This vision document prepared by RSPB 31-03-10

Living Landscapes - a vision for the future of Essex

Central South Essex Marshes Living Landscape (Living Landscape 31)

"A 25 square kilometres landscape, rich in wildlife and accessible to people at the heart of the South Essex Thames Gateway – sustainable wetlands of international importance in a restored industrial landscape, supporting vibrant communities and a thriving economy. A healthy hinterland for the Thames."

This Living Landscape will protect wildlife for the future and benefit local people



This Living Landscape is supported by: (no particular order)

RSPB

Natural England

Environment Agency

Homes and Communities Agency

Department for Communities and Local Government

EEDA

Essex County Council

Thurrock Council

Basildon District Council

Castle Point Borough Council

Thames Gateway South Essex Partnership

South Essex Greengrid Partnership

Basildon Renaissance Partnership

Castle Point Regeneration Partnership

Canvey Town Council

Veolia ES Ltd

Veolia ES Cleanaway Pitsea Marshes Trust

Biffaward

Heritage Lottery Fund

Natural England through Access to Nature as part of the Big Lottery Fund's Changing Spaces

Programme

EU Interreg IVa programme

Port of London Authority

Buglife

Land Restoration Trust

Essex Wildlife Trust

Groundwork South Essex Trust

Thames Estuary Partnership

Local landowners

Living Landscapes - a vision for the future of Essex

Central South Essex Marshes

Contents

- 1. Introduction
- 2. The vision
- 3. Objectives
 - 3.1 Wildlife targets
 - 3.2 People targets
 - 3.3 Local community targets
 - 3.4 Local economic targets
- 4. Statement of ecological significance
- 5. Ecosystem services
- 6. Resources required to deliver the South Essex Marshes Living Landscape
 - 6.1 Projects to meet wildlife targets
 - 6.2 Projects to meet people targets
 - 6.3 Projects to meet local community targets
 - 6.4 Projects to meet local economic targets
- Figure 1a Current position: Designated land
- Figure 1a Current position: Land in conservation management
- Figure 2 Agri-environment schemes
- Figure 3 Accessible Natural Greenspace Standard
- Figure 4 Long term vision (Map to follow)

Contact Details:

This Living Landscape Vision Document has been produced by RSPB

Contact: David Hedges Email: David.hedges@rspb.org.uk

1. Introduction

The landscape is adjacent to the River Thames and its significant tributaries – notably Pitsea, Vange, Holehaven, East Haven and Benfleet Creeks. The RSPB and the Port of London Authority have a partnership agreement that is designed to jointly develop a conservation management framework for the Thames. The South Essex Marshes form a significant and integral part of the wider Thames estuary and the RSPB's landscape project will deliver distinct improvements to its ecology, management and accessibility. The existing and proposed access will integrate with the Thames footpath. There are many activities and events at the riverside, which are designed to raise the profile of the estuary, seafront and its wildlife – this includes boat trips on the neighbouring Crouch and Roach, which we plan to extend onto the Thames itself.

The South Essex Marshes abound with evidence of past human activity. The RSPB has commissioned full archaeological surveys of over 1000 hectares of this landscape, to inform our management decisions and to ensure that the historic dimension is protected, enhanced and articulated. It is intended to recreate some of these features and to incorporate them into modern day site management – for example, the reinstatement of second world war anti-glider ditches as new tertiary ditches for water management and the reconstruction of red hills (mounds associated with Neolithic salt production) as viewing mounds on the marshes. The access and interpretation plans will have the importance of the historic landscape – and the continuation of traditional activities, such as cattle grazing – as a central tenet. The RSPB's work to date with the Essex County Council archaeology and historic landscapes team is regarded as an example of best practice.

The wetlands of the Thames Gateway are its iconic landscape and support the Gateway's most significant biodiversity value – its wildfowl and waders. The RSPB's South Essex Marshes currently extend to 930 hectares, which is planned to increase to 1,500 hectares. This is a landscape that has been preserved through planning protection and traditional land use, but, with the exception of some relatively small and disjunct SSSIs, it is largely bereft of two key elements – wildlife and people. The RSPB has already made a significant start on changing this – at Vange Marshes – and we now have the exciting prospect – of protecting, creating and restoring habitats in a landscape for people to access and enjoy. It is a landscape that currently spans Basildon and Castle Point, with advanced plans for the future spread into Thurrock.

The South Essex Marshes are a highly visible component of the view from two of the major transport corridors – the A13 and C2C mainline railway. Indeed, the C2C line passes through the marshes themselves. This extensive green space forms an attractive backcloth to the subregion and is an important contributor to its improving image. The RSPB already works closely with C2C and is introducing on-train and website information about the South Essex and Rainham Marshes reserves. It is planned to extend this into information and interpretation available at the train stations, at Purfleet, Pitsea and Benfleet. The RSPB also plans a Green Transport Audit for our landholdings in South Essex, to inform decisions about improving transport links between our green spaces and the main transport corridors. An example, it is our intention to provide a new bus stop at West Canvey Marsh, to encourage the use of public transport and greener transport (cycling and walking).

Wat Tyler Country Park lies at the heart of the Living Landscape, providing a wealth of experience and activities for approximately 300,000 visitors currently each year. Significant investment in facilities and environmental improvements will enhance its delivery to wider audiences and will from a key entry point to the wider marshes. The Land Restoration Trust has acquired land at Vange Marsh and Canvey Wick – vital components of the landscape. Both sites will be managed by the RSPB and Canvey Wick – an iconic Thames Gateway site – will be managed in partnership with Buglife (the Invertebrate Conservation Trust).

There is a large farmland resource within the Living Landscape – grazing marsh which, where not designated, could benefit from enhanced management for wildlife and potentially public amenity and arable land. The landowners and farm managers can make significant contributions to creating additional benefits.

2. The vision

The vision is to enhance landscape of the South Essex Marshes to create a high quality environment, rich in wildlife and accessible to people, creating a Living Landscape which is resilient and sustainable and which will bring benefits for the environment, habitats and species, for people who live in and use the area, for the well being of the local community and for the local economy.

The *vision* is to deliver a range of benefits for wildlife, people and the local community:

- A landscape area of national and international conservation and heritage importance for its diverse habitats, associated important wildlife habitats and species that are flourishing in favourable condition as a result of good land management.
- Safeguarding UK and Essex Biodiversity Action Plan habitats and species as well as several nationally rare species within the Living Landscape Area.
- An exemplar of multifunctional green space where the many users from the local community are proud of the conservation and heritage value.

The delivery

The delivery of the vision is a multi-disciplinary approach such as direct land management for nature conservation and recreation, providing management advice, buying land, engaging the local community, providing information and education. This will involve working with a range of landowners, statutory bodies, local authorities, community groups, businesses and funding organisations.

3. Objectives

The vision will be achieved through the following objectives:

- Creating a large wetland flagship project.
- Managing and enhancing habitats to ensure they are of great importance for wildlife, locally, regionally and nationally.
- Improving the extent and quality of wetland, dry grassland, scrub and early stage successional habitats (including on formerly developed land), creating a more robust ecological unit.

- Improving physical access to and around the complex for the many existing and new users who value its natural character for outdoor recreation and study.
- Working with the local community to conserve and enhance wildlife in the wider countryside
- Inspiring, encouraging and supporting people to take action for wildlife.
- Providing management advice to farmers and land managers that would lead to enhancement of the landscape.
- Influencing the planning process to minimise adverse impacts of development and to maximise any benefits that can be achieved through planning gain.
- Developing management plans for different areas of land that recognise the need for revenue funding as well as one off capital investment.
- Working with local companies and businesses so the Living Landscape area benefits the local economy.

3.1 Wildlife targets

By 2014 we aim to achieve:

- The creation or enhancement of 800 hectares of functional wetland habitats
- The creation or enhancement of 400 hectares of functional dry grassland, scrub and early successional habitats, including the restoration and aftercare of a 280-hectare landfill site (from 2023)
- All sites to be in favourable conservation status
- Increased populations of breeding, wintering and passage waterfowl
- Increased populations, with wider distribution, of the significant invertebrate assemblages associated with the Thames terrace grasslands
- Enhanced biodiversity on agricultural land
- At Fobbing Marsh create distinctive hydrological units on site to wet up the area

3.2 People targets

By 2014 we aim to achieve:

- 400,000 annual visits to Wat Tyler Country Park
- Over 6,000 students engaged within formal environmental education, linked to the Primary and Secondary National Curriculum needs in the existing Wat Tyler-based programme and new initiatives.
- Over 500 students engaged within the formal environmental education linked to Advanced and further education requirements.
- Over 1000 students engaged within informal environmental education, such as school holiday activities, pre-school clubs and family days.
- Over 100 special needs students engaged with informal and formal education.

3.3 Local community targets

By 2014 we aim to achieve:

- 25,000 people engaging in a wide range of activities and events annually
- Over 100 volunteers supporting practical conservation work parties.
- Over 40 volunteers involved with health walks.
- Identify Rights of Way improvements and deliver improvements.
- Over 30 volunteers in activities such as education, media, marketing and conservation.
- Provide information about the area, its wildlife, history, access and educational opportunities, available in the form of leaflets, newsletters, displays, website, publications, events, community groups and through the Tourist Information Board.

3.4 Local economic targets

- Promote continued grazing economy, developing potential conservation grade products
- To enable enhanced nature conservation management, by attracting agri-environment grant:
- To promote the Wat Tyler Living Landscape area including all locations of local tourist interest using a Living Landscape guide map.
- To demonstrate the wider benefits of a high quality environment in the transformation of the sub-regional image and the benefits for existing business and future investment

4. Statement of ecological significance

Wat Tyler Complex ecological areas contains 1175.2 ha Local Wildlife Sites, 1300 ha nature reserves/SSSI. The main habitats are wetland, dry grassland, brownfield, intertidal, coppiced woodlands, ephemeral ponds and a network of hedgerows. In addition, approximately 400 ha of land is in an agri-environment scheme mostly existing ESA agreements. As ESA agreements end sites are being entered into HLS.

The area is made up of extensive fresh water and inter tidal SSSI and pSPA (potential). Fresh water sites are predominantly designated for aquatic invertebrates and botany. Inter tidal habitats are designated for wintering waders. SSSI citations are available from the Natural England Website.

Data sources for RSPB reserves are extensive and are held at the RSPB South Essex Marshes office. These include extensive monitoring records but also reports that informed planning application and these are listed below.

Group	Data source(s)
Vange Marsh	
Vascular Plants	Ken Adams (2005 & 2006)
Invertebrates	Peter Harvey (2005 & 2006)
Aquatic invertebrates	Colin Plant (2005)
Great crested newts	Ray Cranfield (2006)
Water voles	Essex Mammal Group (2005)
Vange Wick	
Vascular plants	Ken Adams (2005 & 2006)

Invertebrates	Peter Harvey (2005)
Aquatic invertebrates	Colin Plant (2005)
Water voles	Essex Mammal Group (2005)
West Canvey Marsh	
Vascular plants	Ken Adams (2006)
Invertebrates	Peter Harvey (2006)
Aquatic invertebrates	Colin Plant (2006)
Water voles	Darren Tansley (2006)
Great crested newt	Ray Cranfield (2007)
Bowers Marsh	
Vascular Plants	Scott Wilson 2009
Water Voles	Scott Wilson 2009
Badgers	Scott Wilson 2009
Bats	Scott Wilson 2009
Birds	RSPB 2009
Aquatic and terrestrial	Colin Plant 2009
invertebrates	
Amphibians	Scott Wilson 2009

For the RSPB reserve key species of conservation importance have been identified which are detailed in the table below.

Plants

Species	Popn. size	Status	Comments
Coastal Lowland wet grassland			
Slender hare's ear Buplerum tennuissimun			Restricted to coastal grasslands and upper saltmarsh. Likes trampled disturbed ground.
Sea clover Trifolium squasmosum			Found on dry coastal grassland banks. It favours clay soils.
Fenugreek Trifolium ornithopodiodes			A prostrate annual of dry, open gravely ground especially near the sea.
Divided sedge Carex divisa			A sedge of damp grass and marshes near the sea.

Spiked sedge	Found mainly on calcareous soils
Carex spicata	but found in damp grassy
	habitats.
Corn Parsley	Found in hedges and grassy
Petroselinum segetum	places near the coast.
Upper Saltmarsh/ seawalls	
Small red goosefoot	Found growing on drying mud
Chenopodium chenepodiodes	on saltmarshes.
Sea barley	A plant that is found growing on
Hordium marinum	bare ground and grassy places in
	coastal regions.
Sea wormwood	This species tolerates sea spray
Seriphidium maritimum	and occasional salt water
r	inundation whilst growing on
	saltmarshes and seawalls.
Saltmarsh	
Saltmarsh Goosefoot	Found growing on drying mud
Chenopodium chenepodiodes	on saltmarshes.
Sea rush	A rush that favours drier
Juncus maritimus	saltmarsh and brackish meadows
	inland.
Lax flowered sea lavender	A plant of upper saltmarsh
Limonium himule	

Breeding birds

Species	Popn. Size*	Status	Comments
Reebed			
Reed bunting	12 pairs	Red list, UK BAP	
Lagoons			
Avocet	6 pairs	Regionally important	
Lapwing	2 pairs	Regionally important, FDiv,	
Little ringed plover	2 pairs	Regionally important	
Lowland dry grassland grassland Skylark	2 pairs		

Lowland wet grassland	•		
Skylark	28 pairs	UK BAP	
Grey partridge	1 pair	UK BAP	
Lapwing	6 pairs	Regionally important, FDiv	
Redshank	3 pairs	FDiv	
Pochard	1 pair		
Shoveler	1 pair		
Avocet	1 pair		
Saltmarsh			
Redshank	20 pairs	Regionally important, FDiv	

^{* 2006} breeding birds data

Non-breeding birds

Species	Popn	Status	Comments
	Size*		
Lagoons			
Black tailed godwit	80	Regionally important	Nationally important threshold is 150
Bar tailed godwit	15		
Avocet	120		
Wigeon	350	Regionally important	
Shoveler	93	Regionally important	Nationally important threshold is 100
Teal	250	Regionally important	
Curlew	80		
Reedbed			
Bearded tit	10	Regionally important	
Lowland wet grassland			
Lapwing	700	Regionally important	
Redshank	20		
Curlew	20		

^{**} Mean of peak winter counts for 2006/07

Other Fauna

Species	Popn.	Status	Comments
	size		
Mammals			
Water vole	?	UK BAP	
Brown hare	10	UK BAP,	
		regionally	
		important	
Otter	1	UK BAP,	Field signs observed in creeks
		regionally	
		important	
Reptiles			
Adder			
Amphibians	•		
Great crested newt			

Invertebrates			
Reedbed			
Lygus pratensis		RDB3	This bug species is considered rare and is usually found associated with woodland and woodland ride/edge. There have been previous records not connected to woodland habitat, as is the case on Vange Marsh.
Gracilia minuta	RDB2		
Malachius vulneratus	RDB3		Rare green malachite beetle confined to the saltmarsh around the Thames estuary
Eurina lurida	RDB3		A small fly recorded on coastal marshes in England, South Wales and Scotland (Dumfriesshire).
Hybomitra expollicata	RDB2		The Striped horsefly, which is found on saltmarsh habitat.
Lygus pratensis	DDD		This bug species is considered rare and is usually found associated to woodland and woodland ride/edge. There have been previous records not connected to woodland habitat
Lowland wet grassland	RDB3		as is the case West Canvey Marshes.
Lestes dryas	RDB2		Scarce emerald damselfly is a rare and local species that has strongholds on coastal and estuarine marshes.
Dry grassland	1		
Andrena labialis	UK BAP, Local		A bee has shown a marked decline nationally. It is a mesotrophic meadow species associated with legumes.
Bombus humilis	UK BAP		The brown banded carder bee nests on the surface of the ground at the long vegetation associated with grassland.
Bombus ruderarius	UK BAP		A nationally scarce lowland species of bumblebee found in southern England
Bombus sylvarum	UK BAP		The shrill carder bee has declined due to a loss of herb-rich grassland.
Passaloecus clypealis	RDB3		This species is associated with

		<i>Phragmites</i> growing in relatively dry conditions.
Philanthus triangulum		This wasp was found in sandy
		habitats but has seen an expansion
		in range possibly driven by climate
	RDB2	change.

5. Ecosystem services within the Living Landscape

Natural ecosystems are important to the health of the environment and hence to human populations. Healthy ecosystems assist in maintaining the quality of air, the quality of surface and underground water, the quality of soils. Access to natural ecosystems are also important for the physical and mental health of human populations, particularly by enabling quiet recreation. Thus ecosystems are important to the quality of life of human populations.

The area covered by each of the main habitats and land uses has been estimated from Map 1. These habitats and land uses offer different values as ecosystem services.

Attempts are being made to put a value on these ecosystem services and the best current estimates of the existing value for their ecosystem services are:

450 ha of existing wetland: at £396,000 per hectare = £178,200,000 per year
80 ha of existing secondary woodland: at £36,000 per hectare = £2,880,000 per year
480 ha of existing grasslands: at £36,000 per hectare = £ 17,280,000 per year
30 ha of agricultural habitat: at £16,800 per hectare = £504,000 per year

The estimated value of the new areas for their ecosystem services are: £198,964,000

- An increase of wetland by 700 ha = £277,200,000 per year
- An increase of dry grassland/Thames terrace by 280 ha = £10,080,000 per year

This gives an indication of the value of these habitats and land uses to the community as a whole rather than just to the landowner.

	Low Estimates H		High Estimates		Average Estimates	
Ecosystem Services	£ per year per acre	£ per year per hectare	£ per year per acre	£ per year per hectare	£ per year per acre	£ per year per hectare
Woodland	£8,000	£19,200	£30,000	£72,000	£19,000	£45,600
Grassland / shrub	£6,500	£15,600	£24,500	£58,800	£15,000	£36,000
Agriculture / pasture	£3,250	£7,800	£11,500	£27,600	£7,000	£16,800
Urban	£ 750	£1,800	£4,000	£9,600	£2,000	£4,800

River, streams, ponds	£1,500	£3,600	£10,000	£24,000	£6,000	£14,400
Wetland	£80,000	£192,000	£250,000	£600,000	£165,000	£396,000
Coastal	£18,000	£43,200	£148,000	£355,000	£83,000	£199,000

6. Resources required to deliver the Living Landscape

The land in RSPB management will be largely in a maintenance regime by 2014, although the 280-hectare landfill site will not come under active management until 2023. Initial significant investment (led by the RSPB, Land Restoration Trust and the local authorities) in land acquisition, habitat and visitor infrastructure creation, regeneration of existing assets and building staff and volunteer capacity will be completed by 2012 – approximately £25 million. Annual maintenance and development costs for the RSPB operation are likely to be in the region of £0.5 – 1 million per annum. Agri-environment schemes can provide grants for optimising the management of farmland for wildlife and public amenity. Wat Tyler Country Park is a major operation requiring ongoing resources, including those delivered by its business activities.

6.1 Projects to meet wildlife targets

- 1. The management of all SSSIs to maintain favourable condition
- 2. All farmland to be managed for wildlife under agri-environment schemes
- 3. Wetland creation and restoration on 800 ha
- 4. Restoration of former landfill sites
- 5. Management of brownfield sites the former county tip and the untidy industries site, Basildon especially for their invertebrate interest
- 6. Promotion of the importance of wildlife sites via events, interpretation and visitor centres
- 7. Essex Wildlife Trust at Fobbing Marsh would like to create distinctive hydrological units on site to wet up the area and this could be achieved through bunding the area and creating ditches throughout the marsh.

6.2 Projects to meet people targets

In addition to key initiatives with the Living Landscape – notably those based at Wat Tyler Country Park – the RSPB is engaged in significant community-based activities, as part of the following programme. This programme began in 2005 and continues with new funding from May 2009 to 2012:

The South Essex People and Wildlife Programme Executive Summary

The RSPB is a major manager of high quality green space - rich in wildlife and accessible to people - across the Thames Gateway Growth Area. In South Essex, we have taken on the management of 1040 hectares of new green space since 2005 - a fabulous new resource for local people and visitors and making a real contribution, as we develop it, to the future image of the area and the health and wellbeing of its people. Our work in South Essex complements our

activities elsewhere in the Gateway and we work particularly closely with our team at Rainham Marshes.

Since July 2005, the RSPB has piloted a community engagement project across the South Essex sub-region. A dynamic team, comprising three RSPB staff and twenty volunteers, based at the Wat Tyler Country Park, (WTCP) has trialled a range of environmentally- based community events, activities and outreach work. In the early stages of the pilot, the team converted a barn into a visitor centre, integrating with the existing park provision and benefiting people from across South Essex.

Throughout the pilot phase, the RSPB has delivered more than 400 days of events, attracting more than 80,000 people - right across South Essex, from Coalhouse Fort to Southend pier. The RSPB Bird Friendly Schools project; linking trained volunteers with local schools to encourage learning about birds has also been piloted with approximately eighteen schools. Our presence and media coverage has raised the profile of the area, our work and that of our partners. The pilot has enabled us to engage directly with local community groups and organisations, assess the level of need, and build our confidence to elevate the pilot to a new invigorating project.

Wat Tyler Country Park: Basildon Council is delivering a major regeneration programme here, creating a new range of facilities for the current visitors and encouraging an increase in visitor numbers to 400,000 pa.

Key Aim (vision statement)

The RSPB South Essex People and Wildlife programme will create a new engagement with the natural world and access to high quality green space for all - placing wildlife, a healthy environment and active communities at the heart of sustainable living and regeneration in the Thames Gateway; from the doorstep to the river.

Next Steps

The RSPB is rolling out a new community programme designed to deliver inspiring education, volunteering and community engagement projects, enabling a greater diversity of people to have improved opportunities to experience the natural environment. In turn, these projects will deliver new access to, and interpretation of, the new RSPB green space and at locations across South Essex, with our partners. These new community projects are integral to the RSPB's wider strategic programme to deliver high quality green space on intimate and landscape scales across the Thames Gateway.

The RSPB South Essex People and Wildlife programme is supported by Natural England through Access to Nature as part of the Big Lottery Fund's Changing Spaces Programme. Through this fund the RSPB are developing a new team of dedicated project staff to manage and deliver this inspiring community engagement programme. The new roles will fundamentally increase our capacity to link with communities and engage them with the natural environment for lifelong learning, health, regeneration and environmental improvement. Our new community partnerships will work to generate sustained long-term access to nature.

The programme will offer opportunities from Early Years through to an adult audience, with a focus throughout on linking formal education work in schools with family learning, volunteering and creating exciting opportunities for teenagers.

6.3 Projects to meet local community targets

Project	Annual target
Community talks	30
Attendees at talks	600
Visitors to centre	15000
Visitors to new greenspace	10000
Events/guided walks at Wat Tyler	90
Attendees	650
Outreach events	50
Attendees	8750
Create wildlife friendly space	10
Family open days	3
Attendees	200
Community groups visiting Wat Tyler	10
Attendees	150
Family learning week	2
Attendees	350
New volunteers	50
Bird Friendly Schools	20
Participants	600
Partnerships – voluntary, corporate	15
Partnerships – schools	20
Partnerships – community groups	10
Healthy Walks	12
Adult learning event	5
Participants	50

6.4 Projects to meet local economic targets

- Encourage farmers to take up agri-environment schemes on their land
- Promote new greenspaces and Wat Tyler Country Park as destinations for local people and tourists
- Consider marketing marshes-reared beef as conservation grade products
- Promote Wat Tyler Country Park as destination for weddings, community and business meetings and events, etc
- Initiate retail sales at the RSPB visitor centre
- Ensure that the enhanced environmental quality brought about by increased greenspace provision is promoted as a new image for the sub-region, benefiting inward investment

Figure 1a: Current position – designated land

Figure 1b: Current position – land in conservation management

Figure 2: Agri-environment Schemes

Figure 3: Accessible Natural Greenspace Standard

Figure 4: Long Term Vision (Map to Follow)

31st March 2010







