

# NATURAL AND BUILT ENVIRONMENT - FACT SHEET 3

## Introduction

- The National Planning Policy Framework states that the planning system should contribute to and enhance the natural and local environment as well as ensure the conservation and enjoyment of the historic environment.
- This fact sheet examines the progress on environmental and recreational schemes/facilities and assesses how effective the Boston Borough Local Plan (1999) and South Holland Local Plan (2006) are in protecting the natural and built environment.

## What has been achieved?

**Biodiversity:** We value biodiversity because of the ecosystem services it provides, such as flood defence and clean water; and the contribution that it makes to well-being and sense of place. The protection and enhancement of biodiversity in South East Lincolnshire is therefore imperative.

**European or International Designations:** The Wash - which has Ramsar, Special Protection Area (SPA), and Special Area of Conservation (SAC) designation - adjoins the areas of Boston Borough Council and South Holland District Council. Ramsar's, SPA's and SAC's are designated under the Ramsar Convention of Wetlands of International Importance, EU Birds Directive 79/409/EEC and EU Habitats Directive 92/43/EEC respectively.

### *National Designations:*

- The Wash is also protected as a Site of Special Scientific Interest (SSSI) and National Nature Reserve (NNR). Cowbit Wash and Surfleet Lows SSSI's are also located in South East Lincolnshire. SSSI's are protected under the *Wildlife and Countryside Act 1981* and their condition is monitored by Natural England. The Wash SSSI is currently deemed to be 67.98% favourable, 31.61% unfavourable – recovering and 0.41% unfavourable – declining. However, both Cowbit Wash and Surfleet Lows SSSI's are considered to be in favourable condition.
- There are three Local Nature Reserves in the area – The Vernatts, Havenside Country Park and The Shrubberies (LNRs are designated under Section 21 of the *National Parks and Access to Countryside Act 1949* by the relevant local authority).
- Frampton Marsh and Freiston Shore are Royal Society for the Protection of Birds (RSPB) reserves.

**Non-Statutory sites:** There are a number of Local Wildlife Sites (LWS) that have been designated by the two authorities (coordinated by the Greater Lincolnshire Nature Partnership). At present, South East Lincolnshire has 81 Local Wildlife Sites, 69 (85%) of which are considered to be in positive management.

**Heritage Assets:** South East Lincolnshire retains a rich and irreplaceable heritage from the generations of people who have made the area their home. In 2014/15, the area contained the following designated historic assets:

- 2 Registered Parks and Gardens
- 24 Conservation Areas
- 43 Scheduled Ancient Monuments
- 1,021 Listed Buildings (45 Grade I, 60 Grade II\* and 916 Grade II)

There are many pressures on the historic environment, in both urban and rural areas, particularly from development. As a consequence of these pressures, the area's assets are not all in an acceptable condition. The table below identifies the number and percentage of historic assets on Historic England's *Heritage at Risk Register* 2015. A notable point is that the percentage of conservation areas, scheduled monuments and Grade I and II\* listed buildings 'at risk' in South East Lincolnshire is above the national average. However, the percentage of registered parks and gardens 'at risk' is below the national average.

	Boston Borough	South Holland District	England
Registered Parks and Gardens (Number and %)	0	0	94 (5.8%)
Conservation Areas (Number and %)	2 (18%)	2 (15%)	505 (6.1%)
Scheduled Ancient Monuments (Number and %)	2 (14%)	4 (14%)	2,700 (13.6%)
Grade I and II* Listed Buildings (including places of worship at risk) (Number and %)	6 (13%)	7 (12%)	1,100 (3.5%)

*Source: Historic England*

**Open Space and Outdoor Recreation:** Recreational facilities, including outdoor play space, informal open space and supporting recreation facilities, e.g. club houses and changing rooms, are not only important to local communities for their recreational amenity but also for their impact on the quality of the environment. In high density new housing developments where gardens are smaller, open space and recreation facilities are particularly important. Both Councils therefore require developers to either contribute towards providing new open space within their development or – mostly in the case of smaller sites - to pay a financial contribution to be used to enhance the quantity and/or quality of open space in the locality.

#### Public Open Space Sites in South East Lincolnshire

Type	Number of Sites	Comment
Parks and gardens	6	
Natural and semi natural greenspace	40	This includes recently planted woodland.
Amenity greenspace	443	Much of this is small grassed areas on housing developments
Provision for children and young People	131	These are equipped play grounds

Outdoor sports facilities	164	This includes school grounds that are not open to the public.
Allotments	18	
Cemeteries and Churchyards	78	
Civic Space	1	
Green Corridors		536 Km of Public Rights of Way <sup>1</sup>
Total	880	

Source: Boston Borough Council

**Climate Change Mitigation:** To meet the challenges of climate change, both Councils are committed to ensuring new developments seek ways to reduce CO<sub>2</sub> emissions and increase the use and supply of renewable energy.

The most recent figures (for 2013) show that Boston Borough's total CO<sub>2</sub> emissions were 8.3 tonnes per capita whilst South Holland's stood at 7.6. This was broadly similar to the emissions for other districts in Lincolnshire. The table below shows that both areas recorded a fall in emissions between 2005 and 2009 before fluctuating through to 2013.

#### South East Lincolnshire CO<sub>2</sub> Emissions 2005-2013

	Industry and Commercial	Domestic	Transport	Total	Population ('000s, mid-year estimate)	Per Capita Emissions (t)
<b>BBC 2005</b>	188	157	140	485	58.6	8.3
<b>BBC 2006</b>	186	158	141	485	59.8	8.2
<b>BBC 2007</b>	182	155	139	476	61	7.8
<b>BBC 2008</b>	182	154	133	471	62.2	7.6
<b>BBC 2009</b>	167	140	128	435	63.4	6.9
<b>BBC 2010</b>	174	151	128	453	64.5	7.1
<b>BBC 2011</b>	150	132	127	409	64.6	6.4
<b>BBC 2012</b>	165	140	125	430	64.8	6.7
<b>BBC 2013</b>	157	136	124	417	65.9	6.4
<b>SHDC 2005</b>	288	234	215	737	81.7	9.1
<b>SHDC 2006</b>	278	229	219	726	83.2	8.9
<b>SHDC 2007</b>	274	226	222	722	84.5	8.7
<b>SHDC 2008</b>	283	224	211	718	86.0	8.5
<b>SHDC 2009</b>	254	204	204	662	87.0	7.8
<b>SHDC 2010</b>	259	220	207	686	87.9	8.0
<b>SHDC 2011</b>	235	192	203	630	88.4	7.3
<b>SHDC 2012</b>	276	204	198	678	88.5	7.8
<b>SHDC 2013</b>	268	196	200	664	89.2	7.6

Source: Department of Energy and Climate Change

<sup>1</sup> Data from Lincolnshire County Council during the SA Scoping consultation exercise

The following table identifies the amount of renewable energy developments/installations that are existing, proposed with planning permission and proposed without planning permission in the South East Lincolnshire area. It provides details on the potential capacity (MW), homes supplied and electricity generated (GWh)

### Existing and Projected Renewable Energy Development

Place	Capacity MW	Number of homes supplied	CO2 Tonnes saved	Annual electricity generated GWh
<b>Existing</b>				
Bicker wind farm <sup>i</sup>	26.0	14,592	37,466	61.7
Deeping St Nicholas wind farm <sup>ii</sup>	16.0	8,980	23,056	37.9
Gedney wind farm <sup>iii</sup>	12.0	6,735	17,292	28.5
Tydd St Mary wind farm <sup>iv</sup>	14.0	10,000	Unknown	33.1 <sup>v</sup>
Boston Landfill Scheme	1.3			
Staples anaerobic digester <sup>vi</sup>	3.0	N/A	Unknown	23.7
Long Sutton PV <sup>vii</sup>	2.75	602 <sup>viii</sup>	1,028 <sup>ix</sup>	2.38 <sup>x</sup>
Fen Road <sup>xi</sup>	1.5	300	559	1.3
Leverton Ings <sup>xii</sup>	12.0	3,500	5,800	10.4
Nowhere Farm (under construction) <sup>xiii</sup>	10.0	1,600	3,732	8.68
Grange Farm (under construction) <sup>xiv</sup>	10.0	1,600	3,732	8.68
Installed PV under FIT <sup>xv</sup>	8.45	1,237	2,098	4.89
Installed wind under FIT <sup>xv</sup>	0.22	137	Unknown	0.52 <sup>xvi</sup>
Installed Micro CHP <sup>xv</sup>	0.001	Unknown	Unknown	Unknown
<b>SUB TOTAL</b>	<b>117.22</b>	<b>49,283</b>	<b>94,763</b>	<b>221.75</b>
<b>Proposed with Planning Permission</b>				
Boston gasification plant <sup>xvii</sup>	10.5	10,500	Unknown	88.2 <sup>xviii</sup>
Decoy Farm (AD) <sup>xix</sup>	1.8	Unknown	Unknown	Unknown
Friiths Solar <sup>xx</sup>	28.0	6,000	1,045	24.3
Fendyke Solar Farm <sup>xxi</sup>	17.6	3,410	9,858	16.7
Decoy Farm (Solar) <sup>xxii</sup>	13.8	3,100	7,590	12.0
Long Sutton PV <sup>xxiii</sup>	0.79	175	298	0.69
<b>SUB TOTAL</b>	<b>72.49</b>	<b>23,185</b>	<b>18,791</b>	<b>141.89</b>
Domestic PV	133.7	29,337	43,430	116.0
<b>Proposed without planning permission</b>				
Sutton Bridge renewable energy park <sup>xxiv</sup>	48.0	55,000	140,000	403.2 <sup>xxv</sup>
Holbeach Marsh windfarm <sup>xxvi</sup>	16.0	7,500	21,024	37.8
Delph Wind Farm <sup>xxvii</sup>	18.0	8,940	mid point 24,000	41.9 <sup>v</sup>
<b>SUB TOTAL</b>	<b>82.0</b>	<b>71,440</b>	<b>185,024</b>	<b>482.9</b>
<b>Total</b>	<b>405.41</b>	<b>173,245</b>	<b>342,008</b>	<b>962.54</b>

Source: See Endnotes

**Flood Risk:** The Lincolnshire Coastal Study (2010) cautioned against allowing major housing development in the area's Red, Orange and Yellow (ROY) flood hazard zones. The following table provides a description of the five flood-hazard zones used in the Lincolnshire Coastal Study.

#### Flood hazard classification

Degree of coastal flood hazard	Hazard Rating	Colour on mapping	Description of hazard
None	Little or no hazard	White	Little or no hazard (from coastal flooding)
Low	Low hazard	Green	Caution, low risk to people
Moderate	Danger to some	Yellow	Risk to the vulnerable, such as children, the elderly and the infirm
Significant	Danger for most	Orange	Risk to most, including the general public
Extreme	Danger for all	Red	Extreme hazard, danger to all, including the emergency services

*Source: Defra and Environment Agency, 2008*

In 2014/15, there were multiple planning applications for the development of residential properties granted permission within South East Lincolnshire's ROY flood hazard zones. The table below identifies the number of housing permissions and completions across South East Lincolnshire in all the different zones for 2014/15.

	Permissions BBC	Permissions SHDC	Total	Completions BBC	Completions SHDC	Total
<b>White</b>	16	305	321	1	234	235
<b>Green</b>	2	1	3	5	2	7
<b>Yellow</b>	150	2	152	4	4	8
<b>Orange</b>	602	50	652	28	3	31
<b>Red</b>	179	4	183	82	12	94
<b>Total</b>	949	362	1,311	120	255	375

Flood hazard mapping undertaken as part of the Lincolnshire Coastal Study (2010) revealed that very little of Boston Borough, especially Boston town itself and its immediate environs, is free from designation as either a red, orange or yellow flood hazard zone. In the case of South Holland, over half of the district is free from these three designations. It is therefore unsurprising that the majority of permissions and completions within ROY zones in the area in 2014/15 were in Boston Borough.

The table below shows the number of new planning permissions that were granted contrary to Environment Agency advice during 2014/15.

## Number of planning permissions granted contrary to Environment Agency Advice

	Flooding	Water Quality	Total
<b>Boston Borough</b>	0	0	0
<b>South Holland District</b>	6	0	6

Source: Environment Agency

Permission was granted for 6 developments in South Holland District contrary to Environment Agency advice whilst none were granted in Boston Borough.

<sup>i</sup> [http://www.windprospect.com/wf\\_project?wf=19&p=services&c=engineering\\_current&pa=e](http://www.windprospect.com/wf_project?wf=19&p=services&c=engineering_current&pa=e) accessed 300415

<sup>ii</sup> [http://www.windprospect.com/wf\\_project?wf=23&p=services&c=engineering\\_current&pa=e](http://www.windprospect.com/wf_project?wf=23&p=services&c=engineering_current&pa=e) accessed 300415

<sup>iii</sup> [http://www.windprospect.com/wf\\_project?wf=56&p=services&c=engineering\\_current&pa=e](http://www.windprospect.com/wf_project?wf=56&p=services&c=engineering_current&pa=e) accessed 300415

<sup>iv</sup> <http://www.the-grange-wind-farm.co.uk/news.aspx> accessed 300415

<sup>v</sup> Calculated  $14 \times 24 \times 365 \times 27\% / 1000$  as the Bicker, Deeping and Gedney stations appear 27% efficient.

<sup>vi</sup> Staples agent advised on 120612 that plant capacity is just under 3MW and produces 23,652 MWh/year of electricity and a similar amount of heat.

<sup>vii</sup> <http://www.sholland.gov.uk/doitonline/plandev/details.aspx?oref=h11-0206-11> &

<http://www.sholland.gov.uk/doitonline/plandev/details.aspx?oref=h11-0817-10> accessed 300415

<sup>viii</sup> Annual generation in KWh /3954KWh/yr for East Midlands Table 2 page 10 from

[http://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/65999/7357-subnat-elec-cons-stats-2011-factsheet.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/65999/7357-subnat-elec-cons-stats-2011-factsheet.pdf) accessed 300415

<sup>ix</sup> Annual generation in KWh x 0.43 kg / KWh from <http://www.pluginthesun.co.uk/fag/#carbon-dioxide> accessed 300415

<sup>x</sup> [http://www.energygrants.co.uk/solar\\_power/solar-pv-feed-in-tariff-calculator.html#anchor](http://www.energygrants.co.uk/solar_power/solar-pv-feed-in-tariff-calculator.html#anchor) select region 3 and input figure as kw accessed 300415

<sup>xi</sup> <http://www.boston.gov.uk/index.aspx?articleid=6208&ApplicationNumber=B/13/0345> accessed 300415

<sup>xii</sup> [http://www.boston.gov.uk/PlanningDocs/BBC/B-13-0306/Design\\_and\\_Access.pdf](http://www.boston.gov.uk/PlanningDocs/BBC/B-13-0306/Design_and_Access.pdf) accessed 300415

<sup>xiii</sup> [http://www.boston.gov.uk/PlanningDocs/BBC/B-14-](http://www.boston.gov.uk/PlanningDocs/BBC/B-14-0267/NowhereFarmPV_ArrayNr_BostonPlanningAccessStatementFINAL.pdf)

[0267/NowhereFarmPV\\_ArrayNr\\_BostonPlanningAccessStatementFINAL.pdf](http://www.boston.gov.uk/PlanningDocs/BBC/B-14-0267/NowhereFarmPV_ArrayNr_BostonPlanningAccessStatementFINAL.pdf) accessed 300415

<sup>xiv</sup> [http://www.sholland.gov.uk/PublishedRecords/PBC/DC/APP/6/H20-0937-13-H20-0937-13\\_V1116200204112013\\_6DNA.pdf](http://www.sholland.gov.uk/PublishedRecords/PBC/DC/APP/6/H20-0937-13-H20-0937-13_V1116200204112013_6DNA.pdf) accessed 300415. Owing to no homes, carbon dioxide and annual generation data, are using the Nowhere Farm data as an estimate, because they are same capacity

<sup>xv</sup> <https://www.gov.uk/government/statistical-data-sets/sub-regional-feed-in-tariffs-confirmed-on-the-cfr-statistics> accessed 300415

<sup>xvi</sup> Calculated  $0.22 \times 24 \times 365 \times 27\% / 1000$  as the Bicker, Deeping and Gedney stations appear 27% efficient.

<sup>xvii</sup> <http://www.boston.gov.uk/index.aspx?articleid=3567> B/09/0477 accessed 300415

<sup>xviii</sup> Calculated  $10.5 \times 24 \times 350$  (Operating days)

<sup>xix</sup> <http://www.sholland.gov.uk/PublishedRecords/PBC/DC/APP/6/81cb6d70-18d5-11e0-a02b-005056960035.pdf> accessed 300415

<sup>xx</sup> <http://www.boston.gov.uk/PlanningDocs/BBC/B-14-0287/FrithsFarmPVArrayNrBostonPlanningDesignAccessStatement.pdf> accessed 300415

<sup>xxi</sup> <http://www.sholland.gov.uk/PublishedRecords/PBC/DC/APP/6/H20-0764-14-Design%20and%20Access%20Statement%20-%20REV%201.pdf> accessed 300415

<sup>xxii</sup> [http://www.sholland.gov.uk/PublishedRecords/PBC/DC/APP/6/H02-0147-14-H02-0147-14\\_V415200420022014\\_6DNA.pdf](http://www.sholland.gov.uk/PublishedRecords/PBC/DC/APP/6/H02-0147-14-H02-0147-14_V415200420022014_6DNA.pdf) accessed 300415. Note the CO2 saving has been divided by 25years for an annual figure.

<sup>xxiii</sup> <http://www.sholland.gov.uk/doitonline/plandev/details.aspx?oref=h11-0126-11> accessed 300415

<sup>xxiv</sup> [http://www.sholland.gov.uk/PublishedRecords/PBC/DC/APP/6/H18-0723-12-H18-0723-12\\_V1810300007092012\\_6SUP.pdf](http://www.sholland.gov.uk/PublishedRecords/PBC/DC/APP/6/H18-0723-12-H18-0723-12_V1810300007092012_6SUP.pdf) accessed 300415

<sup>xxv</sup> Calculated  $48 \times 24 \times 350$  to allow for some down time each year.

<sup>xxvi</sup> <http://www.holbeachmarshwindfarm.com/about.asp> accessed 300415

<sup>xxvii</sup> [http://www.sholland.gov.uk/PublishedRecords/PBC/DC/APP/6/H14-0110-13-H14-0110-13\\_V914000815022013\\_6EIA.pdf](http://www.sholland.gov.uk/PublishedRecords/PBC/DC/APP/6/H14-0110-13-H14-0110-13_V914000815022013_6EIA.pdf) accessed 300415