is: £3,000.00</p>	Simon James Leach
RP0483	Action for plants - Damasonium alisma - starfruit	<p>Investigation of previous failures to restore the species, management review, ex-situ cultivation and recommendations for further re-introductions. In partnership with Plantlife</p> <ul style="list-style-type: none"> Evidence published/used in some other format (30/09/2012) 	Ian Taylor

		Natural England's financial contribution to this project is: £2,000.00	
RP0488	Alchemilla - threatened Lady's mantles	<p>To assess the populations of these critical taxa to ensure conservation action is targeted to the right sites and to develop detailed management protocols for them. In partnership with Botanical Society of the British Isles (BSBI)</p> <ul style="list-style-type: none"> Evidence published/used in some other format (30/09/2012) <p>Natural England's financial contribution to this project is: £4,000.00</p>	Ian Taylor
RP0491	Hydroelectric power scheme impacts on important bryophyte sites	<p>Research looking into impacts of hydroelectric schemes on important bryophyte sites. This first stage will develop a scoring system (based on the sensitivity of species to high humidity) for ravines and wooded valleys in the west of England. This will allow these locations to be categorised according to the impact of a potential hydroelectric power scheme.</p> <ul style="list-style-type: none"> Other report/publication (Completed) <p>Natural England's financial contribution to this project is:</p>	Mike Sutcliffe

		£5,000.00	
RP0493	Lobarion lichen community survey and assessment of reasons for decline	<p>Resurvey of known locations for species within the "Lobarion" lichen community including species for which Britain has an International Responsibility. In partnership with British Lichen Society.</p> <ul style="list-style-type: none"> • Other report/publication (29/02/2012) <p>Natural England's financial contribution to this project is: £5,000.00</p>	Mike Sutcliffe
RP0503	Develop conservation strategy for selected widespread Critically Endangered and Endangered vascular plants	<p>A project to improve evidence-base for long list of threatened 'widespread declining' vascular plants listed on the UKBAP and S.41, to evaluate representation across protected sites network and to pinpoint key populations lying outside that network requiring conservation action. BSBI to collate data for agreed subset of the species covered by this project, passing to Plantlife for detailed analysis. Work in 2011-12 will concentrate on 26 species. Partnership with</p> <p><u>Botanical Society of the British Isles</u>  (BSBI) and <u>Plantlife</u> </p> <ul style="list-style-type: none"> • Other report/publication (30/03/2012) <p>Natural England's financial contribution to this project is:</p>	Simon James Leach

		£35,000.00	
RP0508	S41 fungi survey - geographical areas in England	<p>Fungal survey/sampling for all s.41 fungi at selected sites across England. Provision of baseline for distribution mapping of poorly recorded fungi to provide evidence for first official GB fungal RDL assessment. Most of these species are recent BAP additions and it is not even known if they are extant at historic sites. Includes 26 high priority fungi and 36 lower priority species.</p> <ul style="list-style-type: none"> • Population and/or breeding data (31/03/2012) <p>Natural England's financial contribution to this project is: £15,000.00</p>	Martyn Ainsworth
RP0509	Pulsatilla vulgaris - Pasque flower - future options for the conservation of this species in England	<p>To collate most recent available records, including population counts, for all native extant sites. To summarise habitat condition and suitability of current management of these sites. To assess future options for conservation of pasqueflower in England, including recommendations for management of both existing and former sites. To explore role of assisted pollination and ex situ cultivation and re/introductions and augmentations across its historic range. In partnership with Botanical Society of the British Isles (BSBI), included in BSBI MoA.</p> <ul style="list-style-type: none"> • Other report/publication (30/03/2012) 	Simon James Leach

		Natural England's financial contribution to this project is: £1,000.00	
RP0519	Lower Derwent valley: bird ringing and research	<p>The reserve is one of the top five sites in England for breeding waders of wet meadows. It is particularly important for snipe and ruff. The project involves ringing breeding curlew, redshank, lapwing and snipe and also breeding and wintering waterfowl and ruff. The information is used to help establish population changes, advise local management and landscape scale issues, and contributes to our knowledge nationally of certain species (eg quail). The data allows interpretation of international flyways and provides avian influenza assessment. Partnership with Huddleston and Jackson Ringing partnership, Fera, WWT, CCT.</p> <ul style="list-style-type: none"> • Population and/or breeding data (31/03/2013) <p>Natural England's financial contribution to this project is: £1,000.00</p>	Craig Ralston
RP0621	Comparison of threshold sizes in hound's-tongue between Holkham NNR, a Dutch site and British Columbia	<p>Comparison of threshold sizes in hound's-tongue <i>Cynoglossum</i> between Holkham NNR, a Dutch site and British Columbia, undertaken by the Biodiversity Research Centre, Louvain University, Belgium (seeds collected and sent to Belgium in 2009 & 2011)</p> <ul style="list-style-type: none"> • Peer-reviewed paper (30/09/2012) 	Michael Rooney
RP0623	Forecasting the ecological consequences of	Research undertaken by Sheffield University, Dept of	Michael

	environmental change, based on sand dune annuals (Holkham NNR)	<p>Animal & plant Science (2008-2012) into seed dormancy of some of the dune annuals and the relationship between annual plants and other environmental variables (ie the microtopography at the sites, including Holkham). Holkham NNR is one of a number of European locations that allow comparisons to be made when modelling.</p> <ul style="list-style-type: none"> Evidence published/used in some other format (31/12/2012) 	Rooney
RP0624	Experimental evidence for rapid biotic and abiotic reduction of Fe (III) at low temperatures in salt marsh sediments: a possible mechanism for formation of modern sedimentary siderite concretions, Warham Slatmarsh - Holkham NNR	<p>Research by University of Leeds, Earth Sciences (2008-2012) into field & geochemical analytical techniques to compare saltmarsh iron reduction attributes to previous research, Warham Saltmarsh, part of Holkham NNR.</p> <ul style="list-style-type: none"> Evidence published/used in some other format (31/12/2012) 	Michael Rooney
RP0625	Research into Hydrobia spp. populations of Scolt Head Island NNR	<p>Long standing research undertaken by University of Cambridge Zoology Dept. Dr Richard Barnes who is the leading international authority on these small, brackish-water snails. This work of Dr Barnes' is published regularly in scientific journals.</p> <ul style="list-style-type: none"> Evidence published/used in some other format (30/09/2012) 	Michael Rooney
RP0627	Carlina thistle populations on Scolt Head Island NNR	<p>Research undertaken by Animal & Plant Sciences Dept of the University of Sheffield into the carline thistle population</p>	Michael Rooney

		<p>on Scolt Head Island NNR. Occasional academic papers are published by Professor Mark Rees of Sheffield University in scientific journals.</p> <ul style="list-style-type: none"> Evidence published/used in some other format (31/12/2012) 	
RP0628	<p>Research into saltmarsh development, behaviour of dune 'washovers' and other aspects of coastal processes on Scolt Head Island NNR</p>	<p>Long standing research undertaken by University of Cambridge Geography Dept into coastal change & natural processes on Scolt Head Island NNR, dating back to the 1920's. Occasional academic papers are published in scientific journals by Dr Tom Spencer.</p> <ul style="list-style-type: none"> Evidence published/used in some other format (31/03/2016) 	<p>Michael Rooney</p>

Climate Change Research

ID	Title	Description	Contact
RP0322	<p>Managing peatlands as carbon stores (MAPCARS) (PhD)</p>	<p>This project seeks to increase certainty about the impact of land management on the overall greenhouse gas (GHG) balance of peatlands in particular (1) whether reduced losses (and even gains) of carbon by the restored peatland may be counteracted by increased methane emissions and (2) the extent to which fluvial carbon loss from peatlands contributes ultimately to GHG emissions. NERC CASE PhD student: Gemma Dooling, Leeds University.</p> <ul style="list-style-type: none"> PhD thesis (01/07/2013) 	<p>Matthew Shepherd</p>

		Natural England's financial contribution to this project is: £4,500.00	
RP0347	Evaluation of adaptation measures in response to climate change.	<p>Adaptation to climate change is essential to all our areas of work. This project will provide an over-arching framework for assessing the effectiveness of adaptation measures. It will draw directly on the integrated research projects on resilience to climate change and the landscape approach, and feed into the development of new agri-environment schemes, particularly through the integrated project supporting this. This project will also have a remit to collaborate with other internal and external projects.</p> <ul style="list-style-type: none"> • Workshop/conference/event (Completed) • Natural England Technical Publication (Completed) • Natural England Technical Publication (30/03/2012) <p>Natural England's financial contribution to this project is: £69,205.00</p>	Simon Duffield
RP0348	Resilience to climate change: what is it and what makes ecosystems and landscapes resilient?	<p>This project will evaluate theoretical concepts of resilience, clarify definitions, identify practical approaches and test them as far as we are able. This project will provide a strong basis for other climate change evidence projects. The resilience of both valued features (including landscape, geodiversity, habitats and species) and the ecosystem services they support will be included. It will compare across marine, terrestrial, coastal and freshwaters. Although climate change is the focus for this work, this project will also consider the extent to which resilience to other pressures is similar to that for climate change.</p> <ul style="list-style-type: none"> • Workshop/conference/event (Completed) • Natural England Technical Publication (30/03/2012) 	Simon Duffield

		Natural England's financial contribution to this project is: £30,000.00	
RP0349	Carbon storage by habitats	<p>This project aims to summarise the best available evidence on carbon storage in contrasting land uses / habitats and to carry out targeted research to fill key evidence gaps (particularly for peatlands and coastal habitats). It has three main components: 1) An overview of carbon storage and greenhouse gas fluxes by the full range of English habitats. 2) An investigation of carbon storage and fluxes in coastal and marine habitats in a specific English context. 3) Development of peatland greenhouse gas monitoring, through both the development of a new network and support for ongoing measurements.</p> <ul style="list-style-type: none"> Natural England Technical Publication (30/03/2012) <p>Natural England's financial contribution to this project is: £48,000.00</p>	Isabel Alonso
RP0364	National Character Area climate change vulnerability assessment	<p>Project to assess the vulnerability of the natural environment to climate change and identify appropriate adaptation responses. A method has been developed to assess the vulnerability of England's landscapes to climate change, and this is being a trialled in a number of pilot National Character Areas across England. These areas are: (1) South East Northumberland Coastal Plain (2) Lancashire & Amounderness Plain (3) Morecambe Bay Limestones (4) Solway Basin (5) Humberhead Levels (6) Sherwood (7) London (8) South Downs (9).</p> <ul style="list-style-type: none"> Natural England Technical Publication (30/03/2012) <p>Natural England's financial contribution to this project is: £25,000.00</p>	Andy Neale

RP0384	Is eroded peat a source of atmospheric CO ₂ ? (PhD)	<p>To quantify and understand the fate of particulate organic carbon (POC) in streams draining upland peatlands, in particular the transformation to CO₂ that is released to the atmosphere. Specifically the project will: * Measure the loss of POC and dissolved organic carbon (DOC) from peat-covered catchments by mass balance. * Understand the transformation of POC into DOC and CO₂. * Quantify competing processes for POC and DOC loss including adsorption and flocculation. * Develop methods for the inclusion of POC transformation and loss to the atmosphere into present carbon models. PhD student: Catherine Moody, Durham University.</p> <ul style="list-style-type: none"> • PhD thesis (30/09/2013) <p>Natural England's financial contribution to this project is: £3,000.00</p>	Mike Morecroft
RP0437	Mapping Peat Depth and Carbon Storage in England	<p>Peat soils are our most important land store of organic carbon. Natural England estimated peat carbon (C) storage in the 2010 NE257 report, but this was based on few, and old, data. This project, run under an MoA with the North Pennines AONB Partnership's Peatscapes initiative, will: i) collate and analyse all available peat depth/C data ii) develop a survey methodology to assess peat depth/C iii) conduct some new targeted peat surveys iv) coordinate with NPAs, NGOs etc. on new surveys v) produce a improved and easily updateable peat depth/C storage map for England vi) supply a report, database & licence-free map.</p> <ul style="list-style-type: none"> • Spatial data (22/06/2012) <p>Natural England's financial contribution to this project is: £31,000.00</p>	Matthew Shepherd

Ecosystem Approach Research

ID	Title	Description	Contact
RP0422	Ecosystem services: novel case studies	<p>Resources and processes supplied by natural ecosystems are known as ecosystem services. These include products like food and clean drinking water as well as processes such as the decomposition of wastes and the control of flood water. This project will research and analyse a series of 3-5 environmental management projects which are changing land use or management options. These will be published as case studies to demonstrate the potential application of the ecosystem approach in contexts for which there are currently few examples, in particular lowland agricultural land and urban/urban fringe environments.</p> <ul style="list-style-type: none"> • Natural England Technical Publication (31/03/2013) <p>Natural England's financial contribution to this project is: £35,000.00</p>	Stewart Clarke
RP0424	Transferring management methods to deliver ecosystem services (EST)	<p>The objective of this research is to explore the possibility of developing a methodology for "ecosystem services transfer" (EST) building upon the "benefits transfer" approach used in economic valuation.</p> <ul style="list-style-type: none"> • Natural England Technical Publication (31/03/2013) <p>Natural England's financial contribution to this project is: £64,257.00</p>	Ruth Waters
RP0640	Managing Grassland Diversity For Multiple	<p>The overall aim of this proposal is to assess the potential for UK grasslands to deliver multifunctional objectives of carbon sequestration, nutrient retention,</p>	Chris Chesterton

	Ecosystem Services	<p>pollination and biodiversity conservation, while maintaining economically viable levels of production. The main focus of the project is soil carbon sequestration. For more information see Defra funded project BD5003.</p> <ul style="list-style-type: none"> Defra publication (31/03/2015) 	
RP0641	Provision of ecosystem services in Environmental Stewardship Scheme	<p>This project will inform Environmental Stewardship policy and will greatly enhance our knowledge of how to manage the land for ecosystem services. Dissemination of the results and training and demonstration will ensure Natural England and Defra staff can implement the findings and stakeholders can make best use of the project outputs. Defra funded project BD5005.</p> <ul style="list-style-type: none"> Defra publication (30/09/2014) 	Stephen Chaplin

Land Management Research

ID	Title	Description	Contact
RP0026	Quantifying the impacts of Entry Level Stewardship on biodiversity at farm scale (Hillesden Experiment)	<p>To assess the outcomes for a range of wildlife of imposing three different intensities of intervention within a typical intensive arable farm. This is a key project for understanding the scale of biodiversity benefits likely to be delivered by Entry Level Stewardship (ELS).</p> <ul style="list-style-type: none"> Peer-reviewed paper (Completed) Natural England Technical Publication (30/03/2012) 	Mike Green
RP0194	Diversification of grassland through the manipulation of plant-soil interactions and	The aims of this project are to: confirm association of high fungal-to-bacterial ratios with species-rich grasslands; quantify	Steve Peel

	the identification of indicators of restorability	<p>the impact of key plant species in the development of fungal dominated soils; identify mechanisms that influence plant species on fungal-to-bacterial ratios and soil biota influences on vegetation; evaluate other potential indicators for targeting grassland enhancement and creation. Defra funded project1451.</p> <ul style="list-style-type: none"> • Peer-reviewed paper (Completed) • Peer-reviewed paper (Completed) • Natural England Technical Publication (31/03/2012) 	
RP0196	Testing of modified management of agricultural grassland to promote in-field structural heterogeneity, invertebrates and birds (Phase 2)	<p>Phase 1 tried reducing grazing pressure and ceasing grazing. Reduced grazing increased invertebrates but not bird usage. No grazing increased invertebrates but caused unacceptable sward deterioration. A separate study tested mowing and forage harvesting to reduce skylark nest losses. These were potentially successful but difficult to incorporate into modern farming. Phase 2 is testing modified techniques. Defra funded project BD5207.</p> <ul style="list-style-type: none"> • Evidence published by a partner (31/03/2011) 	Steve Peel
RP0199	Techniques to enhance the establishment and persistence of poor-performing species in grassland restoration	<p>To (1) identify the constraints on the survival of poor-performing, specialist species for a wide range of UK grassland types; and (2) develop and test practical management prescriptions to enhance the establishment of these species under the agri-environment schemes. Defra funded project 1459.</p>	Clare Pinches

		<ul style="list-style-type: none"> Defra publication (31/03/2012) 	
RP0200	Sustainable management systems for unimproved neutral grassland	<p>To determine the appropriate level of grazing by cattle to maintain species-rich grassland, and quantify the impact of grazing on invertebrates and on the growth of cattle. This will build on the research that was developed in a previous Defra project on integrating understanding to develop grazing and cutting guidelines. Defra funded project BD1460.</p> <ul style="list-style-type: none"> Defra publication (31/03/2012) 	Richard Jefferson
RP0201	Wide scale enhancement of biodiversity: effects on other resources	<p>A moderate increase in plant diversity has the potential to deliver multiple benefits including (1) increased diversity and abundance of fauna; (2) improved soil structure, nutrient retention and water infiltration; (3) improved forage quality and livestock production. This project aims to provide further evidence to support new options for Environmental Stewardship suitable for intensive beef/sheep farms. Defra funded project BD5208.</p> <ul style="list-style-type: none"> Defra publication (31/03/2013) 	Steve Peel
RP0202	Influence of spring grazing regime on the floristic diversity and restorative potential of upland hay meadows	<p>To provide improved guidance for meadow management in agri-environment schemes, in particular to (1) identify the optimum spring grazing regimes and shut up dates for the maintenance and enhancement of botanical interests and (2) assess the impact on hay yield and quality. Defra funded project BD1467.</p>	David Martin

		<ul style="list-style-type: none"> Defra publication (31/03/2012) 	
RP0277	Hedgerow management: a survey of land managers and contractors practices and attitudes	<p>Good hedgerow management is promoted by Defra and Natural England through Agri-Environment Schemes but poor management is still widely recognised to be a serious problem. The reasons for this are poorly understood. This survey updates a previous one in 2000 and will show what impact Environmental Stewardship has had on attitudes and management. A Defra funded project.</p> <ul style="list-style-type: none"> Defra publication (30/12/2011) Newsletter or journal for specialists (Completed) 	Emily Ledger
RP0278	Effects of hedgerow management and restoration on biodiversity	<p>To examine the effects of simple cutting management regimes promoted by Entry Level Stewardship (ELS) and Higher Level Stewardship (HLS) on the quality and quantity of wildlife habitat, and food resources in hedgerows; and identify, develop and test low-cost, practical options for hedgerow restoration and rejuvenation applicable at the large-scale under both ELS and HLS. <u>Defra funded project.</u></p> <ul style="list-style-type: none"> Peer-reviewed paper (Completed) Other report/publication (Completed) Defra publication (30/06/2014) <p>Natural England's financial contribution to this project is: £375,853.00</p>	Emily Ledger

RP0359	Characterisation of soil structural degradation under grassland and development of measures to ameliorate its impact on biodiversity and other soil functions	<p>Soil compaction may threaten the success of agri-environment schemes. To understand the distribution of soil compaction, its causes, and identify methods to alleviate it, this project will survey compaction at 300 grasslands in England and Wales, assessing management and soil structure. Practical measures to mitigate compaction (mechanical and plants) will be identified and their impact explored through field experiments. Also the impacts on vegetation, water, invertebrates, birds, soil carbon and N₂O flux . Defra project BD5001</p> <ul style="list-style-type: none"> • Defra publication (31/12/2013) 	Matthew Shepherd
RP0420	Developing a method for reporting & monitoring the direct & cumulative impacts of Environmental Stewardship on the maintenance & enhancement of Landscape Character & Quality.	<p>The aim of this 3-year research and development project is to develop and test a robust, repeatable and comprehensive evaluation framework for reporting and monitoring the direct and cumulative impacts of Environmental Stewardship on the maintenance and enhancement of landscape character and quality at a variety of scales, and using a combination of quantitative and qualitative techniques. Defra funded project BD5303.</p> <ul style="list-style-type: none"> • Defra publication (31/03/2013) 	Victoria Hunns
RP0421	Improving effectiveness of grassland restoration and creation options: development of a methodology for setting indicators of success and assessing progress	<p>To develop and test a rapid methodology to assess the progress and timescales that restored or re-created grassland swards take to develop into BAP priority grasslands. The methodology will be used primarily for monitoring the progress and outcomes of HLS agreements under grassland options HK7 and HK8 (Restoration and creation of species-rich semi-natural grassland) and to assist in setting indicators of success.</p>	Richard Jefferson

		<p>The methodology will utilise floristic, structural and possibly soil-based attributes. DEFRA funded Project BD5101.</p> <ul style="list-style-type: none"> • Defra publication (30/04/2012) 	
RP0449	SHINE into HLS: Development of a cost effective and timely way of capturing information and advice from Historic Environment Records to inform delivery of HLS	<p>This project involves the further development of the SHINE protocols (Selected Heritage Inventory for Natural England) that were developed for ELS, to enable local authority Historic Environment Records (HERs) to attach management advice to verified historic environment features for the purposes of informing HLS applications and agreements. Defra funded project BD5305</p> <ul style="list-style-type: none"> • Defra publication (30/09/2012) 	Victoria Hunns
RP0635	Restoration of blanket bog vegetation for biodiversity, carbon and water	<p>Defra-funded project from the ES R&D programme looking at management techniques to reduce dominance of heather on blanket bog as part of restoration to active condition and the impacts on biodiversity, carbon and water.</p> <ul style="list-style-type: none"> • Defra publication (30/09/2014) 	David Glaves
RP0636	Restoration of Purple Moor Grass and rush pasture and associated fen habitats	<p>The aims of this project are: review and summarise information from the European literature and other primary and secondary data sources to identify the habitat conditions required for the existence, restoration or re-creation of fens, "purple moor-grass and rush pastures". For more information see the Defra project description. Defra funded project BD5103.</p>	Iain Diack

		<ul style="list-style-type: none"> Defra publication (28/09/2012) 	
RP0637	Setting Indicators of Success for Species-rich grassland	<p>The aim of this project is to develop a decision framework that can be used by field surveyors with a range of expertise to identify appropriate indicators for measuring the success of management of species-rich grassland, in particular allowing the monitoring of progress within timescales appropriate to the length of agri-environment scheme agreements. For more details see Defra funded project BD5101.</p> <ul style="list-style-type: none"> Defra publication (30/09/2012) 	Richard Jefferson
RP0638	Developing a multi-functional arable agri-environment option: enhanced fallow	<p>Research to support development of Environmental Stewardship options. Defra funded project BD5203</p> <ul style="list-style-type: none"> Defra publication (30/09/2012) 	Mike Green
RP0639	Improving the management and success of arable plant options in ELS and HLS	<p>Project to support Environmental Stewardship options. Defra funded project BD5204.</p>	Mike Green
RP0642	Analysis of habitat quality for breeding woodlarks and nightjars in Breckland Forest SSSI	<p>The Breckland Forest SPA was designated in 2000 for its internationally significant populations of woodlark and European nightjar. Both populations are in decline and, subject to formal site assessment by Natural England, are likely to be in unfavourable condition. This jointly funded FC-NE study aims to help identify the causes of these declines and potential mitigation measures. The project will quantify changes in nightjar and woodlark density in relation to habitat variables. Suggested potential mitigation measures will be based on these</p>	Allan Drewitt

		<p>analyses.</p> <ul style="list-style-type: none"> • Other report/publication (19/03/2012) <p>Natural England's financial contribution to this project is: £8,500.00</p>	
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Landscape, Historic Environment and Geodiversity Research

ID	Title	Description	Contact
RP0020	Rock, fossil and mineral collecting - good practice evidence and guidance	<p>To gather up-to-date information on good practice relating to rock, fossil and mineral collecting in order to inform Natural England guidance on collecting. This work will underpin our statutory role in the management of Sites of Special Scientific Interest.</p> <ul style="list-style-type: none"> • Natural England Technical Publication (30/03/2012) 	Hannah Townley
RP0225	UK Geodiversity Action Plan (UKGAP)	<p>The UKGAP provides a framework planning and recording the delivery of geoconservation across the UK. The aim of this project is to provide evidence (through a range of case studies) to illustrate how the UKGAP is currently being delivered across its objectives. It will also undertake new research on existing delivery monitoring measures for Local Geodiversity Action Plans (LGAPs) in order to develop a standard mechanism for measuring progress that can be adopted by the UKGAP and LGAPs. The work is supported by a wide range of partners across the UK.</p>	Hannah Townley

		<ul style="list-style-type: none"> • Natural England Technical Publication (Completed) • Evidence published/used in some other format (Completed) • Web site (Completed) • Other report/publication (Completed) • Evidence published/used in some other format (30/03/2012) <p>Natural England's financial contribution to this project is: £11,000.00</p>	
RP0229	Soils data project	<p>This is long term project improving the availability of soils data derived from Agricultural Land Classification surveys to Natural England staff and the general public. In addition securing the associated ALC archive of which Natural England has guardianship on behalf of Defra. Current phase of project involves scanning remaining paper Agricultural Land Classification (ALC) maps and associated information. Also updating Geni ALC layer. - continuation of 2008/09 2009/10 projects.</p> <ul style="list-style-type: none"> • Spatial data (Completed) • Spatial data (31/03/2012) 	Gill Shaw
RP0346	Geodiversity technical guidance review	<p>Natural England has a number of technical guidance and advice documents providing advice on geological and geomorphological conservation. These guidance and advice documents have been developed over a number of years and this project will review existing guidance and its need for updating. Guidance considered of high priority for revising will be rewritten and reissued through this project.</p>	Hannah Townley



		<ul style="list-style-type: none"> Natural England Technical Publication (30/03/2012) 	
RP0354	Agricultural land management techniques to deliver ecosystem service benefits from soil biological activity, biomass and diversity in England	<p>The total collection of organisms in the soil, from worms and beetles to bacteria and fungi are known as soil biota. They deliver a wide range of ecosystem services, but are likely to have been damaged by intensive farming, among other threats. Better farm practices could enhance soil biota. This project will review options available to farmers in England to enhance soil biota and the practical costs and benefits of selected options. Results will inform future studies, and current and future farm advice and schemes, and will be presented at a research seminar to policy makers, farm advisors and farming representatives.</p> <ul style="list-style-type: none"> Presentation (Completed) Other report/publication (30/03/2012) <p>Natural England's financial contribution to this project is: £35,000.00</p>	Matthew Shepherd
RP0522	Review of large scale conservation initiatives	<p>This study of large scale nature conservation projects in Britain will help inform our response to the Natural Environment White Paper. The four broad aims are (1) to build an overview of the large scale conservation projects in Britain (2) to explore the scientific principles being used (3) to explore the social, institutional and community aspects (4) to analyse the environmental outcomes achieved. It is a joint project with Defra, Scottish Natural Heritage and the Countryside Council for Wales. Work is being done by the University of Southampton, the University of Cambridge, and Natural England.</p>	Nicholas Macgregor

		<ul style="list-style-type: none"> • Other report/publication (30/04/2012) • Peer-reviewed paper (31/03/2013) <p>Natural England's financial contribution to this project is: £120,000.00</p>	
RP0605	Identifying the movement of female Greater Horseshoe bats in Beer Quarry caves	<p>70% of the visible ghb bats at Beer Quarry Caves SAC are known to be male, this raises the question where are the females, elsewhere within the complex of caves not accessible by humans or somewhere else completely . Proposal would be to install remote monitors around the caves to plot their movement around the complex to see if there are significant movements in peripheral areas of the caves .</p> <ul style="list-style-type: none"> • Evidence published/used in some other format (29/03/2013) <p>Natural England's financial contribution to this project is: £1,500.00</p>	Cathy Fitzroy

Marine Research

ID	Title	Description	Contact
RP0286	Marine connectivity: analysis of keystone species within the British Isles (PhD)	To assess connectivity in marine ecosystems, in particular, the connectivity between populations of sessile marine invertebrates (ie marine invertebrates that are attached to something at the bottom of the sea so cannot move around, eg sponges, anemones and oysters) over a range of geographical scales. Connectivity assessed by measuring genetic relatedness between populations. Natural England-funded PhD student:	Jen Ashworth

		<p>Lyndsey Holland, Exeter University.</p> <ul style="list-style-type: none"> • PhD thesis (31/03/2012) <p>Natural England's financial contribution to this project is: £12,280.00</p>	
RP0328	Accessing and developing the required biophysical datasets and data layers for a Marine Protected Areas network	<p>It is important to ensure the best data are accessed and made available for the UK MPA planning process. This is a multi-partner project to collate a range of biological, physical and socio-economic data and ensure that it is easily interpreted, accessed and used by those responsible for the identification of MPAs. Partners in this project are Defra, JNCC, CCW, DOENI, Welsh Assemby Government, Isle of Man Government, The Scottish Government.</p> <ul style="list-style-type: none"> • Natural England Technical Publication (31/12/2011) • Spatial data (31/12/2011) <p>Natural England's financial contribution to this project is: £134,244.00</p>	Eddy Mayhew
RP0332	Best practice for managing activities in Marine Protected Areas	<p>To review examples of best practice in managing different activities to ensure that they do not pose a risk to achieving conservation objectives in Marine Protected Areas.</p> <ul style="list-style-type: none"> • Natural England Technical Publication (30/03/2012) <p>Natural England's financial contribution to this project is: £16,000.00</p>	Sarah Wiggins

RP0479	Restoration of native oyster through the development of broodstock areas	<p>A feasibility study of native oyster stock regeneration  commissioned by Seafish  identifies that restocking broodstock areas with half-grown imported oyster spat is both cost and ecologically effective. The intent would be to support the recovery of this BAP and FOCI (feature of interest for MCZ designation) species, and to monitor the biodiversity benefits associated with reef development. In partnership with National Oceanography Centre</p> <ul style="list-style-type: none"> • Trial management of habitat or species (30/03/2012) <p>Natural England's financial contribution to this project is: £10,000.00</p>	Jed Nicholson
RP0494	Harbour Porpoise Bycatch Reduction Project	<p>Incidental bycatch of Harbour Porpoise by gill netting remains the most significant single threat. Pingers have been shown to reduce bycatch by 80% or more in several fishery studies. The EU regulation on pingers on over-12m boats has been blocked on grounds of pinger durability or safety, although pingers are in regular use in the USA. This difficulty has probably now been lifted by the impending launch of a new pinger - the banana pinger from Fishtek Ltd. This work trials these pingers. In partnership with Cornwall Wildlife Trust and Centre for Environment Fisheries and Aquaculture Science (CEFAS).</p> <ul style="list-style-type: none"> • Trial management of habitat or species (30/09/2012) <p>Natural England's financial contribution to this project is: £2,000.00</p>	Robert Enever

RP0499	A study to determine shark and ray eggcases laying sites	<p>Some large ray species have disappeared from parts of their former range. Spatial management of important ray habitats, such as egg-laying sites has been suggested as a potentially useful method for the improved management of their stocks. Our current knowledge of such habitats are poor. Three species of ray listed on BAP and OSPAR schedules to which egg-laying sites are not known. Electronic tagging, will aim to identify a method in locating these egg-laying sites. In partnership with Centre for Environmental Fisheries and Aquaculture Science (CEFAS).</p> <ul style="list-style-type: none"> Evidence published/used in some other format (30/09/2012) <p>Natural England's financial contribution to this project is: £12,000.00</p>	Robert Enever
RP0568	Is there potential for more joined up marine monitoring and data collection between statutory nature conservation agencies and industry?	<p>The project aims to find ways that Statutory Nature Conservation Agencies (SNCA) and industry might better join up their monitoring. There are three stages to the project. Stage one will collate data, talk to stakeholders and identify areas of overlap, conflict and constraints. The second stage will develop a series of case studies to highlight scenarios. In the final stage a workshop will bring together stakeholders and develop a protocol that highlights ways in which success can be achieved as well as signposting major barriers, and discuss ways to remove them. The project will show that SNCAs are keen to work closely with developers.</p> <ul style="list-style-type: none"> Workshop/conference/event (31/05/2012) <p>Natural England's financial contribution to this project is: £25,000.00</p>	James Bussell
RP0569	Predicting recovery in intertidal	Natural England is required to provide advice on suitable mitigation to	James

	soft sediment environments	<p>reduce likely significant environmental effects from development. In soft sediment habitats we often advise that minimising the footprint is the best way to do this. However, depending on the sensitivity and recoverability of different sediments, and the intensity of impact, minimising the footprint might not always be the best approach. This project will review, appraise and synthesise the available evidence on this topic and highlight where we can give clear advice and where we are more uncertain.</p> <ul style="list-style-type: none"> • Other report/publication (31/05/2012) <p>Natural England's financial contribution to this project is: £15,000.00</p>	Bussell
RP0574	Review of the impacts and monitoring requirements for tidal stream energy in sensitive habitats	<p>Wave and tidal energy will be an increasingly important source of renewable energy in England. The number of current projects is fairly small and limited to demonstration sites. However, large commercial scale arrays are a real possibility. Natural England is using this time to proactively review the current evidence of impacts from wave and tide deployment, predict where this might be an issue in England, and develop a tool kit for staff to use in early engagement with this emerging sector.</p> <ul style="list-style-type: none"> • Natural England Technical Publication (30/09/2012) <p>Natural England's financial contribution to this project is: £15,000.00</p>	James Bussell
RP0575	Biosecurity in marine and freshwater environments	<p>Invasive alien species are considered one of the greatest threats to biodiversity globally and have a major economic impact. We have a limited understanding of good biosecurity within the aquatic environment. This scoping study will review the evidence underpinning national and</p>	James Bussell

		<p>international advice on biosecurity in the marine and freshwater aquatic environment and provide evidence-based advice on what biosecurity measures should be employed to minimise the risk posed by non-native species and diseases, such as crayfish plague, which are transmitted by non-native species. Partnership with Defra</p> <ul style="list-style-type: none"> Evidence published/used in some other format (30/09/2012) <p>Natural England's financial contribution to this project is: £5,000.00</p>	
RP0576	Climate change risks in the marine environment	<p>Understanding the vulnerability of our marine habitats and species to climate change is important in terms of informing action to improve resilience, better target our monitoring, inputting to work assessing projected impacts on habitats and raising awareness of the potential scope of habitats impacts. To date, there has been a range of reviews, and research projects that evaluate vulnerability of terrestrial landscapes, there is a paucity of information on the vulnerability of marine communities and a gap in terms of an approach to vulnerability assessment. This current work aims to fill that knowledge gap.</p> <ul style="list-style-type: none"> Natural England Technical Publication (30/09/2012) <p>Natural England's financial contribution to this project is: £15,000.00</p>	Robert Enever
RP0622	The development and behaviour of shingle spits on Scolt Head Island NNR	<p>Research into the development and behaviour of shingle spits on Scolt Head Island NNR, undertaken by Prof J Raper & D Livingstone of Kingston University & City University. Scolt is an international type locality for this aspect of coastal process research and work will inform sea-level rise</p>	Michael Rooney

		scenarios.	
		<ul style="list-style-type: none"> Other report/publication (31/03/2012) 	

Sustainable Land Use Research

ID	Title	Description	Contact
RP0454	Solent Disturbance and Mitigation Project	<p>Research project co-ordinated by the Solent Forum to investigate the impacts of recreational pressure on the nationally and internationally important populations of birds that shelter, feed and breed in the Solent. The project will assess the current and future potential effects of visitor pressure and recreational use on these sites, including that arising from proposed new housing development within reach of the Solent shores. It will establish whether avoidance or mitigation measures are necessary to ensure the future protection of the Solent's important birds.</p> <ul style="list-style-type: none"> Evidence published by a partner (Completed) <p>Natural England's financial contribution to this project is: £5,000.00</p>	Allison Potts
RP0455	The New Forest Disturbance Project	<p>The New Forest Disturbance Project is a new partnership project which will investigate potential impacts of human disturbance on populations of Annex 1 bird species (Dartford warbler, woodlark and nightjar) within the New Forest Special Protection Area (SPA). This is a partnership project lead by New Forest National Park Authority.</p> <ul style="list-style-type: none"> Evidence published/used in some other format (30/09/2012) 	Jackie Kelly

		Natural England's financial contribution to this project is: £14,000.00	
RP0548	Economic planning using Ecosystems Approach for LEPs	<p>The project aim is to produce a toolkit to support Local Enterprise Partnerships in developing strategic plans which take into account the available information about the economy/environment relationship. The toolkit will use the ecosystems approach as its organising framework. This financial year Staffordshire, Worcestershire, and Cornwall will trial the toolkit. It is a joint piece of work between NE, EA, FC and DEFRA.</p> <ul style="list-style-type: none"> • Web site (30/09/2012) <p>Natural England's financial contribution to this project is: £20,000.00</p>	Tim Sunderland

Access and engagement Monitoring

ID	Title	Description	Contact
RP0010	Monitor of Engagement with the Natural Environment (MENE)	<p>Monitor of Engagement with the Natural Environment (MENE) is a sample survey of the adult population which provides data on visits to the natural environment at regional and national level. It is being undertaken as part of a weekly in-home omnibus survey. It provides information to support a range of Natural England projects and programmes. The first two years of fieldwork have been completed and a 3rd year [2011/12] is now underway. MENE has been commissioned by Natural England, in conjunction with Defra and the Forestry Commission.</p> <ul style="list-style-type: none"> • Web site (Completed) 	Erica Wayman

		<ul style="list-style-type: none"> • Natural England Technical Publication (Completed) • Natural England Technical Publication (Completed) • Natural England Technical Publication (Completed) • Evidence published/used in some other format (Completed) • Natural England Technical Publication (Completed) • Natural England Technical Publication (Completed) • Natural England Technical Publication (Completed) • Natural England Technical Publication (30/12/2011) <p>Natural England's financial contribution to this project is: £360,001.00</p>	
RP0195	Monitoring and evaluation of the Walking for Health programme	<p>Walking for Health (WFH) encourages people to become physically active in their local communities. A network of schemes across England offer regular short walks over easy terrain with trained walk leaders. The aim of this project is to monitor and evaluate the WfH programme. The WfH database will store personal information on walkers including health data, details of walk schemes, the walks associated with the umbrella scheme and logs of attendance registers of walkers activity. This will be used to monitor, analyse and help evaluate the expanding walking schemes from 2009 to 2012. Partnership with the Department of Health.</p> <ul style="list-style-type: none"> • Natural England Technical Publication (Completed) • Natural England General Publication (30/03/2012) <p>Natural England's financial contribution to this project is: £22,687.00</p>	Alan Pearsons
RP0504	Standards for Access and Engagement On-site Monitoring	<p>Natural England is looking to establish and support common onsite visitor monitoring standards and disseminate best practice, both internally and across the sector. The aim of the project is to develop, test and pilot standard on-site visitor</p>	Rob Keane

		<p>monitoring approaches at three different levels of intensity low, medium and high that can be adopted by a range of access schemes/projects/partner organisations to enable consistent monitoring of how people access and engage with the natural environment, at the local site level. This project is to compliment MENE working more at the local site level.</p> <ul style="list-style-type: none"> Natural England Technical Publication (28/09/2012) 	
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Biodiversity Monitoring

ID	Title	Description	Contact
RP0113	Marine turtle monitoring	<p>Collates and maintains a database of records of marine turtles in British waters. The data is uploaded to the National Biodiversity Network Gateway. A report on the records and trends will be disseminated to a wide range of interested organisations and people. Co-funded with Countryside Council for Wales and Scottish Natural Heritage.</p> <ul style="list-style-type: none"> Population and/or breeding data (Completed) Population and/or breeding data (01/02/2012) <p>Natural England's financial contribution to this project is: £5,200.00</p>	Paul Edgar
RP0117	Updating of ancient woodland inventory	The ancient woodland inventory has been a very useful conservation tool, especially after the inclusion of ancient	Emma Goldberg

		<p>woodland in Planning Policy Statement 9. In order to maintain its usefulness, we need to keep an overview of revisions, especially with the technology to map to finer resolution than was possible at its inception, and ensure that we don't lose information that may still be useful.</p> <ul style="list-style-type: none"> • Web site (20/12/2011) <p>Natural England's financial contribution to this project is: £10,000.00</p>	
RP0119	Long term monitoring in four woodland sites: Wytham Woods, Bix, Sheephouse Wood, Gorswen	<p>To prepare for the future we need to understand past changes in sites. This is particularly true for woodland where changes may only become clear over decadal timescales. One way that we deal with this is through long-term monitoring of selected sites. Identifying the processes leading to change in these SSSIs can provide a model for likely impacts in other sites. This information then informs advice on site management and provides part of the evidence background for woodland policy development. In partnership with Oxford University and CEH.</p> <ul style="list-style-type: none"> • Evidence published by a partner (Completed) • Peer-reviewed paper (31/12/2011) 	Keith Kirby
RP0139	Ribbon-leaved water-plantain reintroduction and ditch surveys	<p>Ribbon-leaved water-plantain <i>Alisma gramineum</i>, is a critically endangered red-listed species and a Biodiversity Action Plan (BAP) priority species with a very restricted distribution. This project monitors the success of the</p>	Ian Taylor

		<p>reintroduction trial which took place at Baston Fen last year. Last year's ditch surveys uncovered a new wild locality for the species, so this year's survey work was aimed at establishing whether a sustainable metapopulation exists in the wider area. Project Leads Ian Taylor/Gen Madgwick Joint project with Lincolnshire Wildlife Trust, Welland and Deepings Internal Drainage Board and the Environment Agency.</p> <ul style="list-style-type: none"> • Population and/or breeding data (Completed) • Natural England Technical Publication (Completed) <p>Natural England's financial contribution to this project is: £19,297.00</p>	
RP0174	Action for Bats in England	<p>Continuing with the current NE/BCT MoA which in it's broadest sense gathers species trend data for priority bat species in England, through the National Bat Monitoring Programme (NBMP), so that we can assess the status of the species within the country. The work informs agri-environment schemes, helps to develop an evidence base to support best practice guidelines for a range of bat related issues. The project to support the employment within BCT of the Biodiversity Officer post and the Partnership Officer post. Project in partnership with Bat Conservation Trust and part of Action for Bats in England</p> <ul style="list-style-type: none"> • Population and/or breeding data (30/09/2011) • Population and/or breeding data (15/12/2011) 	Katherine Walsh

		<ul style="list-style-type: none"> Advice to practitioners or users (31/03/2012) <p>Natural England's financial contribution to this project is: £55,000.00</p>	
RP0222	Predatory Birds Monitoring Scheme (PBMS)	<p>Contribution to a surveillance programme known as the Predatory Birds Monitoring Scheme which monitors contaminant residues in the tissues and eggs of a range of seabirds and predatory and freshwater birds. Co-funded with the Centre for Ecology & Hydrology; Environment Agency and Campaign for Responsible Rodenticide Use.</p> <ul style="list-style-type: none"> Evidence published by a partner (Completed) Evidence published by a partner (30/03/2012) <p>Natural England's financial contribution to this project is: £50,000.00</p>	Alastair Burn
RP0238	Collation and interpretation of estuary data for SSSI/SAC condition assessments	<p>The UK Common Standards Monitoring protocol for both SSSI and SACs has a set of attributes that need to be used to assess the condition of the estuary interest feature and its constituent sub-features. The aim of this project is to explore whether it is possible to present existing contextual information in a single template that can be populated by different information for different estuaries and also whether the template can help identify key evidence gaps in specific estuaries.</p>	Graham Weaver

		<ul style="list-style-type: none"> Advice to practitioners or users (31/03/2011) <p>Natural England's financial contribution to this project is: £10,000.00</p>	
RP0240	National network for local biodiversity recording	<p>To develop the national network of local biological recording, increasing the geographic scope, quantity and quality of biological information available to the general public and key public sector users through the National Biodiversity Network (NBN) Gateway. [Fund managed by Natural England on behalf of Defra.]</p> <ul style="list-style-type: none"> Defra publication (Completed) 	Richard Alexander
RP0247	The UK Biodiversity Action Reporting System (BARS)	<p>The Biodiversity Action Reporting System (BARS) is an integrated web-based information system released in 2002 to help reporting against the UK Biodiversity Action Plan. BARS is supported by a UK partnership led by Natural England. NE sub-contract the hosting & maintenance of the database, servers and website to JNCC. A significant programme of development is underway in 2011/12 that will replace the current system in March 2012. This will simplify the data model, add new aggregated summaries, spatial mapping and bulk data import abilities. As part of a wider evidence framework BARS 2 will benefit biodiversity planning and reporting activity.</p>	Oliver Grafton
RP0324	Article 17 reporting on the Conservation	A multi-species contract to establish and implement	David Heaver

	<p>status of the Vertigo snails- Desmoulins</p>	<p>monitoring for the Vertigo snails for which the UK has responsibility to assess the conservation status of as part of the Natura 2000 network reporting. It will concentrate initially on <i>Vertigo geyeri</i> and <i>V.angustior</i> as the species which have had the least recent conservation effort, with in parallel work to establish what other work has been commissioned to answer the reporting questions on <i>Vertigo moulinsana</i> and <i>V. genesii</i>.</p> <ul style="list-style-type: none"> • Population and/or breeding data (16/02/2012) <p>Natural England's financial contribution to this project is: £11,000.00</p>	
<p>RP0326</p>	<p>Updating of BAP priority habitat inventories 2010</p>	<p>A programme of quality improvements to Natural England's BAP priority habitat inventories and quality assurance prior to data publication. This will include the publication of updated inventories for Fens, Reedbeds, Coastal & Floodplain Grazing Marsh and Lowland Heath. The project also incorporates the development of standards for habitat survey and classification, which will then be tested as part of the Habitat Surveillance Pilot.</p> <ul style="list-style-type: none"> • Natural England Technical Publication (30/03/2012) • Spatial data (30/03/2012) <p>Natural England's financial contribution to this project is: £400,000.00</p>	<p>Bernadette Micklewright</p>


RP0381	Pool frog reintroduction monitoring 2011	<p>The pool frog is a Biodiversity Action Plan (BAP) priority species. This project will monitor the pool frog population, and other relevant species, at the site where a recent reintroduction has taken place as part of a species recovery plan.</p> <ul style="list-style-type: none"> • Population and/or breeding data (Completed) <p>Natural England's financial contribution to this project is: £10,700.00</p>	Paul Edgar
RP0458	National saltmarsh redshank survey	<p>National survey of redshanks breeding on saltmarsh habitats around the English coast. Repeats a similar survey last undertaken in 1996. This survey will allow estimates of numbers of pairs nationally and for each SSSI and will identify national, regional and site level population trends. This information will be used to assist SSSI condition assessments.</p> <ul style="list-style-type: none"> • Population and/or breeding data (Completed) • Population and/or breeding data (31/03/2012) <p>Natural England's financial contribution to this project is: £31,397.00</p>	Allan Drewitt
RP0469	Species surveillance (in-house and partner) change project	<p>This project forms part of our Integrated Monitoring Programme. The aim is to prioritise our surveillance activities and to save overall costs. To achieve this we will</p>	Andy Webb

		<p>develop, with partners, staff and the voluntary sector, different delivery models to meet, more cost effectively, our statutory reporting requirements. Evidence function will lead the development of this change project in close collaboration with our partners and specialist colleagues. Our Land Management advisers will test the in-house methods. There are 20 partners involved in this project including Pond Conservation and Amphibian and Reptile Conservation Trust.</p> <ul style="list-style-type: none"> • Other report/publication (30/03/2012) • Web site (31/05/2012) • Spatial data (31/10/2012) <p>Natural England's financial contribution to this project is: £70,000.00</p>	
RP0475	Updating of BAP priority habitat inventories 2011	<p>A programme of quality improvements to Natural England's BAP priority habitat inventories and quality assurance prior to data publication.</p> <ul style="list-style-type: none"> • Natural England Technical Publication (30/09/2012) • Spatial data (30/09/2012) <p>Natural England's financial contribution to this project is: £62,522.00</p>	Bernadette Micklewright
RP0489	A survey of rare bryophytes in south west	A bryophyte survey of southwest England to include:- -	Mike Sutcliffe

	England	<p>Monitoring or resurvey of known, historic and potential sites for 21 Nationally Rare and 15 Nationally Scarce species. - Habitat management to maintain populations at selected locations. - A bryophyte management plan for Penhale Dunes SAC. - A survey of <i>Bruchia vogesiaca</i> to inform a proposed SAC designation.</p> <ul style="list-style-type: none"> • Population and/or breeding data (31/03/2012) <p>Natural England's financial contribution to this project is: £20,392.00</p>	
RP0490	Monitoring survey of critical and endangered bryophytes in East Anglia	<p>Monitoring survey of critical and endangered bryophytes in East Anglia. Survey of historic, existing and potential new locations.</p> <ul style="list-style-type: none"> • Population and/or breeding data (31/03/2012) <p>Natural England's financial contribution to this project is: £3,000.00</p>	Mike Sutcliffe
RP0500	Wild asparagus survey Cornwall 2011	<p>To undertake survey of wild asparagus <i>Asparagus prostratus</i> colonies at known sites in Cornwall, repeating survey originally carried out in 2001 and building on asparagus surveys in 2010 carried out on NT-owned sites on The Lizard. To sex colonies whenever possible. To collect seed from representative colonies to add to Kew Millennium Seed Bank. To provide a report summarising</p>	Simon James Leach

		<p>current status of asparagus in Cornwall and assessing conservation threats and opportunities.</p> <ul style="list-style-type: none"> • Population and/or breeding data (Completed) • Other report/publication (31/03/2012) <p>Natural England's financial contribution to this project is: £1,800.00</p>	
RP0520	Humberhead Peatlands: crane monitoring	<p>The moors are remnants of wetland that occupied the floodplain of the Humberhead Levels thousands of years ago. Natural England's aims are to establish the Moors as centres of peatland excellence and to provide visitor facilities to match that aspiration.</p> <ul style="list-style-type: none"> • Population and/or breeding data (30/03/2012) <p>Natural England's financial contribution to this project is: £5,000.00</p>	Julian Small
RP0521	Humberhead Peatlands: nightjar survey	<p>The moors are remnants of wetland that occupied the floodplain of the Humberhead Levels thousands of years ago. Natural England's aims are to establish the Moors as centres of peatland excellence and to provide visitor facilities to match that aspiration.</p> <ul style="list-style-type: none"> • Population and/or breeding data (30/03/2012) 	Julian Small

		Natural England's financial contribution to this project is: £2,500.00	
RP0523	National Spotted Crane survey preparation	<p>A survey is required to assess those SSSIs supporting breeding spotted cranes. In advance of a national survey of Spotted Cranes in spring next year preparatory work must be undertaken by the end of March 2012. This includes the development of a survey sampling approach and the identification of survey locations, the production of monitoring protocols and survey forms, and the coordination of a network of nature reserve staff and volunteers to visit all identified survey locations.</p> <ul style="list-style-type: none"> • Other report/publication (31/03/2012) <p>Natural England's financial contribution to this project is: £4,978.00</p>	Allan Drewitt
RP0525	Castle Hill: chalk grassland monitoring/research	<p>Castle Hill chalk grassland is rich in orchids. Species include fragrant, common spotted, pyramidal and autumn lady's tresses, as well as the rare early spider orchid for which Castle Hill is the national stronghold. This work is a 32 year study of demographics / autecology of <i>Ophrys sphegodes</i> (early spider orchid) on the Reserve, using permanent quadrats to follow the survival of individual plants. Population dynamics have been analysed in great detail, including interpretation in relation to the management of the chalk grassland over the lifetime of the</p>	Malcolm Emery

		<p>project. Further analysis is still possible.</p> <ul style="list-style-type: none"> • Habitat creation or enhancement (30/09/2012) <p>Natural England's financial contribution to this project is: £150.00</p>	
RP0534	Winter raptor roost survey	<p>Wintering hen harriers and merlins are a formal interest feature of many Sites of Special Scientific Interest (SSSI) and Special Protection Areas (SPA). As part of its programme of monitoring the condition of all SSSIs, Natural England is required to assess the numbers of birds present on those SSSIs where they are a notified feature every six years. This project will coordinate an existing network of volunteers participating in a national monitoring scheme in order to achieve survey coverage of the relevant SSSIs.</p> <ul style="list-style-type: none"> • Population and/or breeding data (23/03/2012) • Population and/or breeding data (08/06/2012) <p>Natural England's financial contribution to this project is: £30,379.00</p>	Allan Drewitt
RP0535	Putting Plants on the Map: a data services/surveillance/monitoring MoA with the Botanical Society of the British Isles (BSBI)	<p>This agreement sets out and delivers the botanical data services required by Natural England in support of vascular plant conservation in England. The Botanical Society of the British Isles  has a key role to play across</p>	Simon James Leach

		<p>a wide array of Natural England's botanical work, including species surveillance, UK Biodiversity Action Plan and the England Biodiversity Strategy implementation, species status assessments, targeting of conservation action in the wider countryside and reporting on the distribution and trends of threatened species.</p> <ul style="list-style-type: none"> Evidence published by a partner (30/03/2012) <p>Natural England's financial contribution to this project is: £35,800.00</p>	
RP0552	Annual monitoring for bittern at Holkham NNR	<p>Annual monitoring to establish whether breeding activity takes place within the reedbed areas of Holkham NNR. The data has been collected in Partnership with the RSPB and fed into the national RSPB/Natural England bittern monitoring project for the UK, for which an annual summary is produced and circulated.</p> <ul style="list-style-type: none"> Population and/or breeding data (30/03/2012) 	Michael Rooney
RP0554	Monthly Wetland Bird Survey (WeBS) for Holkham NNR	<p>Monthly counts of wetland birds on Holkham NNR grazing marshes that form part of the national Wetland Bird Survey.</p> <ul style="list-style-type: none"> Population and/or breeding data (Completed) 	Michael Rooney
RP0555	Provisional inventory of wood-pasture and	Wood-pasture and parkland priority UK BAP habitat in	Suzanne

	parkland for England	<p>England is currently not mapped in a coherent way. For this reason it is impossible to calculate the area of habitat present in England, or to identify those sites which are sufficiently valuable to include in a SSSI notification review. This project will collate the disparate datasets which currently exist for this habitat to create a single layer for England.</p> <ul style="list-style-type: none"> Natural England Technical Publication (31/03/2013) 	Perry
RP0556	Fens Biodiversity audit	<p>The Fenland Biodiversity Audit will make an important contribution to our understanding of fenland species and the implications for their management. This project has three elements that will draw together evidence and expertise from partners in order to describe the known taxa that are extant within the Fenland National Character Area, group species assemblages into guilds using the same methodology derived for the Breckland Biodiversity Audit and then make land management recommendations in order to benefit the broadest number of species groups and assemblages.</p> <ul style="list-style-type: none"> Evidence published/used in some other format (30/03/2012) <p>Natural England's financial contribution to this project is: £9,500.00</p>	Catherine weightman
RP0572	Supporting Butterfly and moth data	Butterfly Conservation manages a network of voluntary	Keith Porter

	management	<p>recorders who collect and record data on butterfly and moths. Data underpins most of Natural England's evidence requirements that include targeting and monitoring of Agri-environment, site assessments, indicators and reporting on the England Biodiversity Strategy targets. This project includes two elements; the 1st is to secure structured surveillance of butterflies in collaboration with Butterfly Conservation, JNCC, CEH and other country agencies, the 2nd is support direct to BC to support the data management and collation of information on butterfly and moths for England.</p> <ul style="list-style-type: none"> • Spatial data (30/03/2012) <p>Natural England's financial contribution to this project is: £55,000.00</p>	
RP0608	Collaborative Agreement relating to Operational Use of Remote Sensing for Environmental Monitoring	<p>This project involves collaborative work between ourselves and the Geomatics Group within the Environment Agency over creating operational products to aid site management and monitoring. These products are dependent upon remote sensed data, including LiDAR (radar) data. These products are used to help with site condition assessments and to provide data on habitats that cannot otherwise be collected. The project is totally dependent upon the mix of skills between EA staff and our staff.</p> <ul style="list-style-type: none"> • Joint publications (31/12/2011) 	Keith Porter

		Natural England's financial contribution to this project is: £42,000.00	
RP0614	Monthly Wetland Bird Survey (WeBS) for Scolt Head Island NNR	<p>Monthly counts of wetland birds on Scolt Head Island NNR that form part of the national Wetland Bird Survey.</p> <ul style="list-style-type: none"> • Population and/or breeding data (Completed) 	Michael Rooney
RP0615	Scolt Head Island NNR butterfly transect	<p>Annual butterfly transect data collected over 26 weeks between April and September as part of the UK Butterfly Monitoring Scheme. The information is collated and contributes to the UK Butterfly Monitoring Scheme database, forming part of national report produced by Butterfly Conservation.</p> <ul style="list-style-type: none"> • Population and/or breeding data (Completed) • Population and/or breeding data (30/03/2012) 	Michael Rooney
RP0616	Holkham NNR butterfly transect	<p>Annual butterfly transect data collected over 26 weeks between April and September. The information is collated and input to the UK Butterfly Monitoring Scheme database, forming part of national report produced by Butterfly Conservation.</p> <ul style="list-style-type: none"> • Population and/or breeding data (Completed) • Population and/or breeding data (30/03/2012) 	Michael Rooney
RP0617	Annual monitoring of breeding terns & waders of Scolt Head Island NNR	Annual monitoring of the breeding terns and waders of Scolt Head Island NNR to include detailed nest surveys	Michael Rooney

		<ul style="list-style-type: none"> Population and/or breeding data (31/03/2012) 	
RP0618	Annual monitoring of wetland breeding birds of the grazing marshes of Holkham NNR	<p>Annual monitoring of the wetland breeding birds of Holkham NNR grazing marshes</p> <ul style="list-style-type: none"> Population and/or breeding data (31/03/2012) 	Michael Rooney
RP0619	Annual monitoring of breeding terns at Holkham NNR	<p>Annual monitoring of breeding terns, including little terns, on the foreshore at Holkham NNR</p> <ul style="list-style-type: none"> Population and/or breeding data (31/03/2012) 	Michael Rooney
RP0633	Gait Barrows: Duke of Burgundy butterfly restoration study	<p>The reserve contains the most notable limestone pavement flora in Britain, and is important for its rich invertebrate communities. The site also supports 800 moth species, dragonflies and damselflies, and butterflies such as the Duke of Burgundy, high brown and pearl-bordered fritillary. This project involves the translocation of captive-reared Duke of Burgundy butterflies from a nearby population in order that the gene pool at Gait Barrows is refreshed.</p> <ul style="list-style-type: none"> Other report/publication (31/03/2016) <p>Natural England's financial contribution to this project is: £2,500.00</p>	Rob Petley-Jones

RP0643	English twite recovery project	<p>Monitoring of breeding twite numbers is required to evaluate the effectiveness of the recovery project work in delivering habitat suitable for breeding twite in the South Pennines. This element of the project will also provide information essential to the assessment of the condition of the South Pennine Moors SSSI for breeding twite and the efficacy of remedial measures. This contract is for preparatory work in advance of field work in 2013.</p> <ul style="list-style-type: none"> • Other report/publication (23/03/2012) <p>Natural England's financial contribution to this project is: £15,000.00</p>	Allan Drewitt
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Climate Change Monitoring

ID	Title	Description	Contact
RP0291	Monitoring of greenhouse gases following changes in land management in the North Pennines	<p>To assess whether blocking moorland drainage channels reduces the production of greenhouses gases, and an indication of the level of any effect. Moorland drainage channels on Cronkley Fell in the North Pennines have been monitored for greenhouse gas release. The channels were then blocked and greenhouse gas emissions continue to be monitored.</p> <ul style="list-style-type: none"> • Other report/publication (01/12/2012) <p>Natural England's financial contribution to this project is: £90,000.00</p>	Alistair Crowle

RP0316	Development of a long-term monitoring network	<p>The objectives of the project are to: 1. Develop a long-term monitoring network to meet Natural England's evidence needs on the effects of climate change, air pollution and land management on the natural environment. 2. Establish a network of at least 40 core monitoring sites by the end of 2014. 3. Ensure that data from other existing and proposed long-term monitoring activities are managed and used in order to maximise their benefit as evidence on cause and effect of environmental change. 4. Ensure that maximum benefit and efficiency is gained from complementary activities of other agencies and bodies.</p> <ul style="list-style-type: none"> Natural England Technical Publication (30/04/2012) <p>Natural England's financial contribution to this project is: £142,000.00</p>	Andy Nisbet
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Land management Monitoring

ID	Title	Description	Contact
RP0033	Agreement-scale monitoring of Higher Level Stewardship delivery	<p>A detailed evaluation of Higher Level Stewardship (HLS) agreements to provide an assessment of the potential of HLS to deliver expected outcomes. By establishing an independent baseline on the condition and extent of features being managed it will enable a future re-survey to validate the success of management. Partnership with the Centre for Ecology and Hydrology.</p> <ul style="list-style-type: none"> Evidence published by a partner (Completed) Other report/publication (Completed) Advice to practitioners or users (Completed) Workshop/conference/event (Completed) 	Andrew Cooke

		<ul style="list-style-type: none"> • Evidence published/used in some other format (28/02/2012) • Other report/publication (31/03/2012) <p>Natural England's financial contribution to this project is: £480,000.00</p>	
RP0037	Effectiveness of Higher Level Stewardship at providing resources for target bird species	<p>To provide a comprehensive evaluation of the effectiveness of Higher Level Stewardship (HLS) in delivering for target bird species, both at the farm level and the option level. The results will be used to review and enhance delivery of HLS. Five year partnership with RSPB.</p> <ul style="list-style-type: none"> • Presentation (Completed) • Peer-reviewed paper (Completed) • Peer-reviewed paper (Completed) • Peer-reviewed paper (31/12/2011) • Peer-reviewed paper (30/03/2012) 	Phil Grice
RP0315	Developing integrated site monitoring protocols and a programme of Integrated Site Assessments	<p>This monitoring project will: i) develop an integrated approach to Natural England's in-house site monitoring (SSSI Condition Assessment and HLS Indicators of Success Assessments); ii) provide a report on the development phase with recommendations for implementation; and iii) implement the recommendations with a programme of Integrated Site Assessments (ISA) beginning from April 2010. The ISA programme will include: a) an integrated strategy for site monitoring; b) integrated field methodologies, forms and guidance; c) a quality management system; and d) initial development of IT (in association with other integration projects).</p> <ul style="list-style-type: none"> • Advice to practitioners or users (Completed) • Other report/publication (30/06/2011) 	Debbie Russell

		<ul style="list-style-type: none"> • Other report/publication (31/03/2012) • Evidence published/used in some other format (Completed) 	
RP0357	Monitoring the impacts of Entry Level Stewardship	<p>The programme of work envisaged within this specification involves developing and implementing a programme of fieldwork, analysis and reporting that will be expected to provide a sound quantitative basis for evaluating: * the "success" of management under O/ELS to date, and; * the potential of O/ELS agreements post-renewal (ie renewals from 2010 onwards) to deliver a higher level of environmental benefits, and to meet the targets set out for ELS in 2010 by Defra and Natural England.</p> <ul style="list-style-type: none"> • Defra publication (31/03/2013) 	Andrew Cooke
RP0407	Assessing the baseline for environmental impact of Uplands Entry Level Stewardship	<p>This project is one of two current projects intended to set a baseline for an UELS monitoring programme. The project aims are to assess the current baseline conditions in the Severely Disadvantaged Areas, relating to the ES scheme objectives and establish a cost-effective and repeatable survey methodology that will enable a future re-survey to quantify the environmental impacts of the UELS.</p> <ul style="list-style-type: none"> • Other report/publication (31/03/2012) 	Lesley Blainey
RP0448	Establishing an improved baseline for monitoring and evaluating historic environment interventions in Environmental Stewardship (SHINE2012)	<p>This project builds on a pilot (SHINE2011) which focussed on the acquisition of a baseline of historic environment (HE) data for monitoring the effectiveness of our interventions through AES. The work will provide a digital dataset of HE features that can be managed under ES which fulfil previously developed protocols for site review & selection. In addition to enabling the evaluation of</p>	Victoria Hunns

		<p>scheme impacts on the HE, the acquisition of this data will have a strong impact on delivery. It will also evaluate future work requirements for 2012/3 & undertake initial evaluation of the effect of this enhanced dataset on delivery of HE objectives.</p> <ul style="list-style-type: none"> • Defra publication (30/09/2012) 	
RP0457	Catchment Sensitive Farming Monitoring and Evaluation	<p>This is a part of the Catchment Sensitive Farming project and records the success of the project in engaging farmers, changing farmer attitudes, helping farmers to take action to mitigate diffuse pollution and the water quality outcomes that result. This is done through a mixture of recording the project's delivery activities, an annual telephone survey of farmers, repeat visits to assess action taken and detailed water quality monitoring and catchment modelling. This work has been underway since 2006 and is due to last until 2013. It is undertaken by EA for the project which is jointly delivered by NE and EA.</p> <ul style="list-style-type: none"> • Other report/publication (Completed) • Natural England Technical Publication (31/03/2013) 	Bob Middleton
RP0460	Integrated Site Assessments - monitoring of HLS IoS and SSSI units	<p>This is an annual programme of activity to monitor selected HLS Indicators of Success and the condition of SSSI units. The ISA programme includes: a) an integrated strategy for site monitoring; b) integrated field methodologies, forms and guidance; and c) Capturing of the data collected in the field in a central database Delivery is led by Land Management function, with Integrated Monitoring Team (Evidence) owning the programme.</p>	Phil Tolerton

		<ul style="list-style-type: none"> Natural England Technical Publication (30/06/2012) 	
RP0462	Saproxylic invertebrate assemblages at Birklands & Bilhaugh SSSIs, Sherwood Forest, Nottinghamshire	<p>A review of the national importance and current condition of the saproxylic invertebrate assemblages at Birklands & Bilhaugh SSSIs, Sherwood Forest, Nottinghamshire. These ancient semi-natural woodlands are widely recognised as having national and European importance for the conservation of saproxylic invertebrates, especially beetles. This project is a desk study to review and analyse all previous survey data to assess the current condition and national importance and indicate whether current management practices appear sufficient to conserve the invertebrate fauna of the sites.</p> <ul style="list-style-type: none"> Natural England Technical Publication (Completed) 	Steve Clifton
RP0466	Mid-Cornwall Moors marsh fritillary larval monitoring 2011	<p>This project is a continuation of the monitoring for the Mid-Cornwall Moors meta population of marsh fritillary butterfly. Butterfly Conservation's standard methodology will be employed, involving the collection of vegetation data and production of notes on habitat condition and management practices will be made. Twelve project sites will be monitored to repeat the transect routes undertaken in 2010, however three Criggan sites and one Ennisworgey site deemed unsuitable will be omitted. Photographs of survey sites will not be undertaken. The results will be presented in the form of a short report with management recommendations.</p> <ul style="list-style-type: none"> Other report/publication (30/03/2012) 	David Hazlehurst

		Natural England's financial contribution to this project is: £7,975.00	
RP0470	Survey of spined loach (<i>Cobitis taenia</i>) on the Ouse Washes SAC	<p>The Ouse Washes Special Area of Conservation (SAC) comprises two parallel drainage channels; Counter Drain/Old Bedford and Old Bedford/River Delph. The reason these watercourses qualify as a SAC is due to the presence of spined loach; one of four main localities in England for this species, which is listed on Annex II of the EC Directive on the Conservation of Natural Habitats and Flora and Fauna. This project will monitor the current status (broad distribution, density and age-class structure) of this population, which will inform the Integrated Site Assessment of the Ouse Washes SSSI, SAC and can be compared with previous surveys.</p> <ul style="list-style-type: none"> • Other report/publication (20/01/2012) <p>Natural England's financial contribution to this project is: £10,000.00</p>	Stella Baylis
RP0476	Specialist CSM monitoring of bryophyte SAC sites in Cornwall 2011/12.	<p>The project is to undertake specialist Common Standards Monitoring (CSM) of a number of bryophyte SAC sites in Cornwall, 2011/12. The main species to be monitored are <i>Marsupella profunda</i>, <i>Ditrichum cornubicum</i> and <i>Cephaloziella nicholsonii</i>. Standard CSM methodology for monitoring bryophytes will be used involving the identification of species and collection of data on population size and condition. The results will be presented in the form of report/s detailing the condition assessment for the SSSI, photographs and location maps, records of habitat condition together with any threats/issues and management recommendations.</p> <ul style="list-style-type: none"> • Other report/publication (30/03/2012) 	Beth Tonkin

		Natural England's financial contribution to this project is: £5,842.00	
RP0511	Moorhouse and Upper Teesdale: vegetation monitoring	<p>This reserve is famous for the rare spring gentian as well as England's largest juniper wood. The rare black grouse also breeds here, as does the golden plover and ring ouzel. Research and monitoring work: this project is monitoring the special botanical features. This is essentially to monitor the effectiveness of the Higher Level Stewardship-prescribed grazing on the patches of high botanical interest which are subsumed in the unit.</p> <ul style="list-style-type: none"> • Habitat creation or enhancement (30/09/2012) <p>Natural England's financial contribution to this project is: £10,000.00</p>	Chris McCarty
RP0512	Woodwalton Fen: ditch research	<p>Acid peat areas support stands of purple moor-grass, with ling, bog myrtle, tormentil and saw sedge. Flower-rich mixed fen covers a significant area of the reserve and is home to yellow flag, swamp meadow grass and great water dock. The site is also home to rare fen plants such as fen wood-rush and fen violet, and the 15 km of ditches on the site support the rare water violet and carnivorous bladderwort. This evidence project involves preliminary work to assess the reasons behind ditch condition loss so as to plan for a programme of de-silting.</p> <ul style="list-style-type: none"> • Habitat creation or enhancement (30/03/2012) 	Ben Le Bas



		Natural England's financial contribution to this project is: £8,000.00	
RP0514	South Solway Mosses: Hydrological Monitoring of WF Scotts	<p>South Solway Mosses NNR comprises parts of three lowland raised bogs SSSI. Bowness Common, Glasson Moss, Wedholme Flow. All three sites have been substantially affected by domestic cutting, drainage and commercial peat cutting. This project is the long term monitoring of water levels on a former commercially peat extracted Unit (26) of Wedholme Flow, and its response to the process of hydrological and vegetative restoration. The project also links to water level/water flow monitoring in major drainage ditches to the east of this unit which is looking at how water levels/volumes respond over time to the restoration of Unit 26.</p> <ul style="list-style-type: none"> Habitat creation or enhancement (30/03/2012) <p>Natural England's financial contribution to this project is: £2,000.00</p>	Alasdair Brock
RP0517	Derbyshire Dales: NVC survey of restoration hay meadows	<p>The Derbyshire Dales reserve consists of five separate limestone valleys Lathkill, Cressbrook, Monk's, Long and Hay. These five dales represent some of the best examples of wildlife and geology in the White Peak.</p> <ul style="list-style-type: none"> Habitat creation or enhancement (30/03/2012) <p>Natural England's financial contribution to this project is: £250.00</p>	Ben Le Bas
RP0526	Lullington Heath: chalk heath monitoring/research	<p>The slightly acid soil has allowed the development of an intimately mixed chalk and heath plant community. Acid loving heathers and</p>	Malcolm Emery

		<p>tormentil grow among chalk plants such as thyme, salad burnet and dropwort. An array of permanent 1 x 1 metre quadrats were set up in 1997, to measure species frequency in order to a) characterise the chalk heath community b) compare areas with different management histories and c) identify changes in community composition over time. Initially, grazing exclosures were part of the analysis, to allow analysis of effects of grazing by livestock and rabbits. Data collected and collated by University of Sussex.</p> <ul style="list-style-type: none"> • Habitat creation or enhancement (30/09/2012) <p>Natural England's financial contribution to this project is: £250.00</p>	
RP0527	Pevensy levels: wetland bird survey	<p>Pevensy Levels NNR is part owned and managed by the Sussex Wildlife Trust. The remainder is owned and managed by Natural England. This Wetland Birds Survey, is part of the national WeBS project, coordinated by the Wildfowl and Wetlands Trust.</p> <ul style="list-style-type: none"> • Population and/or breeding data (30/03/2012) <p>Natural England's financial contribution to this project is: £250.00</p>	Malcolm Emery
RP0530	Goss Moor: research and monitoring	<p>Goss Moor is a rich mosaic of wetland habitats which make up a large floodplain close to the headwaters of the River Fal, Cornwall. The Reserve has an mining heritage and was used on an industrial scale for tin streaming. Latterly, the moor was drained with the River Fall being canalised and detached from its flood plain. In spring 2011 a portion of the river was diverted into a new shallower channel. The</p>	Philip Bowler

		<p>river and flood plain now exhibit a more natural hydrology. This project aims to monitor the response of the water table to the changes and inform as to what further work may be required to enhance and enlarge the wetland habitats.</p> <ul style="list-style-type: none"> • Habitat creation or enhancement (01/10/2012) <p>Natural England's financial contribution to this project is: £500.00</p>	
RP0531	Fenn's and Whixall: ongoing hydrology	<p>Main habitats: Peatland. Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses Site of Special Scientific Interest, straddling the English/Welsh border near Whitchurch, is of international importance for wildlife. The Mosses are one of the most southerly lowland raised bogs in Britain and, at 948 hectares (2,340 acres), are the third largest.</p> <ul style="list-style-type: none"> • Habitat creation or enhancement (01/10/2012) <p>Natural England's financial contribution to this project is: £125.00</p>	Joan Daniels
RP0610	Survey of Agri-environment Grassland and Restoration Sites: Survey of Higher Level Stewardship option HK8: creation of species-rich semi-natural grassland	<p>The project involves surveys of examples of option HK8 on 36 HLS agreements. This management is designed to facilitate the creation of a species-rich grassland feature, typically from land that has formerly been intensively managed as arable or grassland. On each site detailed species presence and cover is recorded in 5 quadrats, together with a walkover survey of the whole stand. Soil samples are also collected, together with information on management. The project is closely related to previous work on HK6 (maintenance of species-</p>	Andrew Cooke

		rich grassland) and HK7 (restoration of species-rich grassland) that was reported in 2008.	
		<ul style="list-style-type: none"> Evidence published/used in some other format (30/11/2011) 	

Landscape, Historic Environment and Geodiversity Monitoring

ID	Title	Description	Contact
RP0021	Establishing a national Local Geological Site (RIGS) data set	<p>To establish a national, spatial data-set that maps the distribution of all Local Geological Sites (known as RIGS) for England. Associated information collected will include brief details of site interest, level of accessibility (accessible green space) and information on site condition. The information will be used by Local Geoconservation groups, Local Authorities, Planners and Land Managers. This project is being undertaken in partnership with GeoConservationUK and The Geology Trusts.</p> <ul style="list-style-type: none"> Spatial data (Completed) Spatial data (30/11/2011) <p>Natural England's financial contribution to this project is: £120,000.00</p>	Jonathan Larwood
RP0092	Monitoring the character and quality of England's landscapes (CQuEL)	<p>CQuEL is one of Natural England's Integrated Monitoring changes projects. It will assess change in the character and quality of England's landscape. Phase 1 has been completed. The reports are available from: the Natural England internet  and LWEC . Following a period of review, to ensure CQuEL is fit for purpose in respect of the NEWP and review of arms' length bodies the 11/12 work programme for CQuEL will comprise an analytical piloting phase wick</p>	Andrew Baker

		<p>focus on selected geographic areas (NCAs) and a targeted set of ecosystems services.</p> <ul style="list-style-type: none"> • Evidence published/used in some other format (Completed) • Other report/publication (30/03/2012) 	
RP0228	Geological Conservation Review boundary digitisation	<p>Geological Conservation Review (GCR) sites provide the national basis for identifying features of interest in geological and geomorphological Sites of Special Scientific Interest (SSSIs). This project will digitise all GCR site boundaries in England. This will provide a digitised dataset for spatial comparison with established SSSI boundary datasets strengthening Natural England's ability to provide advice and report on geological and geomorphological SSSIs.</p> <ul style="list-style-type: none"> • Spatial data (Completed) • Spatial data (Completed) • Spatial data (30/03/2012) <p>Natural England's financial contribution to this project is: £10,800.00</p>	Hannah Townley
RP0310	Monitoring environmental outcomes in Protected Landscapes	<p>This project is to establish a co-ordinated and robust monitoring framework for England's Protected Landscapes (National Parks and Areas of Outstanding Natural Beauty). It aims to demonstrate the effectiveness of the conservation and enhancement of protected landscapes; provide an evidence-base to assess the effective delivery of protected landscapes' management plans and to inform their review; and to demonstrate that England's protected landscapes are exemplars of land management. This work is being done in partnership with Defra, English Heritage, English National Parks Authorities Association and National Association of AONBs.</p>	Liz Bingham



		<ul style="list-style-type: none"> Evidence published/used in some other format (30/09/2012) <p>Natural England's financial contribution to this project is: £2,500.00</p>	
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Marine Monitoring

ID	Title	Description	Contact
RP0219	Monitoring Fleet Lagoon Special Area of Conservation and Special Protection Area	<p>This project collates a number of sub-projects to assess the condition of this Special Area of Conservation; Special Protection Area and surrounding area, including monitoring the temperature of the lagoon; surveying the subtidal eelgrass beds; monitoring little tern numbers and recording the affects of human activity and inappropriate coastal defences. In partnership with Chesil Bank and Fleet Nature Reserve (Ilchester Estates).</p> <ul style="list-style-type: none"> Evidence published by a partner (31/12/2011) 	Rachel Waldock
RP0221	Understanding responses of marine biodiversity to global environmental change	<p>This project builds on the success of the MarClim project which ran from 2001-2005 and was consortium funded by Natural England and additional government departments and agencies. It involves monitoring of rocky shore species by scientists and volunteer groups to determine past reference states, current fluctuations and future forecasts.</p> <ul style="list-style-type: none"> Spatial data (03/03/2012) 	Robert Enever
RP0474	Condition Assessment	Survey to monitor the reef feature subtidally, through diving surveys. New	Sangeeta

	Monitoring for Reefs, Isles of Scilly European Marine Site - Diving Survey June 2011	<p>sites were included into the survey design, as well as existing sites and draft Marine Conservation Zone sites for Scilly were also included. The final report will include analysis of the data to allow NE to meet its monitoring commitments and to provide a suitable baseline for the following attributes of the IoS SAC: a. Biotope composition, b. Distribution and spatial pattern of biotopes c. Presence of representative / notable biotopes d. Species composition of representative or notable biotopes</p> <ul style="list-style-type: none"> Natural England Technical Publication (31/03/2013) 	McNair
RP0559	New N2K baseline monitoring - Haisborough Hammond & Winterton sandbanks	<p>Component of a larger project being undertaken jointly with JNCC and Cefas to obtain baseline physical and ecological data for Haisborough Hammond & Winterton cSAC and Inner Dowsing, North Ridge and Race Bank cSAC. This component focuses on obtaining further acoustic data covering toes / flanks of banks plus ground truthing in the form of biological sampling.</p> <ul style="list-style-type: none"> Evidence published/used in some other format (13/04/2012) <p>Natural England's financial contribution to this project is: £50,000.00</p>	Chris Pirie
RP0560	New N2K baseline monitoring - Haisborough Hammond & Winterton, Sabellaria spinulosa reef.	<p>Component of a larger project being undertaken jointly with JNCC and Cefas to obtain baseline physical and ecological data for Haisborough Hammond & Winterton cSAC and Inner Dowsing, North Ridge and Race Bank cSAC. This component focuses on obtaining further acoustic data for areas of biogenic Sabellaria reef within Haisborough Hammond and Winterton cSAC plus ground truthing in the form of video and still pictures and limited biological sampling.</p>	Chris Pirie

		<ul style="list-style-type: none"> Evidence published/used in some other format (12/04/2012) <p>Natural England's financial contribution to this project is: £60,000.00</p>	
RP0561	New N2K baseline monitoring - Inner Dowsing & Race Bank - Sandbanks.	<p>Component of a larger project being undertaken jointly with JNCC and Cefas to obtain baseline physical and ecological data for Haisborough Hammond & Winterton cSAC and Inner Dowsing, North Ridge and Race Bank cSAC. This component focuses on obtaining further acoustic data for Sandbanks within Inner Dowsing and Race bank cSAC plus ground truthing in the form of biological sampling.</p> <ul style="list-style-type: none"> Evidence published/used in some other format (16/03/2012) <p>Natural England's financial contribution to this project is: £50,000.00</p>	Chris Pirie
RP0562	New N2K baseline monitoring - Inner Dowsing & Race Bank, Sabellaria spinulosa reef.	<p>Component of a larger project being undertaken jointly with JNCC and Cefas to obtain baseline physical and ecological data for Haisborough Hammond & Winterton cSAC and Inner Dowsing, North Ridge and Race Bank cSAC. This component focuses on obtaining further acoustic data for areas of biogenic Sabellaria reef within Inner Dowsing, North Ridge and Race Bank cSAC plus ground truthing in the form of video and still pictures and limited biological sampling.</p> <ul style="list-style-type: none"> Evidence published/used in some other format (16/03/2012) 	Chris Pirie

		Natural England's financial contribution to this project is: £30,000.00	
RP0563	New N2K baseline monitoring: Shellflat sandbanks	<p>This project is a 12 day boat based bathymetric survey, using multibeam sonar. The purpose of the survey is to obtain a high resolution physical baseline map detailing the topography of the sand bank. The data will provide the key dataset for identifying the locations of physical sample sites and will be essential if we are to monitor the physical and ecological evolution of the site. The survey is required as the Special Area of Conservation has never been surveyed, and current charted bathymetry over the site is an amalgamation of a number of coarse historic datasets.</p> <ul style="list-style-type: none"> • Natural England Technical Publication (31/03/2013) • Spatial data (31/03/2013) <p>Natural England's financial contribution to this project is: £59,000.00</p>	Mark Johnston
RP0564	Ongoing N2K condition assessment - MARCLIM rocky shore features	<p>Delivery of MarClim project for England. This is a UK wide project lead by the Marine Biological Association . Rocky shore species which have been chosen as suitable indicators of climate change are surveyed at a number of locations across England and the UK.</p> <ul style="list-style-type: none"> • Evidence published by a partner (30/09/2012) <p>Natural England's financial contribution to this project is: £28,000.00</p>	Robert Enever
RP0565	Operational monitoring - MCCIP - annual report card	Operational monitoring - Marine Climate Change Impacts Partnership annual report card  .	Robert Enever

		Natural England's financial contribution to this project is: £10,000.00	
RP0580	Intertidal SSSI Monitoring - Morecambe Bay:	Intertidal SSSI Monitoring - Morecambe Bay: several elements to package - estuaries, shallow inlet & bays, intertidal mud & sand flats, upper, middle & pioneer saltmarsh - Project Officer to complete on review. Natural England's financial contribution to this project is: £60,000.00	Green Joe
RP0581	Ongoing N2K condition assessment - Humber - Lamprey.	Ongoing N2K condition assessment - Humber - Lamprey. Based on regions investigations and partnership approach with EA. Project Officer to complete on review. Natural England's financial contribution to this project is: £15,000.00	Fiona Neale
RP0582	Ongoing N2K condition assessment - Berwickshire and Northumberland:	Ongoing N2K condition assessment - Berwickshire and Northumberland: Reefs via dive surveys. Natural England's financial contribution to this project is: £60,000.00	Catherine Scott
RP0583	Ongoing N2K condition assessment - Flamborough Head:	Ongoing N2K condition assessment - Flamborough Head: side-scan sonar project - habitat mapping of SAC. Natural England's financial contribution to this project is: £40,000.00	Mike Quigley
RP0584	Operational monitoring - Flamborough: Baseline monitoring of the effectiveness of the no take zone	Operational monitoring - Flamborough: Baseline monitoring of the effectiveness of the no take zone - Project Officer to complete on review. Natural England's financial contribution to this project is: £15,000.00	Mike Quigley
RP0585	Operational monitoring - Filey Bay:	Operational monitoring - Filey Bay: auk bycatch - Monitoring for review of net limitation due in 2 years in partnership with Environment Agency.	Mike Quigley

		Natural England's financial contribution to this project is: £10,000.00	
RP0586	The Wash: Large Shallow Inlet and Bay baseline monitoring Survey	<p>The Wash: Large Shallow Inlet and Bay baseline monitoring survey to contribute to baseline data sets for condition of the Annex I Large Shallow Inlet and Bay and Annex 1 features in order to provide a robust baseline for future monitoring of feature condition within The Wash and North Norfolk Coast SAC. The hard subtidal substrate sub features of The Wash and North Norfolk Coast SAC Large Shallow Inlet and Bay are (i) subtidal boulder and cobble communities; and (ii) Sabellaria spinulosa reefs.</p> <ul style="list-style-type: none"> Natural England Technical Publication (30/09/2012) 	Tom Manning
RP0587	Ongoing N2K condition assessment - Solent: Estuaries and subtidal sandbanks.	<p>Ongoing N2K condition assessment - Solent: Estuaries and subtidal sandbanks. To be done in partnership with Environment Agency.</p> <p>Natural England's financial contribution to this project is: £40,000.00</p>	Dylan Todd
RP0588	Operational monitoring Thanet Reefs: kelp dominated communities on animal-bored rock	<p>Operational monitoring Thanet Reefs: kelp dominated communities on animal-bored rock.</p> <p>Natural England's financial contribution to this project is: £28,000.00</p>	Rachel Williams
RP0589	Operational monitoring - Outer Thames Estuary: assess impact of netting on red-throated diver	<p>Operational monitoring - Outer Thames Estuary: assess impact of netting on red-throated diver.</p> <p>Natural England's financial contribution to this project is: £20,000.00</p>	Audrey Jones
RP0590	Operational monitoring - Thanet pacific oyster monitoring	<p>Operational monitoring - Thanet monitoring non-native invasive Pacific oysters.</p> <ul style="list-style-type: none"> Natural England Technical Publication (Completed) 	Ingrid Chudleigh

		<ul style="list-style-type: none"> Natural England Technical Publication (30/09/2012) <p>Natural England's financial contribution to this project is: £2,000.00</p>	
RP0591	Intertidal SSSI Monitoring - Solent: intertidal mud and sand flats	<p>Intertidal Site of Special Scientific Interest Monitoring - Solent: intertidal mud and sand flats.</p> <p>Natural England's financial contribution to this project is: £75,000.00</p>	Dylan Todd
RP0593	Intertidal SSSI Monitoring - Solent: Cordgrass swards	<p>Intertidal Site of Special Scientific Interest Monitoring - Solent: cordgrass swards.</p> <p>Natural England's financial contribution to this project is: £6,000.00</p>	Graham Weaver
RP0594	Intertidal SSSI Monitoring - South Wight: Rocky shores.	<p>Intertidal Site of Special Scientific Interest Monitoring - South Wight: Rocky shores. Project Officer to complete on review.</p> <p>Natural England's financial contribution to this project is: £10,000.00</p>	Rachel Williams
RP0595	Intertidal SSSI Monitoring: Thanet reef and sea caves	<p>Intertidal Site of Special Scientific Interest Monitoring - Thanet reef and sea caves: chalk communities.</p> <p>Natural England's financial contribution to this project is: £10,000.00</p>	Rachel Williams
RP0596	Intertidal SSSI Monitoring - Essex estuaries: intertidal mud & sand flats and mud communities	<p>Intertidal SSSI Monitoring - Essex estuaries: intertidal mud & sand flats and mud communities.</p> <p>Natural England's financial contribution to this project is: £30,000.00</p>	Conor Donnelly
RP0597	The Wash & Norfolk: common seal ongoing N2K condition	<p>Ongoing N2K condition assessment. The Wash contains the largest population of harbour (common) seals in England, holding some 10% of</p>	Claire Ludgate

	assessment	<p>the total UK population. The intertidal mud and sand flats in the Wash provide ideal conditions for breeding and haul-out sites and the subtidal sandbanks provide important feeding areas for the seals during the summer breeding and moulting season when the. The seals are one of the features of the Wash and North Norfolk Coast SAC for which the site was designated. Annual surveys of the common seal population in The Wash are undertaken by the Sea Mammal Research Unit (SMRU) at the University of St Andrews.</p> <p>Natural England's financial contribution to this project is: £6,000.00</p>	
RP0598	Ongoing N2K condition assessment - The Wash & Norfolk: subtidal sandbanks.	<p>Ongoing N2K condition assessment - The Wash & Norfolk: subtidal sandbanks.</p> <p>Natural England's financial contribution to this project is: £30,000.00</p>	Claire Ludgate
RP0599	The Greater Wash: understanding direct physical and indirect impacts of the pink shrimp fishery on reef and wider biodiversity	<p>The aim of this project is to undertake a survey of the physical and some biological impacts of shrimp fishing on <i>Sabellaria spinulosa</i> reef and associated biodiversity in the Wash and North Norfolk SAC, Inner Dowsing Race Bank North Ridge SAC and surrounding areas. This will improve and update the evidence used by Natural England to provide statutory advice to the managing authorities as to the effects, and or impacts, of shrimp fishing on <i>S. spinulosa</i> reef. Joint project with the Marine Management Organisation 🌐 .</p> <ul style="list-style-type: none"> Evidence published/used in some other format (30/09/2012) <p>Natural England's financial contribution to this project is: £50,000.00</p>	Charlotte Johnson
RP0600	Operational monitoring - The	Following a cockle handwork monitoring study carried out in the summer	Charlotte

	Greater Wash: environmental impacts of suction dredge fishery	<p>of 2010 the EIFCA, in partnership with Natural England and Cefas, will carry out an impact, control and recovery rate study, focusing on investigating direct impacts of suction dredging for cockles in the Wash. This will look at the direct physical impacts and any changes in the sediment and associated benthos by comparing fished and non-fished (control) sites areas, as well as the time taken for recovery where appropriate. This study will build on the report made into cockle suction dredging in the Wash published in 2007.</p> <ul style="list-style-type: none"> • Evidence published by a partner (Completed) • Natural England Technical Publication (31/03/2013) <p>Natural England's financial contribution to this project is: £30,000.00</p>	Johnson
RP0604	Operational monitoring - Suffolk Coast: disturbance study	<p>Operational monitoring - Suffolk Coast: disturbance study - Natural England are contributing to this project.</p> <p>Natural England's financial contribution to this project is: £5,000.00</p>	Emma Hay
RP0609	Condition Monitoring of the Intertidal Mudflats and Sandflats Feature of the Fal & Helford SAC	<p>The main aim of the study is to provide standardised faunal and infaunal information for the littoral sediment habitats and communities of the Fal & Helford Estuary, across a series of sampling areas. The main sediment types and their associated communities (biotopes) will be mapped within these areas. The work will be carried out in accordance with the marine CSM guidance for littoral sediment. The field methods used will follow the techniques described in the marine monitoring handbook (especially procedural guidelines 1-1, 3-1 and 3-6) and current Environment Agency procedures used for the Water Framework Directive.</p>	Helena Towers

		<ul style="list-style-type: none"> Natural England Technical Publication (31/03/2013) <p>Natural England's financial contribution to this project is: £25,541.00</p>	
RP0611	Investigation into disturbance effects on waders and wildfowl at low and high tides in Poole Harbour	<p>A study of disturbance from human recreational and other activities in the Harbour. The study took place at thirteen different locations around the Harbour. Visits included both high and low tide counts during both the day and night.</p> <ul style="list-style-type: none"> Natural England Technical Publication (31/03/2012) <p>Natural England's financial contribution to this project is: £29,500.00</p>	Susan Burton
RP0612	The effect of algal mats on waterfowl foraging behaviour in Poole Harbour	<p>The study will take place between October and end of February to assess the impact of algal cover on bird foraging behaviour. The study will clearly assess whether birds are avoiding areas where there are higher densities of algae and whether their behaviour is being affected. The focus of the study will be in the area south of Brownsea Island and part of Brands Bay which birds appear to be under utilising in relation to the prey items found in the area.</p> <ul style="list-style-type: none"> Natural England Technical Publication (31/03/2012) <p>Natural England's financial contribution to this project is: £25,000.00</p>	Susan Burton


RP0644	Shore Thing Project	<p>The www.marlin.ac.uk/shore_thing Shore Thing Project aims to generate records of marine wildlife by facilitating intertidal biological surveys at sites around the British Isles, and to make the results available to all on the Internet. It encourages students and local communities to monitor their local rocky shore for climate change and non-native species. The Shore Thing Project follows on from the UK Marine Biodiversity and Climate Change Programme (MarClim) run by the MBA and supported by Natural England.</p> <ul style="list-style-type: none"> • Spatial data (30/03/2012) <p>Natural England's financial contribution to this project is: £15,977.52</p>	Chris Pirie
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Access and engagement Evaluation

ID	Title	Description	Contact
RP0258	Evaluation of the Access To Nature Grants Programme	<p>The Access to Nature Grants Programme is part of Big Lottery's Changing Spaces Programme. This is a formative programme evaluation reporting initially to the Project Steering Group, with a final report to be published in 2013. Every project will do its own self-evaluation, and 20 projects will be selected for detailed case study.</p> <ul style="list-style-type: none"> • Evidence published/used in some other format (31/10/2011) • Workshop/conference/event (31/10/2011) • Natural England General Publication (30/06/2013) • Workshop/conference/event (31/10/2013) 	Alison Hill

		<ul style="list-style-type: none"> Other report/publication (31/12/2013) <p>Natural England's financial contribution to this project is: £154,228.86</p>	
RP0498	Evaluation of Higher Level Stewardship permissive access	<p>Evaluating the extent to which existing HLS permissive access agreements are delivering their intended outcomes, whether there are any unintended (or indirect) impacts arising from the agreements, and how these impacts are experienced by different stakeholders. Funded as part of RDPE Technical Assistance programme.</p> <ul style="list-style-type: none"> Other report/publication (30/03/2012) <p>Natural England's financial contribution to this project is: £75,000.00</p>	Alison Hill

Biodiversity Evaluation

ID	Title	Description	Contact
RP0573	Support for the UK Environmental Observation Framework	<p>The UK EOF  is a Defra/NERC lead multi-agency project to bring together information on all environmental monitoring work across government. We contribute £5K per year to a very large project.</p> <ul style="list-style-type: none"> Evidence published/used in some other format (31/03/2012) <p>Natural England's financial contribution to this project is: £5,000.00</p>	Keith Porter

Climate Change Evaluation

ID	Title	Description	Contact
RP0634	Assessing and Responding to climate risks to Natural England's Objectives	<p>The direct impact of climate change on the natural environment is already being observed. The resultant changes in species, habitats and ecosystems pose both threats and potential opportunities for Natural England's objectives. Indirect effects mediated through human responses to climate change, including adaptation in other sectors can also affect the natural environment in positive or negative ways. This report has been produced to meet the requirements of the Climate Change Act (2008) reporting power and presents our completed assessment of risks that climate change poses and our plans to address them.</p> <ul style="list-style-type: none"><li data-bbox="779 678 1556 710">• Natural England Technical Publication (31/03/2012)	Simon Duffield