Department
for Environment
Food & Rural Affairs

England Natural Environment Indicators

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Cover photograph:	Grasmere in the Lake District National Park. © Martin Fowell 2010

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Introduction

The Natural Environment White Paper (NEWP) was published in 2011 by the Coalition Government. It set out the Government's strategy for valuing nature in our society and ensuring that it is available for use by future generations. The White Paper contained 92 commitments. The England Natural Environment Indicators (ENEI) publication has been produced under commitment 90 of the White Paper:

"We will develop a set of key indicators...to track progress on the ambitions of this White Paper. These will include a new, compact set of biodiversity indicators for the England Biodiversity Strategy. We will consult on them and finalise them by Spring 2012."

The purpose of the ENEIs is to track progress against the broad ambitions of the White Paper, to communicate this to stakeholders and interested users and to provide a robust evidence base on which to base future policy interventions. These indicators draw on other indicator sets produced for various reporting purposes including UK and England Biodiversity Indicators. Where appropriate, links are provided to further data, charts and background information in other indicator publications[1].

The Government is currently developing a 25 year plan for the environment in line with its manifesto commitment. The plan will draw on the information provided in these indicators and we will work to align the indicators with the needs of the new plan. Therefore, this is an interim report providing an overview of progress on the current England Natural Environment Indicators[2].

1 Links were correct at time of publishing

2 An Indicator for Ease of access to local woodland, green space and countryside, which was under development last year and has not been developed further since and the international and EU section which was not assessed are not included in this interim publication.

Traffic Light Assessment Methodology

Each indicator is composed of one or more measures which will show trends over time. Several indicators are represented by a single measure, but where data cannot be combined logically, indicators have more than one measure. Each measure is summarised or assessed separately using a set of 'traffic lights'. The traffic lights show change over time. They do not show whether the measure has reached any published or implied targets or whether the status is 'good' or 'bad'.

The traffic lights are determined by identifying a period over which the change is to be assessed and comparing the value of the measure in the base or start year with the value in the end year.

Improving

Little or no overall change

Deteriorating

Not yet assessed due to insufficient or no comparable data

Where possible the assessment has been made by evaluating trends using statistical analysis techniques. The assessment may be made by Defra statisticians in collaboration with the data providers, or undertaken by the data providers themselves. A green or red traffic light is only applied when there is sufficient confidence that the change is statistically significant and not simply a product of random fluctuations.

For some indicators, it is not possible to formally determine statistical significance and in such cases the assessment has been made by comparing the difference between the value of the measure in the base or start year and the value in the end year against a 'rule of thumb' threshold. The standard threshold used is three percent. Where the data allow it, a three year average is used to calculate the base year, to reduce the likelihood of any unusual year(s) unduly influencing the assessment. Where an indicator value has changed by less than the threshold of three per cent, the traffic light has been set at amber. The choice of three percent as the threshold is arbitrary but is commonly used across other Government indicators and use of this approach is kept under review

The traffic lights only reflect the overall change in the measure from the base to latest year and do not reflect fluctuations during the intervening years.

Where data are available, two assessment periods have been used:

1. Long-term – an assessment of change since the earliest date for which data are available. If the data run is for less than ten years a long-term assessment is not made.

2. Short-term – an assessment of change over the latest five years. In a minority of cases the short term assessment has been carried out over a shorter time period, where the earliest data point is within the past five years but where statistical analysis allows a robust assessment of change over that time.

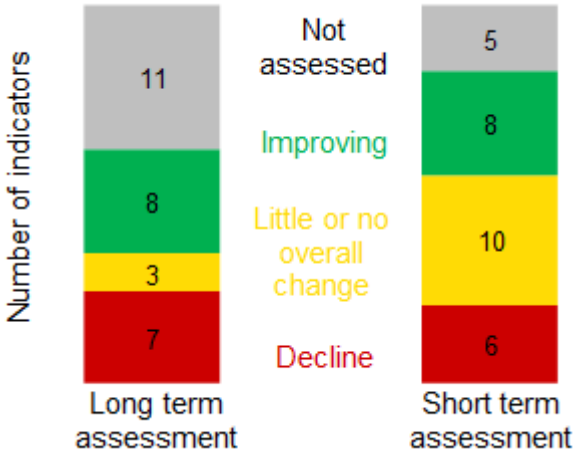
The individual indicators also have a third marker showing the direction of change in the last year. This period is too short for a meaningful assessment. However, when it exceeds a one per cent threshold, the direction of change is given simply as an acknowledgement of very recent trends and as a possible early indication of emerging trends.

Overview

There are 29 measures listed. Of those assessed for long term change (a period of 10 years or more), 61% have showed improvement or stayed the same. More indicators are able to be assessed in the short term, of these, 75% have showed improvement or stayed the same.

The chart below shows the number of indicators given each assessment. Although a similar number of indicators are assessed as declining both in the long term and the short term, these are not the same indicators and the chart masks differing trends in individual indicators.

Figure 1: A summary of the long and short term assessments



For example, the abundance and diversity of woodland birds and butterflies of the wider countryside in woodland were both assessed as declining over the long term but have levelled off or increased in recent years. The same trend is seen in the relative abundance and distribution of priority species and marine litter. Two indicators have shown decline over both the long and short term: breeding farmland birds, and butterflies of the wider countryside on farmland. There are also two indicators which show little change over the long term but have started to decline in the short term, wintering water birds and conservation volunteering. Sustainable fisheries, forest carbon stocks and raw material consumption have all improved consistently in both the long term and the short term. Detail on the trends and an assessment of each indicator is given in the following sections.

1. Species in the Wider Countryside

Statistics on the populations of birds, butterflies and bats are used to reflect broader biodiversity changes in the farmland, woodland, wetland and sea environments.

Farmland

In 2014, the breeding farmland bird index in England reached its second lowest recorded level, 56 per cent lower than its level in 1970. While the largest declines in farmland bird populations occurred between the late seventies and the early nineties, there has been a significant decline of eight per cent between 2008 and 2013. Since 1990, butterfly numbers on farmland have fallen by 27 per cent, reaching a historical low point in 2012. Although there was some increase in 2013 and 2014, overall, the underlying smoothed trend has shown a significant decline since 2009.

Woodland

In 2014, the breeding woodland bird index in England was 23 per cent lower than its 1970 level – up slightly from the lowest level recorded in 2013. The index has been relatively stable in recent years. Since 1990 butterfly numbers in woodland have fallen by 51 per cent, reaching a historical low point in 2012. Butterfly numbers vary from year to year and statistical analysis of the underlying smoothed trend shows no overall change since 2009.

Wetland

In 2014, populations of breeding wetland birds in England were four per cent lower than at the start of the time series in 1975 but the smoothed index showed a statistically significant decline of 10 per cent between 2008 and 2013. The smoothed wintering waterbirds index showed a decline of five per cent over the short term between 2007/08 and 2012/13, but was still higher that the 1975/76 baseline.

Sea

In 2014, the breeding seabird index in England was 16 per cent higher than its 1986 baseline level. The index has shown negligible short term change.

A more detailed analysis and further background information is included within the England Biodiversity Indicators National Statistics publication.

Indicator Assessment

Assessment of change in abundance and diversity of species in the wider countryside			
	Long term	**Short term**	**Latest year**
Breeding farmland birds	1970-2013	2008-2013	No change (2014)
Butterflies of the wider countryside on farmland	1990-2014	2009-2014	Decreased (2014)
Widespread bats	1999-2013	2008-2013	Decreased (2014)
Breeding woodland birds	1970-2013	2008-2013	Increased (2014)
Butterflies of the wider countryside in woodland	1990-2014	2009-2014	Decreased (2014)
Breeding wetland birds	1975-2012	2007-2012	No change (2014)
Wintering water birds	1975/6-2012/13	2007/08–2012/13	No change (2013/14)
Breeding seabirds	1986-2013	2008-2013	Increase (2014)

Links to data and further information

Organisation	Subject
Defra	England Biodiversity Indicators Populations of wild birds
Forestry Commission	Indicators page
Joint Nature Conservation Committee	Home Page
European Environment Agency (EEA)	Abundance and distribution of selected species State of nature in the EU report
Bat Conservation Trust	National Bat Monitoring Programme
UK Butterfly Monitoring Scheme	Official Statistics
British Trust for Ornithology	Research and data services

2. Water Quality

The indicator shows the percentage of water bodies in England assessed as having a good or high surface water status between 2009 and 2015. Surface water status is a composite measure that looks at both the chemical status and the ecological (including biological and habitat condition) status of a water body. This indicator is based on data used to meet reporting requirements under the EU Water Framework Directive.

There was a decrease in the overall number of water bodies awarded high or good surface water status between 2010 and 2015. In 2015, 20 per cent of surface water bodies assessed in England were in high or good status compared to 25 per cent in 2010. In 2015 a higher proportion of lakes (27 per cent) and estuaries and coastal water bodies (26 per cent) were in high or good status than rivers (17 per cent).

A more detailed analysis and further background information is included within the England Biodiversity Indicators publication.

Indicator Assessment

Assessment of change in water quality			
	Long term	**Short term**	**Latest year**
Proportion of surface water bodies with status classified as good or high		 2010 - 2015	No Change (2015)

Links to data and further information

Organisation	Subject
gov.uk	Improving water quality
European Commission	Water Framework Directive
Environment Agency	Water Framework Directive – Surface Water Classification Cycle 1[3] Water Framework Directive - Surface Water Classification - Cycle 2 River Basin Management Plans
European Environment Agency (EEA)	European level Water indicators Waterbase - Transitional, coastal and marine waters

[3] The assessment for England has been made according to the cycle 1 classification

3. Marine Ecosystem Integrity

There are two indicators within the topic of marine ecosystem integrity: fish size and marine litter.

Fish Size

This indicator shows changes in the proportion, by weight, of large individual fish equal to or over 40 cm in length in fish catches in the north-western part of the North Sea, from the Humber Estuary to the Shetland Islands. Larger fish are an indication of healthy fish populations, larger fish are more likely to be caught by trawls and larger fish species are more likely to decline in number when fishing communities are more heavily fished.

In 2014, large fish in the North-Western North Sea made up almost 22 per cent of the weight of the fish community. There was a clear decline in the indicator from 1983 to 1993, to a low of two per cent in 2001, but a rapid recovery since 2003 that accelerated after 2010 towards the previous peak of 23 per cent in 1983.

Marine Litter

This indicator shows the number of litter items per square kilometre on the sea floor around the UK.

The average[4] number of litter items per km^2 on the sea floor was 141 in 2015; this average is 4 per cent above the 1992-94 baseline average. In 2003 the amount of litter was ten times the amount in 1993, but since this peak it has fallen and remained below 400 items per to km^2 since 2007. Sea floor litter is dominated by plastics, which make up 76 per cent of all sea floor litter.

Indicator Assessment

Assessment of change in marine ecosystem integrity measures			
	Long term	**Short term**	**Latest year**
Marine ecosystem integrity (fish size class)	1983-2014	2009-2014	Increased (2014)
Marine Litter	1992-2015	2010-2015	Decreased (2015)

[4] Historically, the collected concentrations data has shown considerable spatial variability, so the indicator assessment should be treated with caution.

Links to data and further information

Organisation	Subject
Defra	England Biodiversity Indicator 11: Marine biodiversity, ecosystems services and fish size Charting Progress: The State of UK Seas
European Environment Agency (EEA)	State of Europe's seas EEA Marine indicators Marine litter watch
British Oceanographic Data Centre	BODC home page MEDIN home page

4. Priority Species

There are 2,890 species defined as priority species in the UK, of which there are 213 with robust quantitative time series data of relative species abundance (change in population size) available. There are a further 111 priority species with robust species distribution estimates. The criteria used for identification of priority species include long term declines in abundance and/or distribution.

Abundance

By 2012, populations of the 213 priority species for which abundance data are available had declined to 33 per cent of the 1970 population, a statistically significant decrease. Over this long-term period, 25 per cent of species showed an increase and 75 per cent showed a decline. More recently, the index value continued to decline though the change is not statistically significant.

Distribution

Over the same long term time period, 1970 and 2012, 49 per cent of the 111 species for which distribution data are available became less widespread and 22 per cent became more widespread. The overall smoothed index for the distribution of these priority species declined by 35 per cent in the long term, but was unchanged in the short term.

Changes to this section

A more detailed analysis and further background information on species are included as part of indicator C4 within the UK biodiversity indicator suite.

This topic previously included habitats, although no indicator assessments were ever made. Information and commentary on these can be still found in indicator 2 within the England Biodiversity Indicators National Statistics publication.

Indicator Assessment

Assessment of change in Status of priority species and habitats			
	Long term	**Short term**	**Latest year**
Relative abundance of priority species	1970-2012	2007-2012	Decreased (2012)
Distribution of priority species	1970-2012	2007-2012	Decreased (2012)

Links to data and further information

Organisation	Subject
Defra	England Biodiversity Indicator 4: status of priority species
JNCC	Relative abundance indicator Distribution indicator

5. Land-use

Our land is used for many purposes including agriculture, forestry, recreation and housing. There are a number of data sources that allow an investigation of how this resource is being used. There are sector specific data sets such as those with an agricultural focus and more generic sources coving all land types. Land cover map 2007 (LCM2007), released in July 2011, is still the latest high resolution land cover map for the UK. Although the lower resolution Corine land cover map, based on the analysis of satellite images collected as part of the Copernicus program was updated for the 2012 reference year. For this publication, the assessment of land use is limited to sustainable management of woodland.

There has been a gradual increase from 52 per cent of woodland in active management in 2011 (the baseline year) to 58 per cent in 2016. In the North East and Yorkshire forestry delivery area, the proportion of managed woodland is much higher than in the rest of the county (69 per cent). In March 2016, 337 thousand hectares of woodland in England were certified as being sustainably managed.

Indicator Assessment

Assessment of change of land-use			
	Long term	**Short term**	**Latest year**
Change in percentage of woodland in active management		 2012-2016	No change (2016)

Links to data and further information

Organisation	**Subject**
Defra	Government Policy on Forestry Agri-environment indictor C2 Agricultural land use
DCLG	Live tables on land use change statistics Planning system
ONS	Sustainable Development Indicators - Environment section, supplementary indicators 30: Land use
Centre for Ecology and Hydrology	Corine land cover 2012 CEH Land Cover Plus: Crops 2015 Land cover map 2007
Forestry Commission	Corporate Plan Performance Indicators and Woodland Indicators National Forest Inventory Woodland Area, Planting and Restocking statistics

6. Natural Stocks

There are four indicators covered under this topic. These are fish stocks, water abstractions and the carbon held in forests and the soil.

Fish Stocks

The indicator shows the percentage of fish stocks in seas around the UK that are both harvested sustainably and are at full reproductive capacity. The indicator is based on a group of seven species, in 13 stocks, with reliable data. In 2013, 31 per cent of these fish stocks around the UK (4 of the 13 stocks) were at full reproductive capacity and were being harvested sustainably. This is an increase from the 1990–1992 average of 24 per cent (3 stocks out of 13).

Water abstractions

The estimated abstraction of water from non-tidal surface water and groundwater in England and Wales in 2014 was 13.2 billion cubic metres. Whist this is a smaller volume than in the previous two years overall there is little short term change. Relative to the 1991-93 average, there has been a nine per cent reduction in abstractions. Over the period from 2000 to 2014, on average 45 per cent of total abstractions were for public water supply and 36 per cent were for electricity generation.

Forest and soil carbon stocks

Carbon capture by forests is important in reducing climate change. The total carbon in UK forests increased between 1990 and 2010 and then further increased by 2015. The carbon stored in the first meter of the forest soil profile accounts for approximately 75 per cent of total forest carbon.

The concentration of carbon in soils (0-15 cm) across all ecosystem types in Great Britain decreased between 1978 and 2007. More recent data are not currently available so a short term assessment is not possible.

Indicator Assessment

Assessment of change in Natural stocks			
	Long term	**Short term**	**Latest year**
Sustainable fisheries	1990-2013	2008-2013	No change (2013)
Water abstraction[5]	1991-2014	2009-2014	Decreased (2014)
Forest carbon stocks[6]	1990-2015	2010-2015	Not assessed
Soil carbon concentration (all habitats)[7]	1978-2007		Not assessed

Links to data and further information

Organisation	Subject
Defra	England Biodiversity Indicator 23: sustainable fisheries England Biodiversity Indicator 9: removal of greenhouse gases by forests Water abstraction statistics
Countryside Survey	Soils Survey Report 2007
Forestry Commission	Forestry Statistics 2015- Forest carbon stock
European Environment Agency (EEA)	Use of freshwater resources indicator

[5] The indicator assessment for water abstraction should be treated with caution as it is very difficult to establish trends for this measure.
[6] The data is now collected at 5 year intervals so these figures were not updated in Forestry Statistics 2015. The assessment remains the same as in the 2015 ENEI publication.
[7] Soil carbon data come from the Countryside Survey which has not been repeated since 2007 so there is no short term or latest year assessments.

7. Raw Material Consumption

This indicator focuses on the use of renewable materials in our consumption. Biomass is material derived from living or recently living organic matter and is a renewable source of energy and material. A positive direction for this indicator is a lower overall consumption, alongside moving away from the consumption of finite materials to that of biomass, provided that biomass extraction is sustainable. Biomass consumption is measured in terms of its raw material equivalent (RME).

Total UK consumption = UK production + imports – exports

Net domestic UK consumption = UK production - exports

Total biomass consumption dropped from 188 million tonnes (mt) of RME in 2000 to 173 mt RME in 2013. This represents a ten per cent drop in consumption. The proportion of biomass consumption from imports has remained between 48 per cent and 52 percent over the period 2000 to 2013.

The increase in gross domestic product coupled with a decrease in raw material consumption since 2000 leads to a strong negative correlation[8] between these two variables over the last ten years. This suggests that the reduced consumption could be due to higher resource efficiency.

Indicator Assessment

Assessment of change in Raw material consumption			
	Long term	**Short term**	**Latest year**
Raw material consumption[9]	✓ 2000-2013	✓ 2009-2013	Increase (2013)

Links to data and further information

Organisation	Subject
ONS	Experimental estimates of resource use Material consumption in the United Kingdom Environmental accounts

[8] A correlation of -0.73 with 14 data points is highly significant with a very low probability of occurring by chance alone (p=0. 0.0030 for a 2 tail test).

[9] The indicator assessment should be treated with caution due to the experimental nature of the statistic.

8. Value of Ecosystem Services

This indicator aims to take account of the benefits that nature provides, some of which are not priced in the market place. In economic terms, nature can be thought of as an asset, or stock of capital, which has the capacity to generate goods and services that benefit, and are valued by, people. This indicator presents the value of the flow of four services (timber production, carbon sequestration, air filtration and recreation) that we obtain from UK woodland as a part of the natural capital of the country.

Experimental statistics (that should be interpreted with caution) show that the total value of all 4 services in 2014 was estimated at £6.4 billion, up from £5.7 billion in 2009 (in 2013 prices). Woodland accounts show that carbon, air quality and recreational benefits are around 30 times the value of timber.

A partial and experimental estimate of the total value of woodland ecosystems in the UK is £168 billion in 2014, based on the net present value of the expected future flows of the 4 main services over a 50 year period, using the social discount rate[10].

Indicator Assessment

Assessment of change in value of ecosystem services			
	Long term	**Short term**	**Latest year**
Value of UK woodland ecosystem services[11]			Not assessed

Links to data and further information

Organisation	Subject
ONS	Environmental accounts

[10] HM Treasury (2003). The Green Book: Appraisal and Evaluation in Central Government

[11] These are experimental statistics which at this stage should be interpreted with caution. Therefore no assessments have been made.

9. Integrating Biodiversity and Natural Environment Considerations into Business Activity

This indicator relates to the uptake of biodiversity and natural environment considerations in business activity in the UK. The data used for this indicator are currently only available for 3 years (2011 to 2013) so assessments are not yet possible.

In 2013, 77 per cent of responding large companies[12] had an Environmental Management System (EMS) in place, compared to 83 per cent in 2012. Companies can have an EMS certified to ISO 14001[13] and 53 per cent of large companies had such a certification in 2013. This is a small increase from the 2012 figure (51 per cent).

Overall, 92 per cent of large companies considered environmental issues within their supply chain in 2013, up from 78 per cent in 2012. Of those companies considering environmental issues 63 per cent did so in a formal manner in 2013.

A more detailed analysis and further background information is included within the JNCC indicator pages.

Indicator Assessment

Assessment of change in biodiversity considerations in business activity			
	Long term	**Short term**	**Latest year**
Percentage of large companies (>250 employees) that use an Environmental Management Scheme (EMS)			Decreased (2013)
Percentage of companies where the environment is formally considered in the supply chain			Increased (2013)

Links to data and further information

Organisation	Subject
European Environment Agency (EEA)	European level indicator on the number of organisations with registered environmental management systems
JNCC	Business considerations indicator

[12] companies with at least 250 employees

[13] ISO 14001 is the standard that covers the design and implementation of an EMS. It is a framework designed to measure and improve the way natural resources are used and disposed of by an organisation. It is a generic standard applicable to organisations of all shapes and sizes from large construction and manufacturing business to small service based companies.

10. Public Engagement with the Natural Environment

This topic contains three separate indicators: (1) visits to the natural environment; (2) visits by children; and, (3) time spent volunteering for conservation.

Visits to the natural environment

This indicator assesses public engagement with the natural environment by estimating the frequency of visits to the natural environment by the adult population in England. Between March 2014 and February 2015, 36 per cent of the adult population stated that on average, they had visited the natural environment several times a week or more over the previous year. Over the previous five years, this figure had remained between 32 and 34 per cent so the change over the past year represents the biggest year-on-year change in the series. There is now data for 5 financial years, this is sufficient data to make a short term trend assessment. The increased frequency of visits over the latest year is the main reason for the improving rating recorded below.

The proportion of people who visit the natural environment several times or more a week varies across England with more than 40 per cent of people living in the South East and South West regions visiting the natural environment several times a week. Outside of London, the West Midlands region had the lowest proportion of people visiting the natural environment several times a week than in any other region in almost every year between 2009/10–2014/15.

In 2014/15, an estimated 674 million visits with one child or more in the party were taken. The proportion of visits including children has remained steady at just over 20 per cent since 2009-10. Since the average number of children per party fell relative to 2013/14, the estimated total number of visits made by children to the natural environment in the last year fell, by almost 9.5 million, to 1.46 billion. This indicator requires further methodological development work before a robust short term assessment can be made.

Time spent volunteering

The amount of volunteer time spent undertaking conservation activities is based on information from ten major organisations across the environmental sector in England. The work undertaken by conservation volunteers includes assisting with countryside management, carrying out surveys and inputting data, assisting with administrative tasks, and fundraising. The index of time spent volunteering increased rapidly from between 2001[14] and 2008 but has declined since then, though in 2014 it was still 7 per cent above levels in 2000. At the time of writing, the methodology for this indicator was being reviewed in preparation for the next update of England Biodiversity Indicator suite.

[14] Restrictions on access to the countryside in 2001 due to the outbreak of Foot and Mouth disease resulted in a sharp fall in the index between 2000 and 2001.

Indicator Assessment

Assessment of change in public engagement with the natural environment			
	Long term	**Short term**	**Latest year**
Proportion of people visiting the natural environment several times a week or more		2009/10–2014/15[15]	Increase (2014/15)
Number of visits made by children[16]			Decrease (2014/15)
Conservation volunteering	2000-2014	2009-2014	Decreased (2014)

Links to data and further information

Organisation	Subject
Defra	England Biodiversity indicator 13: public engagement
Natural England	Monitor of Engagement with the Natural Environment (MENE)
National Ecosystems Assessment	Home Page

[15] Data collected for financial years

[16] This indicator requires further methodological development work before a robust short-term assessment can be made.

11. Environmental Quality and Health

Poor air quality can have effects on health and wellbeing due to both short term and long term exposure. Individuals with existing heart or respiratory conditions are at greater risk when levels of air pollutants rise. The number of days when air quality is "moderate or higher"[17] is an indicator of how often air pollution is raised to levels when there is an increased risk of health effects from short term exposure. There were, on average, fewer days of moderate or higher pollution at urban pollution monitoring sites in 2015 compared with any other year since 2010. The average number of pollution days declined from 24 days in 2011 to nine days in 2015. There is no clear trend in the number of days of moderate or higher air pollution at rural sites but the figure was 11 days in 2015.

Long term exposure to air pollution can have adverse effects on health. The Public Health Outcomes Framework Indicator for England, produced by the Department of Health, estimates this long term health burden for different parts of England. In 2013, 5.3 per cent of all deaths for over 30-year-olds in England were attributable to long term exposure to current levels of anthropogenic $PM_{2.5}$. In London this figure was as high as 6.7 per cent of all deaths.

The Public Health Outcomes Framework also includes information about noise complaints and exposure to transport noise. There are a number of direct and indirect links between exposure to noise and health outcomes such as stress, heart attacks, and other health and wellbeing issues. In 2013/14 there was an average of 7.4 complaints about noise per 1,000 people in England and this figure has remained between 7.4 and 8.0 over the period 2006/07 to 2013/14. At 17.4 complaints about noise per 1,000 people, the rate in London is considerably higher than in any other region.

Indicator Assessment

Assessment of change in Environmental quality and health			
	Long term	**Short term**	**Latest year**
Number of air pollution days classed as moderate or higher- Urban[18]	•••	✓ 2010-2015	Decreased
Number of air pollution days classed as moderate or higher - Rural[18]	•••	≈ 2010-2015	Increased
Mortality caused by anthropogenic air pollution[19]	•••	•••	Not assessed
Percentage of the population affected by noise	•••	≈ 2008/09 – 2013/14	No Change (2013/14)

[17] Defined using the Daily Air Quality Index (DAQI) – see Air quality statistics for details

[18] Although the air quality data series extends back to 1987, on 1 January 2012, the air pollution bandings and the suite of air pollutants used were changed. Figures were only retrospectively calculated back to 2010 preventing any long term analyses. See Air quality methodological changes for details.

[19] This indicator has a very short time series and requires further methodological development work before robust assessments can be made.

Links to data and further information

Organisation	Subject
Defra	Air quality statistics
Department of Health	Public health framework outcomes[20,21]
World Health Organisation	Guidelines for community noise
European Environment Agency (EEA)	Signals publication Air pollution indicators Air quality in Europe 2015 SOER 2015: Health and environment

[20] Indicator 3.01 - Fraction of mortality attributable to particulate air pollution 2013

[21] Indicator 1.14i - The rate of complaints about noise 2013/14

Annex A. Acronyms

BCT	Bat Conservation Trust
BC	Butterfly Conservation
BODC	British Oceanographic Data Centre
BTCV	British Trust for Conservation Volunteers
BTO	British Trust for Ornithology
CAP	Common Agricultural Policy
CEFAS	Centre for Environment, Fisheries and Aquaculture Science
CEH	Centre for Ecology and Hydrology
CAP	Common Fisheries Policy
CIEH	Chartered Institute for Environmental Health
Corine	Coordination of information on the environment
DAQI	Daily Air Quality Index
DCLG	Department for Communities and Local Government
Defra	Department for the Environment, Food and Rural Affairs
EA	Environment Agency
EEA	European Environment Agency
EMS	Environmental Management System
ENEI	England Natural Environment Indicators
EU	European Union
FC	Forestry Commission
GDP	Gross Domestic Product
ICES	International Council for the Exploration of the Sea
IPBES	Intergovernmental platform for biodiversity and ecosystem services
JNCC	Joint Nature Conservation Committee
LCM	Land Cover Map
MEDIN	Marine Environmental Data and Information Network
MENE	Monitor of Engagement with the Natural Environment
MMO	Marine Management Organisation
MSFD	Marine Strategy Framework Directive
NE	Natural England
NEWP	Natural Environment White Paper
OECD	Organisation for Economic Co-operation and Development

ONS	Office for National Statistics
OS	Ordinance Survey
PHOF	Public Health Framework
RME	Raw Material Equivalent
RMC	Raw Material Consumption
RSPB	Royal Society for the Protection of Birds
SDI	Sustainable Development Indicators
UK BAP	United Kingdom Biodiversity Action Plan
UK BARS	UK Biodiversity Action Reporting System
WWT	Wildfowl and Wetlands Trust
WFD	Water Framework Directive
WHO	World Health Organisation

Annex B. National Statistics

The following statistics presented in this 2016 update of ENEI are sourced from publications which have been designated as National Statistics:

- Species in the wider countryside: breeding farmland birds
- Species in the wider countryside: breeding woodland birds
- Species in the wider countryside: breeding wetland birds
- Species in the wider countryside: wintering water birds
- Species in the wider countryside: breeding seabirds
- Public engagement with the natural environment: proportion of people visiting the natural environment several times a week or more
- Public engagement with the natural environment: number of visits made by children
- Environmental quality and health: number of air pollution days classed as moderate or higher – urban, and
- Environmental quality and health: number of air pollution days classed as moderate or higher – rural

This means that the UK Statistics Authority, which was given a statutory power to assess statistics against the Code of Practice for Official Statistics in the Statistics and Registration Service Act 2007, has assessed the aforementioned indicators as complying with this code of practice. The code is wide-ranging, but designation can broadly be interpreted as meaning that the statistics meet identified user needs, are well explained and readily accessible, are produced according to sound methods and are managed impartially and objectively in the public interest.

The UK Statistics Authority's assessment of these indicators, alongside other environmental statistics, can be found in its reports on Statistics on Sustainability and the Environment in England and the UK (Department for Environment, Food and Rural Affairs) and Statistics on Engagement with the Natural Environment (Natural England), and in the accompanying letters confirming their status as National Statistics.

Designation does not mean that all the individual statistics presented in this publication are National Statistics in their own right; it only relates to the statistics listed above.