

## Environmental Protection and Enhancement

### SA Objective 11: To Maintain and Improve Biodiversity and Natural Habitats

#### Indicator: Number and Total Area of Internationally, Nationally and Locally Designated Nature Conservation and Geologically Important Sites

(Original SA Scoping Report July 2007 Indicator: Number and total area of internationally and nationally designated nature conservation and geologically important sites and reported condition)

The original version of this indicator identified in the July 2007 SA Scoping Report, only referred to international and national sites, although the original baseline review included data for local sites. The indicator in this review has been amended to include local sites. The original indicator also referred to the reported condition of sites, but the original baseline review only included condition data for Sites of Special Scientific Interest (SSSI). The reported condition of SSSIs has been presented as a separate indicator in this review.

The table below identifies the number and area of internationally, nationally and locally designated biodiversity and geodiversity sites in Wirral in 2012. The majority of the Borough's coastline is of international importance for nature conservation. Almost a third of the administrative area of Wirral is designated as a Site of Special Scientific Interest. Locally designated sites for biological and earth science importance were reviewed in 2011. This identified a number of proposed changes to the original schedule of sites, including the removal of sites which no longer met the criteria for inclusion and the addition of new sites which now meet the criteria for inclusion.

Nature Conservation Sites in Wirral 2012		
Type of Site	Number of Sites	Total Area within Wirral (Ha.)
Special Protection Areas (SPA)	2	4,418.31
Potential Special Protection Areas (pSPA)	1	1,808.67
Special Area of Conservation (SAC)	1	5,410.00
Ramsar	2	4,429.71
Proposed Ramsar	1	1,808.67
Sites of Special Scientific Interest (SSSI)	12	7,215.93
Sites of Biological Interest (SBI)	70	774.57
Local Geological Sites (LGS)	15	220.21
Local Nature Reserves (LNR)	5	183.86

#### Indicator: The Condition of Sites of Special Scientific Interest (New)

The condition of Sites of Special Scientific Interest (SSSI) is monitored by Natural England. The table below shows the change in condition of the Borough's SSSI between 2007 and 2012. While five of the SSSI have seen no change, the overall condition of Wirral's SSSI has declined with four sites moving from predominantly favourable to unfavourable condition. Three of the SSSI have seen an improvement, but this has been to an unfavourable but recovering status rather than to a favourable condition.

<b>Condition of Wirral Sites of Special Scientific Interest</b>				
<b>Site Name</b>	<b>January 2007</b>		<b>January 2012</b>	
	<b>%</b>	<b>Condition Status</b>	<b>%</b>	<b>Condition Status</b>
Dee Cliffs	86.93	Unfavourable (recovering)	86.87	Unfavourable (recovering)
	13.07	Unfavourable (no change)	13.13	Unfavourable (no change)
Dee Estuary	29.71	Favourable	100	Favourable
	70.29	Unfavourable (recovering)		
Dibbinsdale	91.78	Unfavourable (no change)	79.55	Unfavourable (recovering)
	8.22	Favourable	12.23	Unfavourable (no change)
			8.22	Favourable
Heswall Dales	100	Unfavourable (recovering)	100	Unfavourable (recovering)
Meols Meadows	86.89	Unfavourable (no change)	86.89	Unfavourable (no change)
	13.11	Unfavourable (declining)	13.11	Unfavourable (declining)
Mersey Estuary	99.95	Favourable	53.18	Unfavourable (recovering)
	0.05	Unfavourable (recovering)	45.99	Favourable
			0.47	Unfavourable (no change)
			0.36	Unfavourable (declining)
Mersey Narrows	100	Favourable	77.74	Unfavourable (recovering)
			22.26	Favourable
New Ferry	100	Favourable	100	Favourable
North Wirral Foreshore	100	Favourable	100	Unfavourable (recovering)
Red Rocks	100	Favourable	100	Unfavourable (declining)
The Dungeon	100	Favourable	100	Favourable
Thurstaston Common	99.29	Unfavourable (no change)	99.29	Unfavourable (recovering)
	0.71	Favourable	0.71	Favourable

Source: Natural England Citations and Condition Reports

***Deleted indicator: Progress against biodiversity action plan targets***

The July 2007 SA Scoping Report identified the above indicator under this SA Objective, but it was not included in the original baseline review. Nationally there has been a strategic change in thinking and a move away from Biodiversity Action Planning and therefore this indicator has not been included in this review.

***Deleted indicator: Number and area of locally designated nature conservation/earth science sites***

The July 2007 SA Scoping Report identified the above indicator, but it was not included in the original baseline review as a separate indicator and the data was presented within the first indicator for SA Objective 11. In this review the title of the first indicator has been amended to clearly include local sites.

**Objective 12: To Minimise Pollution to Land, Water or Air****Indicator: Number and Total Area of Air Quality Management Areas and Population Living in Air Quality Management Areas**

Wirral continues to have no designated Air Quality Management Areas (AQMA). Therefore no people in Wirral live within an AQMA. A summary of the advice on the designation of AQMA is reproduced below:

*“Since December 1997 each local authority in the UK has been carrying out a review and assessment of air quality in their area. This involves measuring air pollution and trying to predict how it will change in the next few years. The aim of the review is to make sure that the national air quality objectives will be achieved throughout the UK by the relevant deadlines. These objectives have been put in place to protect people's health and the environment.*

*If a local authority finds any places where the objectives are not likely to be achieved, it must declare an Air Quality Management Area there. This area could be just one or two streets, or it could be much bigger.*

*Then the local authority will put together a plan to improve the air quality - a Local Air Quality Action Plan.”* (Source: DEFRA, Air Quality Management Areas Website, 2012)

**Indicator: The Number of Days Air Pollution is Moderate or High**

In Wirral there is one real-time air quality monitoring station which is located in Victoria Park, Tranmere. This is part of a national Automatic Urban and Rural Network (AURN) of monitoring stations measuring oxides of nitrogen (NO<sub>x</sub>), sulphur dioxide (SO<sub>2</sub>), ozone (O<sub>3</sub>), carbon monoxide (CO) and particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>).

In the UK, most air pollution information services use the index and banding system recommended by the Committee on Medical Effects of Air Pollutants (COMEAP). The system uses an index numbered 1-10, divided into four bands to provide more detail about air pollution levels in a simple way, similar to the sun index or pollen index.

<b>Air Pollution Index</b>			
<b>Air Pollution Band</b>	<b>Value</b>	<b>Accompanying health messages for at-risk groups and the general population</b>	
		<b>At-risk individuals</b>	<b>General population</b>
Low	1-3	Enjoy your usual outdoor activities.	Enjoy your usual outdoor activities.
Moderate	4-6	Adults and children with lung problems, and adults with heart problems, who experience symptoms, should consider reducing strenuous physical activity, particularly outdoors.	Enjoy your usual outdoor activities.
High	7-9	Adults and children with lung problems, and adults with heart problems, should reduce strenuous physical exertion, particularly outdoors, and particularly if they experience symptoms. People with asthma may find they need to use their reliever inhaler more often. Older people should also reduce physical exertion.	Anyone experiencing discomfort such as sore eyes, cough or sore throat should consider reducing activity, particularly outdoors.
Very High	10	Adults and children with lung problems, adults with heart problems, and older people, should avoid strenuous physical activity. People with asthma may find they need to use their reliever inhaler more often.	Reduce physical exertion, particularly outdoors, especially if you experience symptoms such as cough or sore throat.

Source: DEFRA website, 2012

The overall air pollution index for a site or region is determined by the highest concentration of five pollutants:

- Nitrogen Dioxide
- Sulphur Dioxide
- Ozone
- Particles < 2.5µm (PM2.5)
- Particles < 10µm (PM10)

The table below shows the number of days when the pollution levels have been moderate, high or very high in Wirral between 2004 and August 2012. All records were within the moderate band with the exception of 7 days recorded as high and 2 days as very high. Ozone has been the most commonly recorded pollutant in Wirral. However, this is considered a trans-boundary pollutant which can be affected by atmospheric conditions and weather patterns.

<b>Number of Days When Pollution Levels Have Been Moderate, High, or Very High in Wirral 2004 to August 2012</b>					
<b>Year</b>	<b>Nitrogen Dioxide</b>	<b>Sulphur Dioxide</b>	<b>Ozone</b>	<b>Particles (PM2.5)</b>	<b>Particles (PM10)</b>
<b>2004</b>	0	0	12	N/A	0
<b>2005</b>	0	0	9	N/A	0
<b>2006</b>	0	0	41 (4 high)	N/A	0
<b>2007</b>	0	0	14	N/A	6
<b>2008</b>	0	0	22	N/A	5 (2 high/ 1 very high)
<b>2009</b>	0	0	16	0	N/A
<b>2010</b>	0	0	11	0	N/A
<b>2011</b>	0	0	17	0	N/A
<b>2012 (August)</b>	0	0	3	8 (1 high/ 1 very high)	N/A
<b>2004-2012</b>	<b>0</b>	<b>0</b>	<b>145</b>	<b>8</b>	<b>11</b>

Source: DEFRA UK-AIR Data Archive Website, 2012

Further information is available at: <http://uk-air.defra.gov.uk/>

### **Indicator: The Ecological Quality of Watercourses**

(Original SA Scoping Report July 2007 Indicator: Proportion of rivers registered good or fair for chemical and biological water quality)

The original indicator, identified in the July 2007 SA Scoping Report and the original baseline review, has been amended to reflect the 2009 changes to the system used by the Environment Agency (EA) for assessing river quality. The new classification system, in line with the European Water Framework Directive, provides a more sophisticated method of assessing the whole water environment and will enable action to be directed to where it is most needed.

The tables below are taken from the EA web-based mapping tool and show the latest water quality summaries for the watercourses in Wirral. There are two entries, with the watercourses in the north of the Borough being classified together and referred to as “the Arrowe Brook and the Fender”, but which also includes the Birket; and “the Clatter Brook” in the south east, which also includes the River Dibbin.

The ecological quality of watercourses that are heavily modified, such as the Arrowe Brook and the Fender are assessed against the maximum ecological quality they could achieve given the constraints imposed by this modification or artificial characteristics and are classified for their ecological potential as maximum, good, moderate, poor and bad. In 2012 the Arrowe Brook and the Fender was in the lowest classification and was not predicted to improve by 2015. The Environment Agency objective is to achieve good potential ecological status by 2027.

The Clatter Brook is not classified as having been modified; therefore the ecological status is assessed high, good, moderate, poor or bad. The Clatter Brook achieved a status of poor in 2012 and this is not expected to change by

2015. The Environment Agency objective is to achieve good ecological status by 2027.

<b>Environment Agency River Quality Assessment 2012</b>	
<b>Arrowe Brook and the Fender</b>	
Waterbody ID	GB112068060530
Waterbody Name	Arrowe Brook and the Fender
Management Catchment	Mersey Estuary
River Basin District	North West
Typology Description	Low, Small, Calcareous
Hydromorphological Status	Heavily Modified
Current Ecological Quality	Bad Potential
Current Chemical Quality	Does Not Require Assessment
2015 Predicted Ecological Quality	Bad Potential
2015 Predicted Chemical Quality	Does Not Require Assessment
Overall Risk	At Risk
Protected Area	Yes
Number of Measures Listed (waterbody level only)	-

Source: Environment Agency, 2012

<b>Environment Agency River Quality Assessment 2012</b>	
<b>Clatter Brook</b>	
Waterbody ID	GB112068060270
Waterbody Name	Also includes Clatter Brook.
Management Catchment	Mersey Estuary
River Basin District	North West
Typology Description	Low, Small, Calcareous
Hydromorphological Status	Not Designated A/HMWB
Current Ecological Quality	Poor Status
Current Chemical Quality	Does Not Require Assessment
2015 Predicted Ecological Quality	Poor Status
2015 Predicted Chemical Quality	Does Not Require Assessment
Overall Risk	At Risk
Protected Area	Yes
Number of Measures Listed (waterbody level only)	-

Source: Environment Agency, 2012

The new classification system makes it difficult to compare the current status with previous data. Further information can be found at;

<http://www.environment-agency.gov.uk/homeandleisure/37811.aspx>

### **Indicator: The Quantitative and Chemical Quality of Groundwater Bodies (New Indicator)**

In addition to monitoring the quality of watercourses, the Environment Agency (EA) also assesses the quality of groundwater sources in line with the European Water Framework Directive. This indicator has been added to this baseline review to reflect this data.

The majority of Wirral lies over the Wirral and West Cheshire Permo-Triassic Sandstone Aquifers. The western edge of the peninsula, including Heswall, lies over Dee Permo-Triassic Sandstone. The tables below are taken from the EA web-based mapping tool and show the latest water quality summaries for the two groundwater areas in Wirral.

The quantitative status of a body of groundwater is an assessment of the degree to which it is affected by direct or indirect abstraction. Four elements are considered and determined 'good' or 'poor'. An assessment as 'poor' against any of the components results in an overall quantitative status of 'poor'. Both groundwater bodies covering Wirral have 'poor' current quantitative quality and are predicted to remain 'poor' until 2015.

The chemical status of groundwater bodies is also assessed against five components and determined 'good' or 'poor'. An assessment as 'poor' against any of the components results in an overall chemical status of 'poor'. The Wirral and West Cheshire Permo-Triassic Sandstone Aquifers are currently 'poor' and are predicted to remain 'poor' until 2015. The current chemical quality of the Dee Permo-Triassic Sandstone is 'good' and is predicted to remain so to 2015.

The EA set objectives for the overall, quantitative and chemical status of each groundwater source. For the Wirral and West Cheshire Aquifers this is to remain as 'poor' for all categories by 2015. For the Dee the objective is to achieve 'good' overall, quantitative and chemical status by 2027.

<b>Environment Agency Groundwater Quality Assessment 2012 Wirral and West Cheshire Permo-Triassic Sandstone Aquifers</b>	
Waterbody ID	GB41101G202600
Waterbody Name	Wirral and West Cheshire Permo-Triassic Sandstone Aquifers
River Basin District	North West
Current Quantitative Quality	Poor
Current Chemical Quality	Poor
Upward Chemical Trend	Yes
2015 Predicted Quantitative Quality	Poor
2015 Predicted Chemical Quality	Poor
Overall Risk	At Risk
Protected Area	Yes
Number of Measures Listed (waterbody level only)	4
The following elements make up the overall Current Quantitative Quality Classification:	
Groundwater dependent terrestrial ecosystems (quantitative impacts)	Good
Impact on surface waters	Poor
Saline or other intrusions	Poor
Resource balance	Poor

Source: Environment Agency, 2012

<b>Environment Agency Groundwater Quality Assessment 2012</b>	
<b>Dee Permo-Triassic Sandstone</b>	
Waterbody ID	GB41101G202400
Waterbody Name	Dee Permo-Triassic Sandstone
River Basin District	Dee
Current Quantitative Quality	Poor
Current Chemical Quality	Good
Upward Chemical Trend	No
2015 Predicted Quantitative Quality	Poor
2015 Predicted Chemical Quality	Good
Overall Risk	At Risk
Protected Area	Yes
Number of Measures Listed (waterbody level only)	1
The following elements make up the overall Current Quantitative Quality Classification:	
Groundwater dependent terrestrial ecosystems (quantitative impacts)	Good
Impact on surface waters	Poor
Saline or other intrusions	Good
Resource balance	Good

Source: Environment Agency, 2012

### **Indicator: Number of Bathing Beaches Achieving Higher Standard under the Bathing Water Directive**

(Original SA Scoping Report July 2007 Indicator: Number of beaches and coastal areas gaining international blue flag status)

The original version of this indicator, identified in the July 2007 SA Scoping Report and the original baseline review, referred to Blue Flag beaches. Wirral has not as yet applied for Blue Flag status for any of its bathing beaches and therefore has no Blue Flag beaches. The indicator in this review therefore has been revised to use the available data that best reflects bathing beach quality.

Wirral has four bathing beaches designated by the Department for Environment, Food and Rural Affairs (DEFRA), located at West Kirby, Meols, Moreton and Wallasey. Bathing beaches are monitored by the Environment Agency throughout the summer and their water quality is assessed under the Bathing Water Directive. Each bathing area is classified as either failing to meet the minimum standard, meeting the minimum standard or meeting the higher standard.

The table below shows the annual compliance ratings for Wirral's bathing beaches between 2007 and 2012. In Wirral only two of the bathing beaches achieved the 'higher' standard in 2012. Water quality fell in 2012 from 'higher' to 'minimum' at Moreton and Wallasey for the first time since 2007. Prior to 2012 only West Kirby had failed to achieve the 'higher' standard since 2007. The Environment Agency have indicated that water quality at West Kirby is influenced by its location at the mouth of the River Dee which drains a large area of agricultural land and can therefore be adversely affected by run-off following heavy rainfall. No explanation has yet been provided for the unexpected change in status at Moreton and Wallasey in 2012.

<b>Bathing Water Directive Water Quality Assessment of Bathing Beaches in Wirral 2007-2012</b>						
	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>West Kirby</b>	Higher	Minimum	Higher	Minimum	Higher	Higher
<b>Meols</b>	Higher	Higher	Higher	Higher	Higher	Higher
<b>Moreton</b>	Higher	Higher	Higher	Higher	Higher	Minimum
<b>Wallasey</b>	Higher	Higher	Higher	Higher	Higher	Minimum

Source: Environment Agency, 2012

Further information can be found at: <http://environment.data.gov.uk/lab/bwq-web.html>

Achieving the higher water quality standard under the Bathing Water Directive in 2011 meant that all Wirral's designated bathing beaches have been included as recommended beaches in the Marine Conservation Society 2012 Good Beach Guide (<http://www.goodbeachguide.co.uk/>).

Wirral Council's Pollution Control Team also monitors bathing water quality at five additional locations in the Borough. Water samples are taken 20 times a year between May and September and assessed using a similar methodology to the Bathing Water Directive and classified as poor, satisfactory or good.

The table below shows the annual results for the locally assessed sites between 2007 and 2011. The overall water quality at these locations is generally lower than at the DEFRA designated bathing beaches. Thurstaston Beach is located on the River Dee and may be affected by similar issues as West Kirby Beach.

<b>Locally Assessed Bathing Water Quality of Beaches in Wirral 2007-2011</b>					
	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Fort Perch Rock New Brighton</b>	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory
<b>Leasowe Bay Beach</b>	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory
<b>Red Rocks Hoylake</b>	Satisfactory	Satisfactory	Poor	Satisfactory	Satisfactory
<b>West Kirby Marine Lake</b>	Good	Satisfactory	Out of Use	Satisfactory	Satisfactory
<b>Thurstaston Beach, Wirral Country Park</b>	Poor	Higher	Poor	Poor	Satisfactory

Source: Wirral Council, Pollution Control, 2012

Further Information can be found at: <http://www.wirral.gov.uk/my-services/environment-and-planning/pollution-control/bathing-water-quality>

**Indicator: Amount of Land Registered as Contaminated or Number of Sites No Longer Scheduled for Further Inspection under Wirral Council's Contaminated Land Strategy as a Result of Development**

(Original SA Scoping Report July 2007 Indicator: Number and area of Part 2A contaminated sites)

The original version of this indicator, identified in the July 2007 SA Scoping Report, was included in the original baseline review, but no data was presented. The indicator in this review has been amended to better reflect the available contaminated land data.

Wirral has no (zero) sites that are classified as contaminated under Part IIA of the Environmental Protection Act 1990. The Council maintain a schedule of sites requiring further inspection under its Contaminated Land Strategy. Sites are removed from this schedule as part of the development process. It is proposed that a more appropriate indicator in the future would be the number of sites no longer scheduled for further inspection under the Council's Contaminated Land Strategy as a result of development.

There are currently 2,299 sites included on the schedule. These sites are currently under review following a recent change in statutory guidance and the number of sites included on the schedule is expected to drop significantly. On completion of the review the number of sites taken off the schedule due to development will be recorded.

**Indicator: Area and Percentage of High Quality Agricultural Land Lost to Development**

No (zero) hectares of high quality agricultural land has been lost to development since the adoption of Wirral's Unitary Development Plan in 2000. The current estimated area of land classified as high agricultural quality (Grade 1-3a) within the Borough is 2,722.73 hectares, although it should be noted that this figure is based on the Merseyside Agricultural Land Classification Map 1986, which may now need to be re-confirmed by site specific survey.

**SA Objective 13: To Preserve, Protect and Enhance Sites, Features and Areas of Archaeological, Historical and Cultural Heritage Importance****Indicator: Number and Area (Ha.) of Designated Conservation Areas**

In 2012 Wirral had 25 designated Conservation Areas covering a total area of 714.48 hectares which represents 4.59% of the Borough's land area. The Magazines Conservation Area in New Brighton is the most recently designated, in January 2009.

<b>Wirral Conservation Areas 2012</b>	
<b>Name</b>	<b>Area (ha.)</b>
Gayton Conservation Area	9.50
Rock Park Conservation Area	40.73
Port Sunlight Conservation Area	56.03
Bromborough Pool Conservation Area	14.80
Barnston Conservation Area	6.68
Bromborough Village Conservation Area	2.48
Heswall Lower Village Conservation Area	28.42
Thornton Hough Conservation Area	14.96
Eastham Village Conservation Area	29.92
Wellington Road Conservation Area	12.00
Bidston Village Conservation Area	10.16
Flaybrick Hill Conservation Area	10.67
Hamilton Square Conservation Area	14.35
Oxton Village Conservation Area	45.20
Birkenhead Park Conservation Area	81.03
Thurstaston Conservation Area	22.91
The Kings Gap Conservation Area	22.55
Saughall Massie Conservation Area	11.49
Frankby Conservation Area	5.27
West Kirby Conservation Area	6.92
Caldy Conservation Area	95.32
Meols Drive Conservation Area	112.51
Clifton Park Conservation Area	7.17
Mountwood Conservation Area	37.62
Magazines Conservation Area	15.80
<b>Total Area</b>	<b>714.48</b>

Three of the Borough's Conservation Areas are on the English Heritage 2012 Heritage at Risk Register. The current condition of Flaybrick Cemetery and Hamilton Square is described as 'Very Bad', deteriorating from 'Poor' in 2011.

<b>Conservation Areas in Wirral on the Heritage at Risk Register 2012</b>			
<b>Name</b>	<b>Condition</b>	<b>Vulnerability</b>	<b>Trend</b>
Flaybrick Cemetery	Very bad	Low	Deteriorating
Hamilton Square	Very bad	High	Deteriorating
Rock Park	Poor	Medium	Deteriorating

Source English Heritage, Heritage List for England, 2012

### **Indicator: Number, Area and Condition of Designated Historic Parks and Gardens**

In 2012 Wirral had four parks and gardens on the National Register of Parks and Gardens of Special Historic Interest in England. These cover an area of 113.79 hectares which represents 0.73% of the Borough land area. Birkenhead Park is of exceptional historic interest and classified as Grade I.

<b>Parks and Gardens of Special Historic Interest in Wirral 2012</b>		
<b>Name</b>	<b>Grade</b>	<b>Area (ha.)</b>
Birkenhead Park	I	57.81
Flaybrick Memorial Gardens	II*	10.70
Port Sunlight	II	2.68
Thornton Manor	II*	42.60
<b>Total Area</b>		<b>113.79</b>

Source English Heritage, Heritage List for England, 2012

Flaybrick Memorial Gardens and Thornton Manor are on the English Heritage 2012 Heritage at Risk Register. Thornton Manor is identified as being in an unsatisfactory condition and highly vulnerable.

<b>Registered Parks and Gardens in Wirral on the 2012 Heritage at Risk Register</b>			
<b>Site Name</b>	<b>Condition</b>	<b>Vulnerability/ Trend</b>	<b>Summary</b>
Flaybrick Memorial Gardens	Generally satisfactory but with significant localised problems	Medium/ Declining	A public cemetery opened in 1864 and extended in the late C19 and early C20. The layout was designed by Edward Kemp and the buildings by Lucy and Littler. Edward Kemp is buried within the cemetery. Cemetery Chapels now roofless and some walls supported by scaffolding. Boundary walls and lodges generally in poor condition. Landscape management and maintenance under resourced.
Thornton Manor	Generally unsatisfactory with major localised problems	High/ Declining	Park and gardens designed by Thomas Hayton Mawson in collaboration with the industrialist and philanthropist William Hesketh Lever, later first Viscount Leverhulme. This privately owned property, which is used for exclusive events, inherited a large backlog of conservation and repair work both in house and grounds. Gardens around the house well maintained but pergola in advanced state of decay and lake and woodland in poor condition.

Source: English Heritage, Heritage at Risk Register, 2012

### **Indicator: The Number of Listed Buildings on the English Heritage Buildings at Risk Register**

Wirral has 714 Listed Building entries on The National Heritage List for England in 2012. The 714 designations protect 1,789 properties or structures, as individual list entries can include more than one property or structure. Since the beginning of 2000, 25 additional properties or groups of properties have been designated. The 714 designated Listed Buildings include 7 classified as Grade I and 31 as Grade II\*. Two of the Borough's Listed Buildings remained on English Heritage's Heritage at Risk Register in 2012.

The condition status of Storeton Hall was classified as 'Fair' in 2012, an improvement from 2005 when it was considered 'Very Bad'. Fort Perch Rock continues to be classified as 'Poor'.

In 2012 three Listed Places of Worship in Wirral had been added to English Heritage's at Risk Register following ongoing surveys of this category of site. The condition of the Church of St Andrew in Bebington and the Church of St James in New Brighton are both classified as 'Very Bad'.

<b>Listed Buildings/ Places of Worship in Wirral on the 2012 Heritage at Risk Register</b>			
<b>Property</b>	<b>Grade</b>	<b>Condition</b>	<b>Description</b>
Storeton Hall	II*	Fair	C17 house with C14 architectural details (H-plan). North wing and east wall of Great Hall incorporated into farm buildings. North wing is deteriorating. Emergency work and archaeological assessment have been carried out. A proposal for enabling development is in preparation.
Fort Perch Rock	II*	Poor	Coastal fort 1826-9 with later additions. Built to defend the approach to Liverpool, now used as a museum and in need of general repair. Brief has been drafted for a Conservation Management Plan and feasibility study for additional uses. An application for an English Heritage grant has been encouraged.
Church of St. Andrew, Bebington	I	Very Bad	Grade I listed multi-phase medieval church, stone with slate roofs. Interior with arcades, columns, capitals and roof structure which are all significant. Evidence of recent heritage crime and historic weathering.
Church of St James, New Brighton	II	Very Bad	Sir GG Scott 1854 Gothic Revival church, elaborately painted cantered chancel, five bay north and south arcade. Soaring landmark five stage tower. Complicated integration of iron cramps and dowels, heavily corroded and jacking/fracturing of masonry. Complicated rainwater discharge prone to blockage. Soft external sandstone, excessively weathered to point of failure with hard cement patches and pointing
Christ Church, Port Sunlight	II*	Poor	Large early C20 sandstone church, built as part of the Port Sunlight model village built under the philanthropy of Lord and Lady Lever. The founders are buried at the church, in a small mausoleum attached to the west end of the church. The cast iron rainwater goods are severely corroded. The west side of the north porch is heavily saturated. There are detached rainwater goods on the east side of the north porch and dislodged downpipes.

Source: English Heritage, Heritage at Risk Register, 2012

**Indicator: Number and Condition of Scheduled Ancient Monuments**

In 2012 there were nine designated Scheduled Ancient Monuments in Wirral. Scheduled Ancient Monuments are legally protected for their national importance and in Wirral include archaeological sites and historic buildings.

<b>Scheduled Ancient Monuments in Wirral 2012</b>
Storeton Hall, Bebington
Grange Beacon, Column Road, Hoylake
Bromborough Court House moated site and fishponds, Wirral
Irby Hall moated site, Wirral
Standing cross in churchyard of St Barnabas, Bromborough, beside the porch
Standing cross in the churchyard of the Church of the Holy Cross at Woodchurch
Site of church and churchyard at Overchurch 875m north west of Upton Hall
Moated site 400m north east of New Hall
Birkenhead Priory

Source English Heritage, Heritage List for England, 2012

Two of the Borough's Scheduled Ancient Monuments have been included on the English Heritage 2012 Heritage at Risk Register.

<b>Scheduled Ancient Monuments in Wirral on the 2012 Heritage at Risk Register</b>			
<b>Site Name</b>	<b>Condition</b>	<b>Principal Vulnerability</b>	<b>Trend</b>
Birkenhead Priory	Generally unsatisfactory with major localised problems	Deterioration – in need of management	Declining
Bromborough Court House moated site and fishponds	Generally satisfactory but with significant localised problems	Vandalism	Declining

Source: English Heritage, Heritage at Risk Register, 2012

**SA Objective 14: To Provide for the Separation of Incompatible Land Uses*****Deleted Indicator: Number of Significant "Point" Source - Part A Processes***

This indicator was included in the July 2007 SA Scoping Report and the original baseline review but has been combined with the following indicator in this review.

**Indicator: Number of Homes Falling Within the Consultation Distance of a Part A Industrial Process**

In 2012 there were 11 companies operating Part A processes permitted under the Pollution Prevention and Control Act 1999 in Wirral, which are regulated by the Environment Agency for emissions to air, land and water, all of which were located in south east Wirral. The Council consults the Environment Agency on planning applications within 250 metres of a Part A permitted

process. 248 properties were located within the consultation zones of the eleven Part A installations operating in 2012.

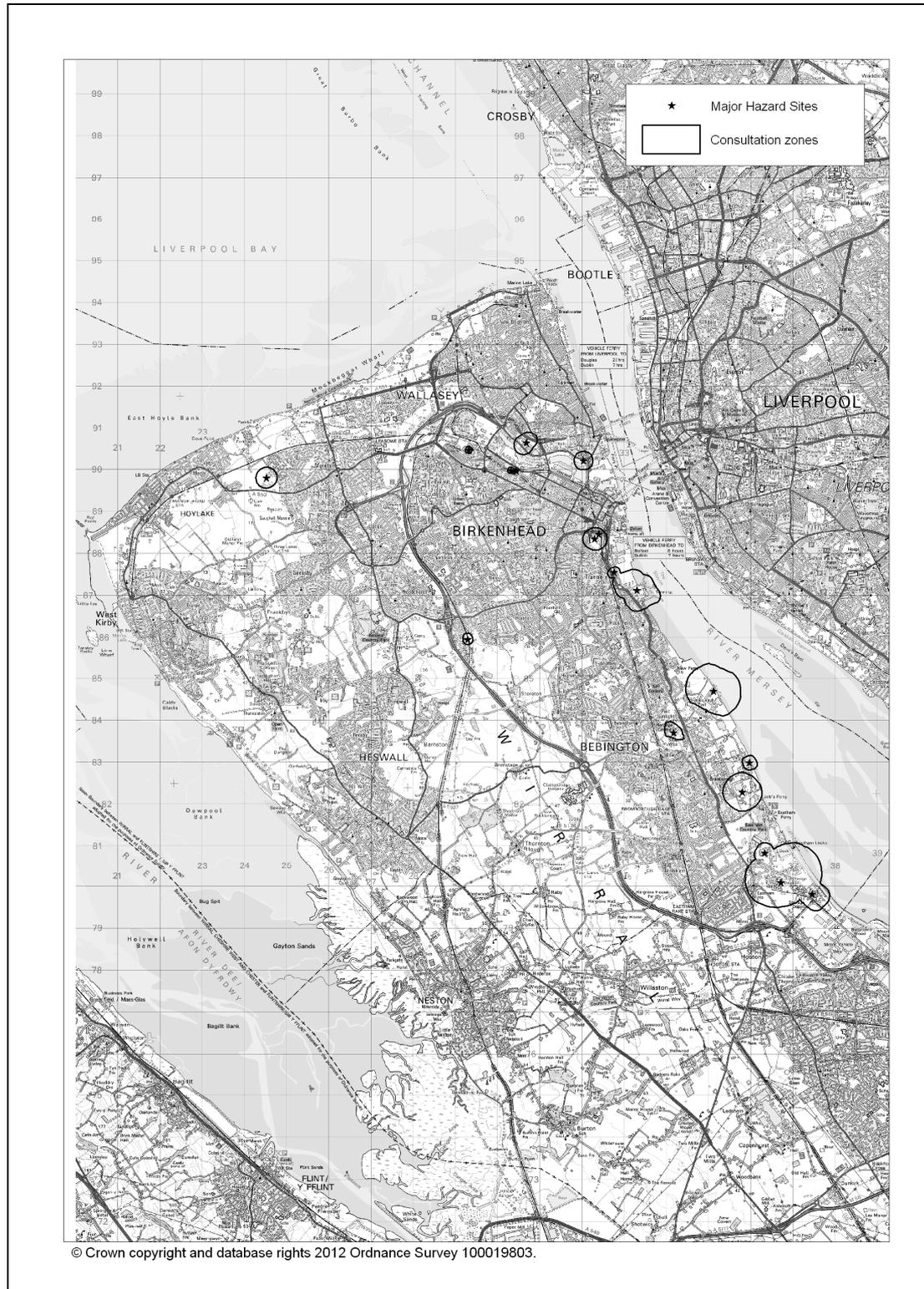


Source: Environment Agency, 2012

### Indicator: Number of Homes Falling Within a Major Hazard Consultation Zone

The Health and Safety Executive (HSE) set consultation distances around sites that could cause a major accident hazard. The Council must consult the

HSE on planning applications for developments within consultation zones which are likely to lead to an increase in population around major hazards. The map below shows the consultation zones for registered major hazard sites in Wirral in 2012. 1,100 residential properties were located within these consultation zones.



Source: Health and Safety Executive, 2012

### Indicator: Number of People Reporting Disturbance Due to Noise and Type of Noise Causing Complaint

Wirral Council's Pollution Control Team investigate complaints regarding noise from premises such as barking dogs, live or recorded music, televisions, excessive D.I.Y and intruder alarms. The table below shows the number of complaints received since 2004-2005 split by the cause of the noise. The greatest number of complaints relate to noise disturbance from domestic properties particularly music and dog barking. The total number of complaints received overall has fallen slightly in recent years.

<b>Noise Complaints in Wirral 2004-2005 to 2011-2012</b>								
<b>Complaint Category</b>	<b>2004-2005</b>	<b>2005-2006</b>	<b>2006-2007</b>	<b>2007-2008</b>	<b>2008-2009</b>	<b>2009-2010</b>	<b>2010-2011</b>	<b>2011-2012</b>
<b>DOMESTIC</b>								
Alarms	75	35	72	50	36	49	49	50
Dogs barking	251	253	290	234	238	249	271	232
Music	304	318	303	280	282	283	216	236
Other	85	92	103	82	112	73	112	103
<b>INDUSTRIAL</b>								
Machinery & vehicles	31	31	20	32	12	10	31	18
Other	6	9	18	4	2	1	4	4
<b>COMMERCIAL</b>								
Alarms	9	6	7	12	10	11	7	10
Machinery & vehicles	36	47	48	58	50	36	54	58
Music	102	112	145	108	111	94	121	87
People noise	12	18	19	31	29	21	16	15
Other	33	27	27	21	16	22	9	13
<b>OTHER</b>								
Alarms	12	4	6	4	4	7	3	0
Machinery & vehicles	68	52	102	77	42	59	46	50
Other	20	26	22	25	11	19	16	19
<b>TOTAL</b>	<b>1,044</b>	<b>1,030</b>	<b>1,182</b>	<b>1,018</b>	<b>955</b>	<b>934</b>	<b>955</b>	<b>895</b>

Source: Wirral Council, Pollution Control, 2012

### SA Objective 15: To Reduce the Impact of Traffic Intrusion in Residential Areas

#### Indicator: Number of Persons Killed or Seriously Injured in Road Accidents

(Original SA Scoping Report July 2007 Indicator: Number of persons killed or seriously injured in road accidents per 100,000 population)

The original indicator has been slightly amended to reflect changes in the way this dataset is presented in national statistics.

In 2010, 108 persons were killed or seriously injured in road accidents in Wirral. The annual number of persons killed or seriously injured in road accidents in the Borough has decreased year on year since 2005 with an

overall reduction of over 45%. This is a significantly greater reduction compared with Merseyside (28%) and England (23.9%) which also both had a drop in the total number of persons seriously injured or killed in road accidents between 2005 and 2010.

<b>Number of Persons Killed or Seriously Injured in Road Accidents</b>			
<b>Year</b>	<b>Wirral</b>	<b>Merseyside</b>	<b>England</b>
<b>2005</b>	198	710	27,945
<b>2006</b>	170	626	27,551
<b>2007</b>	153	542	26,720
<b>2008</b>	145	552	24,369
<b>2009</b>	143	553	23,206
<b>2010</b>	108	511	21,255
<b>% Change 2005 - 2010</b>	-45.5%	-28%	-23.9%

Source: Department for Transport, 2011

#### **Indicator: Number of Children Killed or Seriously Injured in Road Accidents**

(Original SA Scoping Report July 2007 Indicator: Number of children killed or seriously injured in road accidents per 100,000 population)

The original indicator has been slightly amended to reflect changes in the way this dataset is presented in national statistics.

In 2010, 18 children were killed or seriously injured in road accidents in Wirral. The annual number of children killed or seriously injured in road accidents in the Borough has fluctuated between 2006 and 2010 with an overall reduction of 45.5%. This is a significantly greater fall compared with Merseyside (29%) and England (22%) which also both had a drop in the total number of children seriously injured or killed in road accidents between 2006 and 2010.

<b>Number of Children Killed or Seriously Injured in Road Accidents</b>			
<b>Year</b>	<b>Wirral</b>	<b>Merseyside</b>	<b>England</b>
<b>2006</b>	33	107	2779
<b>2007</b>	23	90	2671
<b>2008</b>	14	81	2402
<b>2009</b>	22	79	2278
<b>2010</b>	18	76	2168
<b>% Change 2006 - 2010</b>	-45.5%	-29%	-22%

Source: Department for Transport Statistic, 2011

#### **Indicator: Number of Dwellings and Associated Population Identified as 'First Priority' for Further Investigation in DEFRA Noise Action Plan (New Indicator)**

This indicator has been added to highlight the potential impact of traffic noise on residential areas and to utilise a valuable national data source.

The Department for Environment, Food and Rural Affairs has produced noise maps and Noise Action Plans for major agglomerations in response to the

European Environmental Noise Directive and the Environmental Noise (England) Regulations 2006. In 2010 a Noise Action Plan was prepared for the Birkenhead Agglomeration, which covers all of the urban areas in the east of Wirral and Ellesmere Port.

The tables below estimate the number of people and dwellings exposed to noise from road traffic within the Birkenhead Agglomeration.

<b>Birkenhead Agglomeration Noise Action Plan 2010</b>		
<b>Annual Average Noise Level</b>		
<b>Noise Level (<math>L_{den}</math>) (dB)</b>	<b>Number of Dwellings</b>	<b>Number of People</b>
≥55	138,000	308,000
≥60	111,000	247,000
≥65	11,000	24,000
≥70	3,000	7,000
≥75	<500	<500

Source: Noise Action Plan Birkenhead Agglomeration, March 2010

<b>Birkenhead Agglomeration Noise Action Plan 2010</b>		
<b>Annual Average Night-time (2300-0700) Noise Level</b>		
<b>Noise Level (<math>L_{night}</math>) (dB)</b>	<b>Number of Dwellings</b>	<b>Number of People</b>
≥50	122,000	273,000
≥55	22,000	47,000
≥60	4,000	9,000
≥65	<500	1,000
≥70	<500	<500

Source: Noise Action Plan Birkenhead Agglomeration, March 2010

<b>Birkenhead Agglomeration Noise Action Plan 2010</b>		
<b>Annual Average Day and Evening (0600-2400) Noise Level</b>		
<b>Noise Level (<math>L_{A10,18h}</math>) (dB)</b>	<b>Number of Dwellings</b>	<b>Number of People</b>
≥55	137,000	306,000
≥60	112,000	249,000
≥65	15,000	31,000
≥70	4,000	9,000
≥75	<500	1,000

Source: Noise Action Plan Birkenhead Agglomeration, March 2010

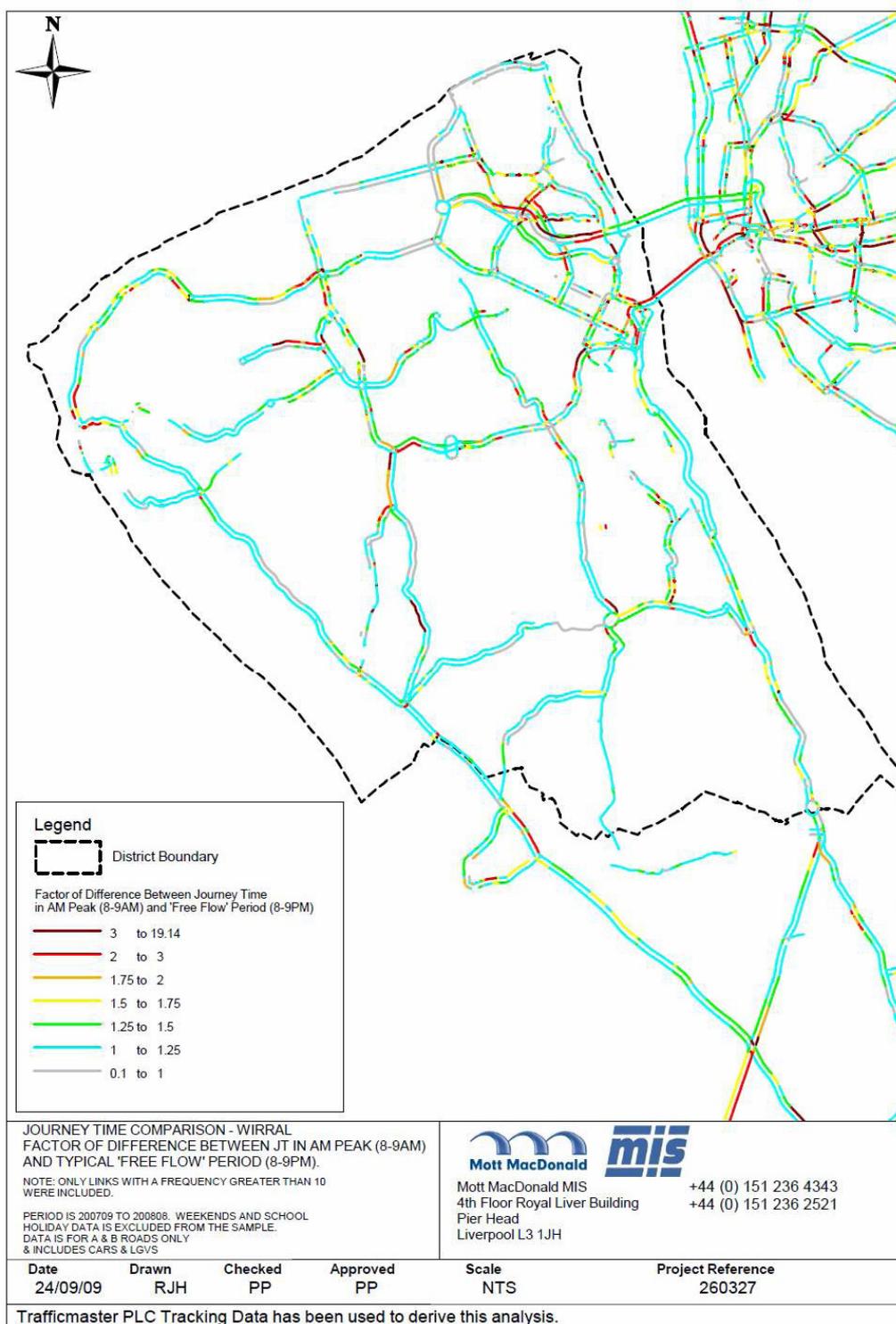
The Noise Action Plan uses noise mapping data to identify 'Important Areas' and 'First Priority Locations' for the management of noise and its effects. Important Areas, in respect to traffic noise, are considered to be the 1% of the population affected by the highest noise levels (in the agglomeration) and require further investigation for potential action. In Wirral, approximately 1,500 dwelling and 3,300 residents are located within an 'Important Area'.

The Action Plan also identifies 'First Priority Locations' where the average day and evening noise level is at least 76dB for further investigation by highways authorities. In Wirral, approximately 100 dwellings and 300 residents are within the 'First Priority Locations'.

### Indicator: Number of Road Traffic Congestion Points (New Indicator)

This indicator has been added to highlight the potential impact of traffic congestion on residential areas and to utilise a valuable new data source.

Traffic Master data, provided by the Department for Transport, factors the difference between vehicle journey times in the morning peak (8-9 AM) and 'freeflow' journey times in the evening (8-9 PM). In 2008-2009 morning peak journey times were twice as long as or greater than the equivalent evening journey at 24 locations on the A and B classified road network in Wirral.



Source: The Merseyside Transport Partnership, Travel in Merseyside 2011