



State of the AONB 2018

Mendip Hills AONB

State of the AONB: Indicators

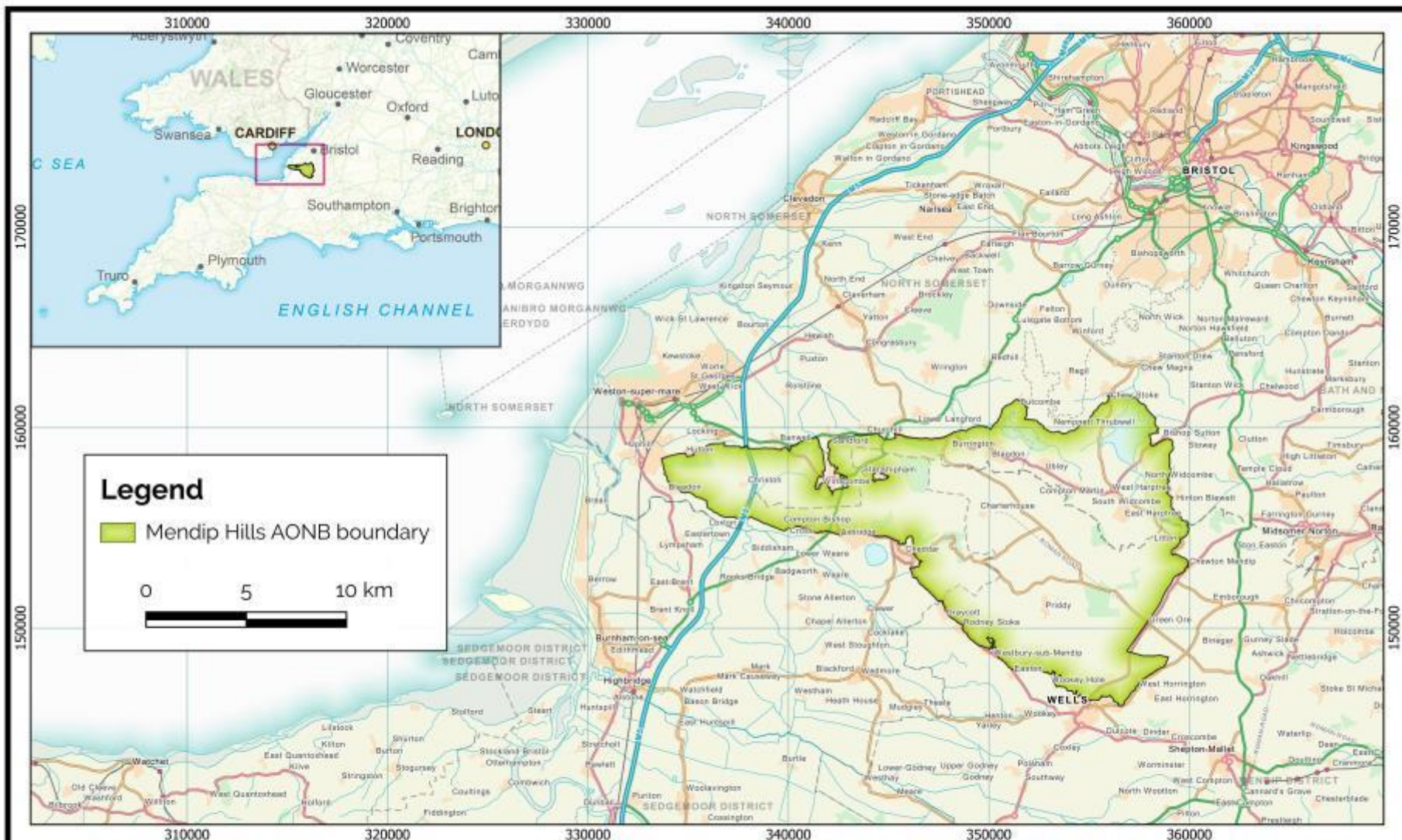
This report pulls together the data and information gathered by Natural England for the Mendip Hills AONB and from other sources as indicated. The indicators appear in the Mendip Hills AONB Management Plan 2014-2019.

The workbook takes as a start point and template the '2009 State of AONB' indicator report and presents data collated in January 2018 alongside comparable data from 2009, where such exists, or to alternative baselines against which comparisons/ trends can be identified.

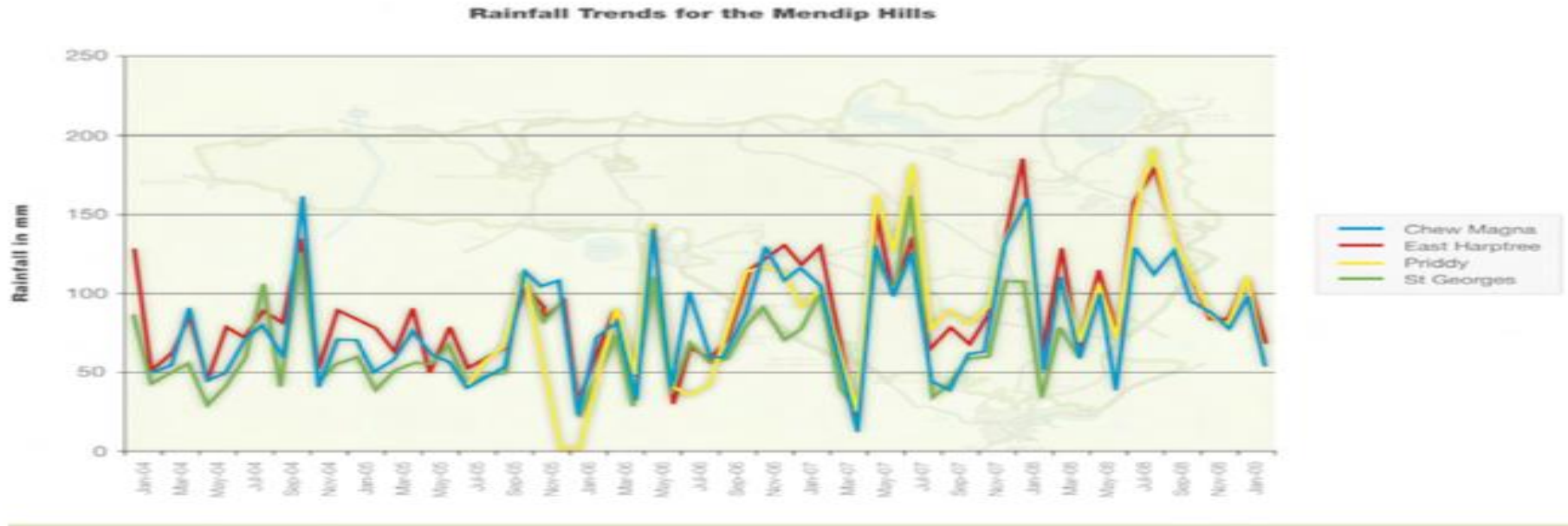
Data Considerations

- A number of the data sets collated for the 'State of AONB' Report (2009) have since been discontinued or otherwise no longer available. In such cases the data collated here should become the new baseline for future comparison purposes.
- Where original data from 2009 or before was absent or not available we have attempted to extract useable figures from graphs or visuals. As a result some of the comparative data used are estimates and a degree of error should be accepted.

- Indicator 1 - Rainfall Trends
- Indicator 2 - Metaldehyde Levels in Water Bodies
- Indicator 3 - The % of the protected landscape that is relatively tranquil for its area
- Indicator 4 - Light Pollution
- Indicator 5 - Condition of Historic Assets
- Indicator 6 - Population Change
- Indicator 7 – Volunteer hours achieved and practical tasks undertaken
- Indicator 8 - The area managed under agri-environment agreements
- Indicator 9 - The total annual value of agri-environment agreements
- Indicator 10 - The uptake of 6 themed groups of Environmental Stewardship
- Indicator 11 - The area of Sites of Special Scientific Interest (SSSI) in favourable or recovering condition
- Indicator 12 - Condition of broad habitats within SSSIs
- Indicator 13 - Total area of Woodland
- Indicator 14 - The % area of woodland under management
- Indicator 15 - Length of Public Rights of Way
- Indicator 16 – Development Monitoring



Indicator 1 - Rainfall Trends

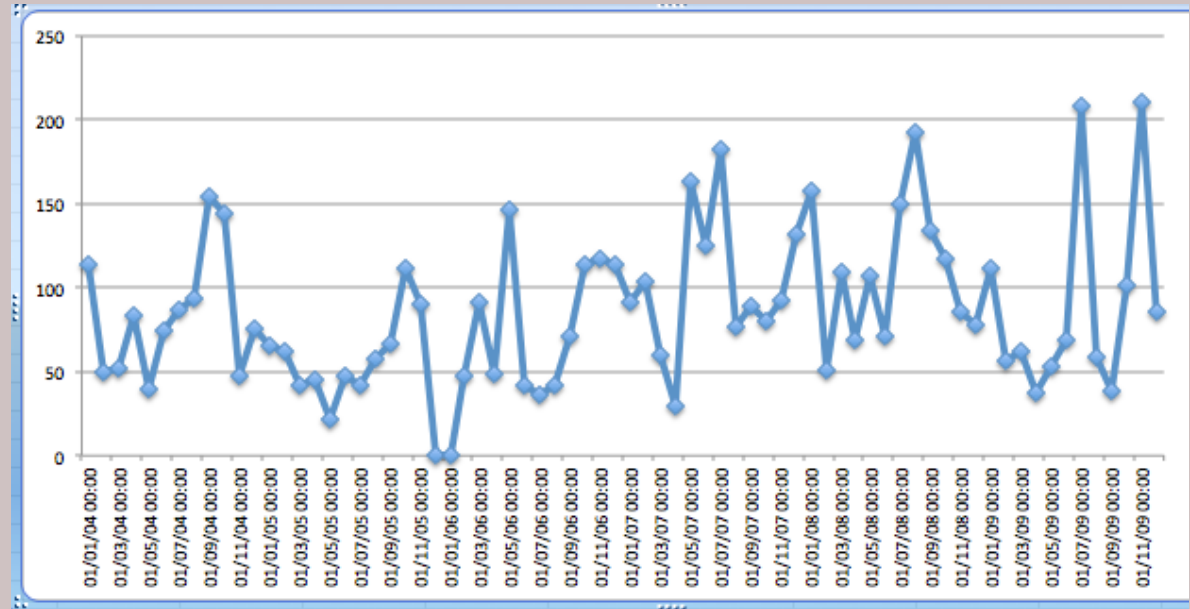


The rainfall data used in the 2009 'State of AONB' report were derived from 4 rain gauge stations and covered a 5 year period (2004-2009). The gauging stations were:

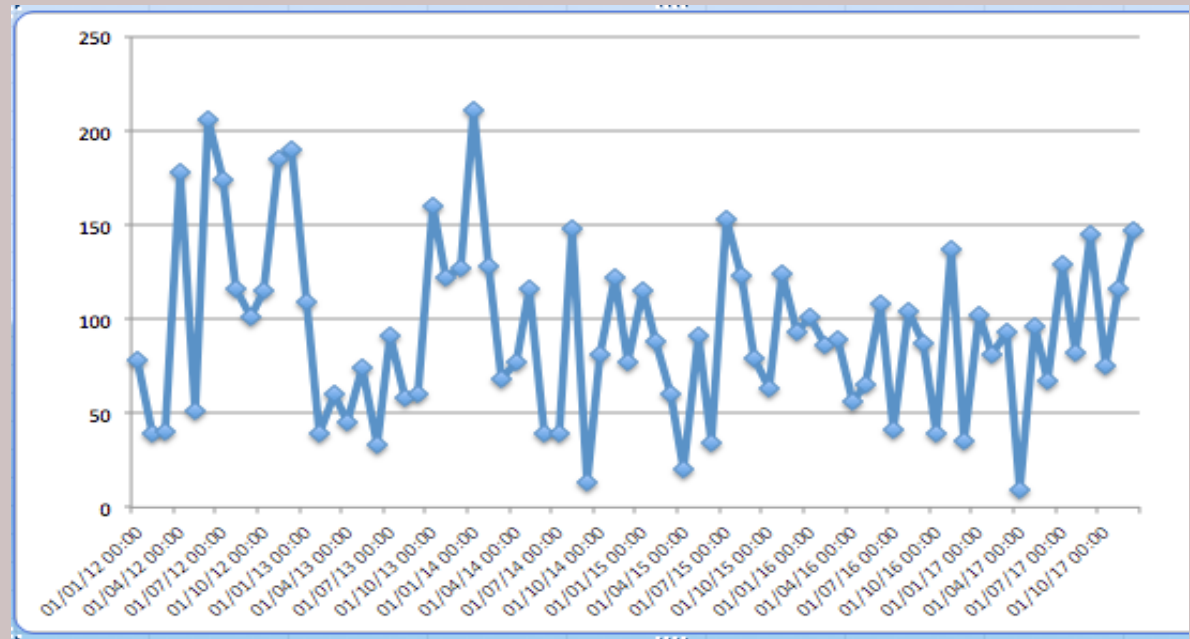
Chew Magna (data to March 12)
East Harptree (data to Jul 11)
Priddy (data for whole period 2004-2016) and
St Georges (data to Oct 09)

Three of the gauging stations have changed to new locations between 2009-2012. Despite a change in location of rain gauge in 2005 – Rainfall readings from Priddy are available across the 2004-2016 period and have been selected for comparison.

2004/09 Monthly rainfall readings – Priddy
(station number 5212275SC to 01/06/05)
Priddy Chancellors Farm (station number
407214 from 01/07/05)



2012/17 Monthly rainfall readings – Priddy
Chancellors Farm (station number 407214)



Indicator 2 - Metaldehyde Levels in Water Bodies

Metaldehyde, used as a pesticide against slugs, snails, and other gastropods.

Bristol Water no longer keep data on Metaldehyde levels and therefore advise Mendip Hills AONB to look at the following Environment Agency website to see what they say about Metaldehyde for water bodies which pass through the AONB:

Catchment Data Explorer: <http://environment.data.gov.uk/catchment-planning/>

What's in my back yard: <http://apps.environment-agency.gov.uk/wiyby/default.aspx>

The following article may offer further insight into the catchment management issues on the Mendip Hillss (which are different to those on the Severn where Bristol Water have a Metaldehyde Action Programme):

<https://www.bristolwater.co.uk/about-us/environment/catchment-management/>

Indicator 3 - The % of the protected landscape that is relatively tranquil for its area

Campaign to Protect Rural England (CPRE) funded and produced data on Tranquillity and published their data in 2006/07. They have so far been unsuccessful in getting Government support for an update but are considering funding an update again themselves.

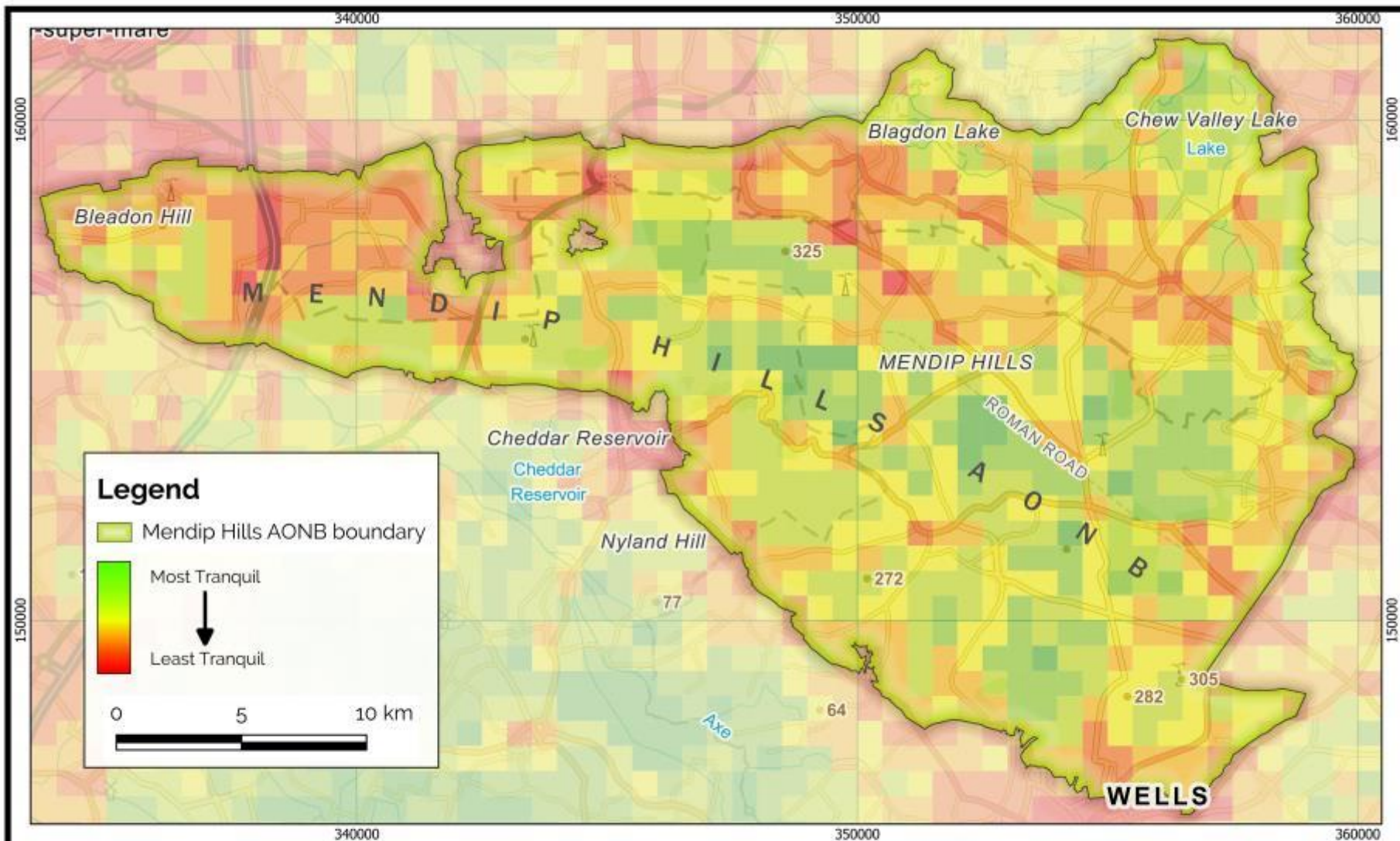
From the CPRE Website: “In 2005-06 CPRE worked with Natural England and Newcastle and Northumbria Universities to produce new tranquillity maps that are still useful today. Published in 2006 and 2007 these illustrated how fragmented tranquillity has become in the countryside, and identified relatively unspoilt areas that needed stronger protection.”

CPRE have supplied a digital copy of the underlying 2007 tranquillity data and this has been cut to the AONB boundary. Each pixel represents an area 500m by 500m (see Map 1).

Indicator 4 - Light Pollution

CPRE are no longer updating their light and tranquillity mapping but have interactive maps online that use Street Maps with AONB boundaries.

The website <http://nightblight.cpre.org.uk/maps/> has been used to produce a simple PDF map centred over the AONB (see Map 2). We were unable to acquire the digital data from CPRE so the style of the map is different to the others that have been created.



Map 1 Mendip Hills AONB - Relative Tranquillity

Scale
1:100,000

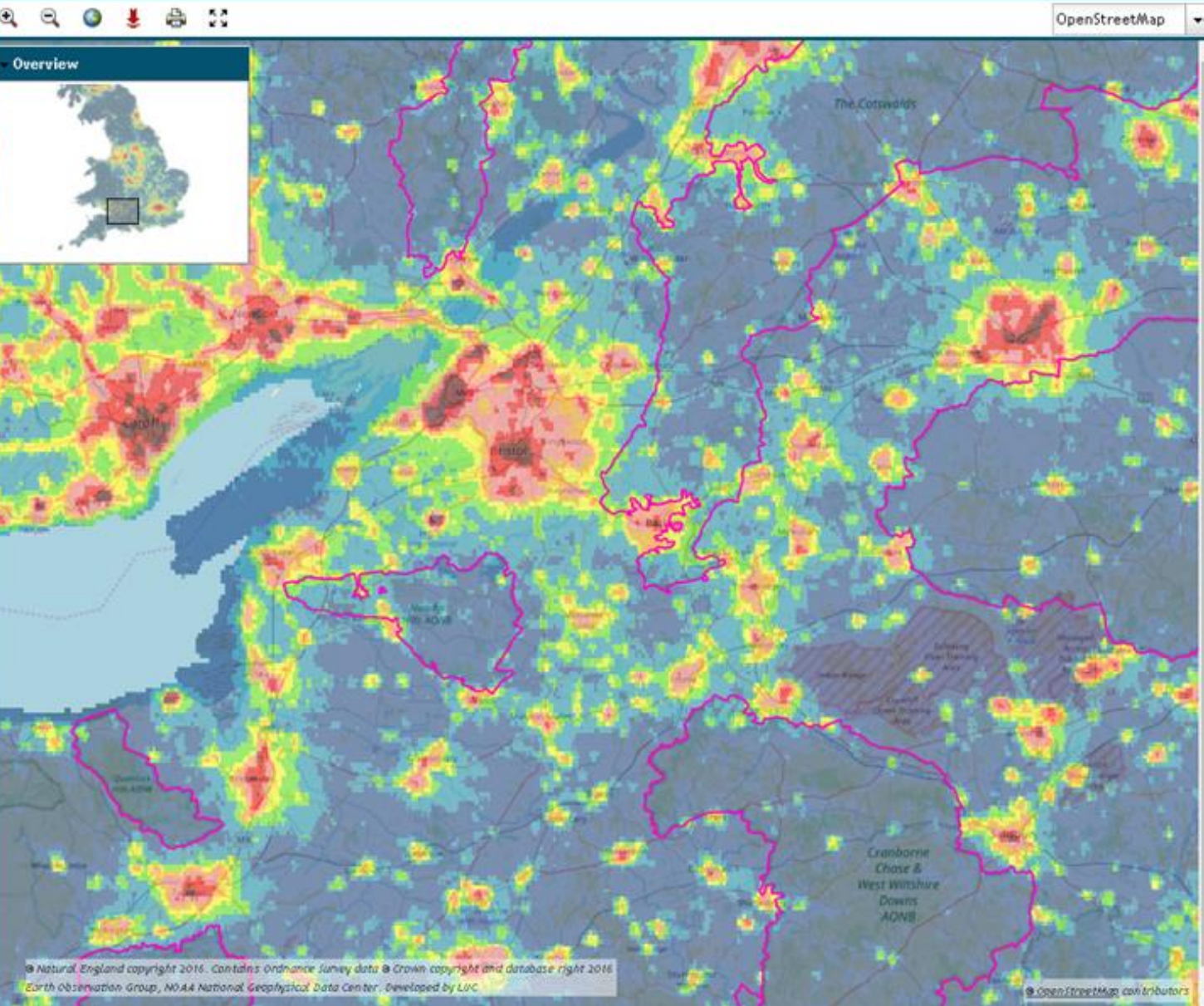
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National Tranquillity Mapping Data 2007 developed for Campaign to Protect Rural England and Natural England by Northumbria University.
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England's Light Pollution and Dark Skies



Legend

Search tools

Detailed maps and statistics

X

Areas of Outstanding Natural Beauty - Mendip Hills AONB

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PDF Map

More information

Name	Mendip Hills AONB
< 0.25 (low) (%)	1.1
0.25 - 0.5 (%)	61.9
0.5 - 1 (%)	27.1
1 - 2 (%)	7.4
2 - 4 (%)	1.8
4 - 8 (%)	0.6
8 - 16 (%)	0.1
16 - 32 (%)	0
>32 (high) (%)	0
Average (Mean) Rank	27

Map 2
Earth Observation Group,
NOAA National Geophysical
Data Center. Data processed
by LUC on behalf of CPRE.

Indicator 5 - Condition of Historic Assets

Listed Buildings (see Map 3):

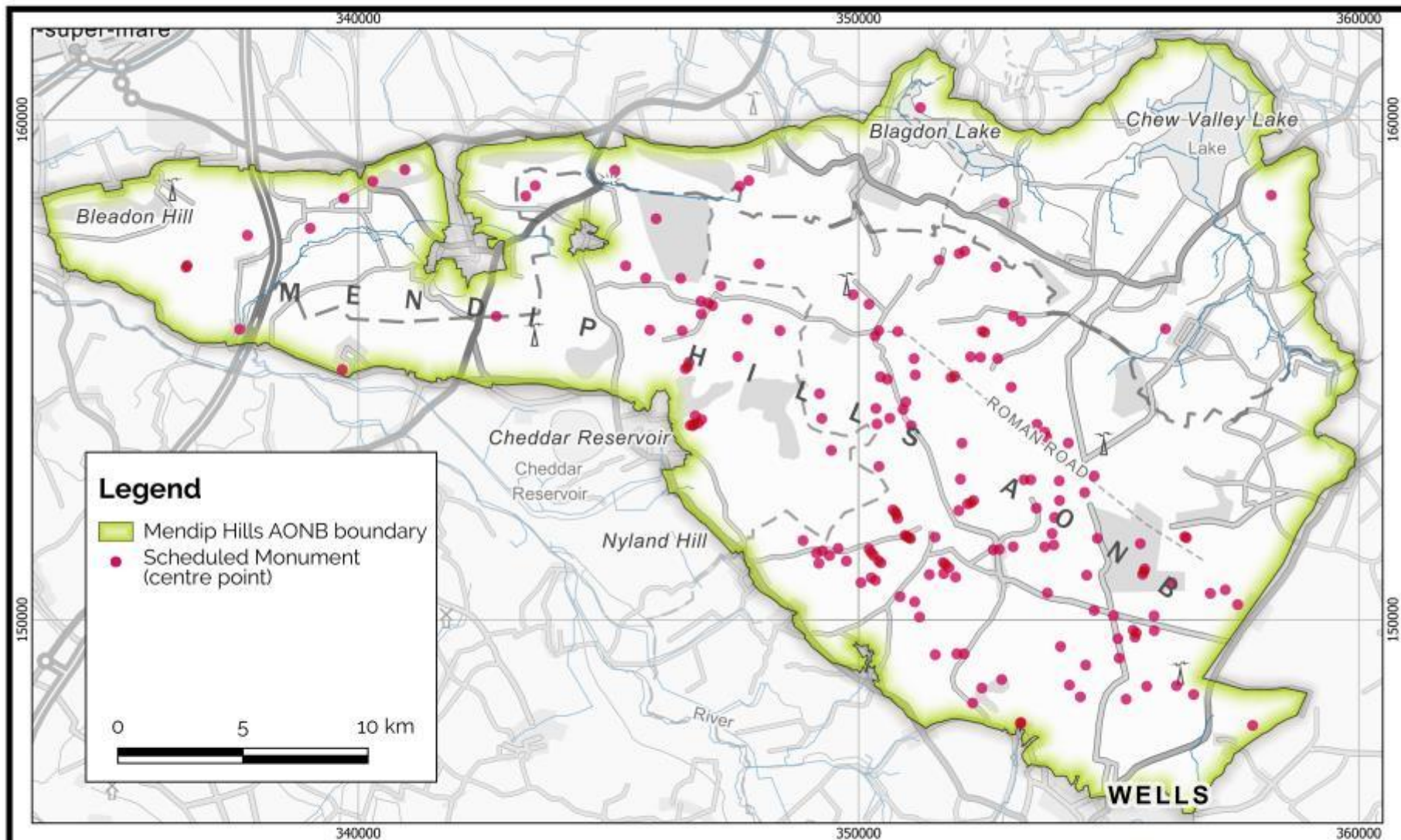
	Grade 1	Grade 2*	Grade 2	NG	Total	@ Risk
2006 Mendip Hills AONB	11	16	169	0	196	0
2016 Mendip Hills AONB	11	18	178	0	207	0
Change 2006-2017	none	+	+		+	None

Scheduled Monuments (see Map 4):

	Number of monuments	% of SW RDA monuments	Area monuments (Ha)	Area of AONB (Ha)	% of AONB coverage by Monuments	@ Risk
2005 Mendip Hills AONB	169	2.42	332.65	19847.95	1.68	?
2016 Mendip Hills AONB	172	N/A				5 (2.9%)
Change	+					

Scheduled Parks and Gardens:

	Number of Parks and Gardens	Area (Ha)	% coverage of AONB	@ Risk
2006 Mendip Hills AONB	2	32	0.16	
2016 Mendip Hills AONB	1			
Change	-	-		



Map 3 Mendip Hills AONB - Scheduled Monuments 2018

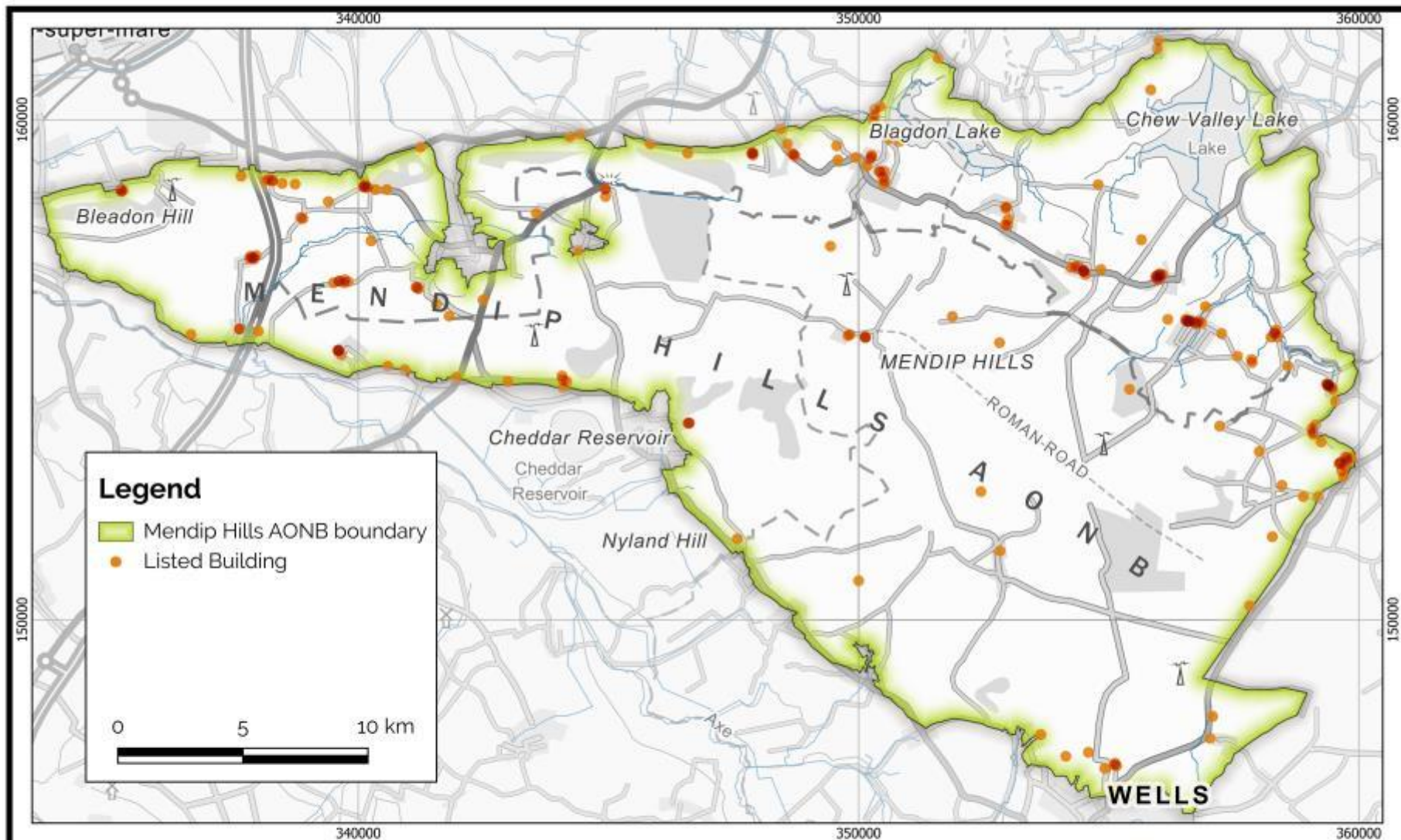
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The Historic England GIS Data contained in this material was obtained on 28/02/2018. The most publicly available up to date Historic England GIS Data can be obtained from HistoricEngland.org.uk



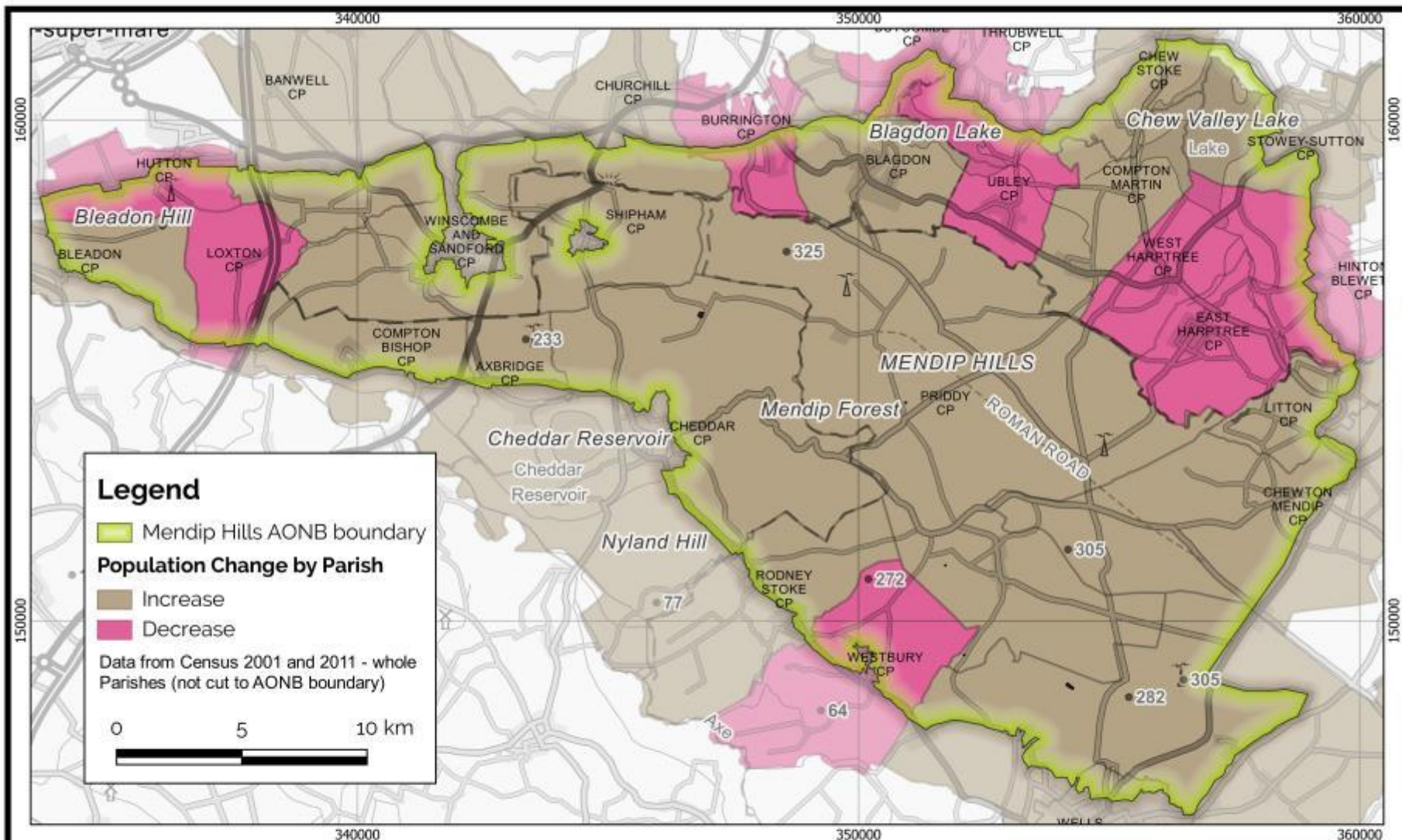


Indicator 6 - Population Change

Census data from 2001 and 2011 was used to produce Map 5 – (NB whole Parishes - not cut to AONB boundary)

Parish	Population 2001 Census *	Population 2011 Census	Change		Parish	Population 2001 Census	Population 2011 Census	Change
Axbridge	2025	2057	+		Loxton	222	192	-
Cheddar	4849	5755	+		Winscombe & Sandford	4,332	4,546	+
Compton Bishop	581	620	+					
Shipham	1,022	1,087	+		Chew Stoke	905	991	+
					Compton Martin	508	508	
Litton	230	240	+		East Harptree	680	644	-
Priddy	598	624	+		Hinton Blewett	326	308	-
Chewton Mendip	518	585	+		Nempnett Thrubwell	189	177	-
Rodney Stoke	1,260	1,326	+		Stowey Sutton	1,222	1,361	+
St Cuthbert Out	3,459	3,749	+		Ubley	335	331	-
Wells	10,406	10,536	+		West Harptree	459	439	-
Westbury	806	801	-					
Banwell	2,923	2,919	+					
Blagdon	1,032	1,116	+					
Bleadon	1,068	1,079	+					
Burrington	477	464	-					
Butcombe	232	218	-					
Churchill	1,106	2,235	+					
Hutton	2,627	2,582	-					

* Due to some parish data needing to be extracted from Ward data some 2001 census figures are approximations



Map 5
Mendip Hills AONB - Population Change by Parish

Scale
1:100,000

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Indicator 7 – Volunteer hours achieved and Practical Tasks undertaken

Year	Total Volunteer Hours	Change
2010-11	1,196	
2011-12	1,942	+
2012-13	1,589	-
2013-14	2,077	+
2014-15	2,357	+
2015-16	2,123	-
2016-17	2,350	+
2017-18	3,709	+
GRAND TOTAL	17,343	Growth 2009-2017

Year	No of Volunteer Tasks	Change
2010-11	0	
2011-12	26	+
2012-13	22	-
2013-14	25	+
2014-15	26	+
2015-16	25	-
2016-17	25	
2017-18	28	+
TOTAL	167	Growth 2009-2017

Scheme Years	No of Young Rangers completing the programme	Change
2007-09	11	
2009 -11	15	+
2011-13	14	-
2013-15	12	-
2015-17	11	-
TOTAL	63	Growth 2009-2017

Indicator 8 - The area managed under agri-environment agreements

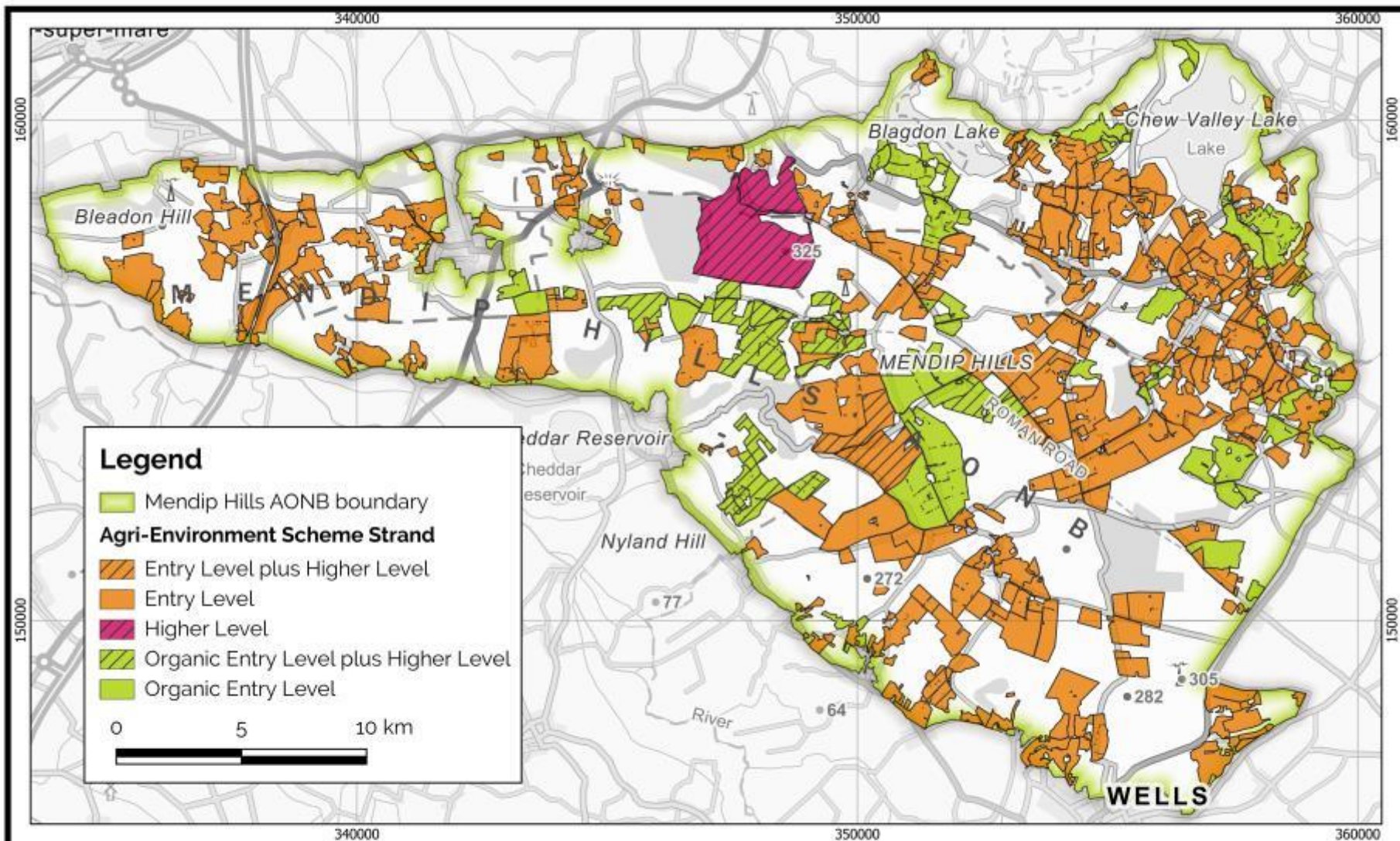
Countryside Stewardship Scheme (CSS), Environmentally Sensitive Areas (ESA) and the different levels of Environmental Stewardship (ES). Expressed as a % of the protected landscape and as a % of the draft Utilisable Agricultural Area within it.

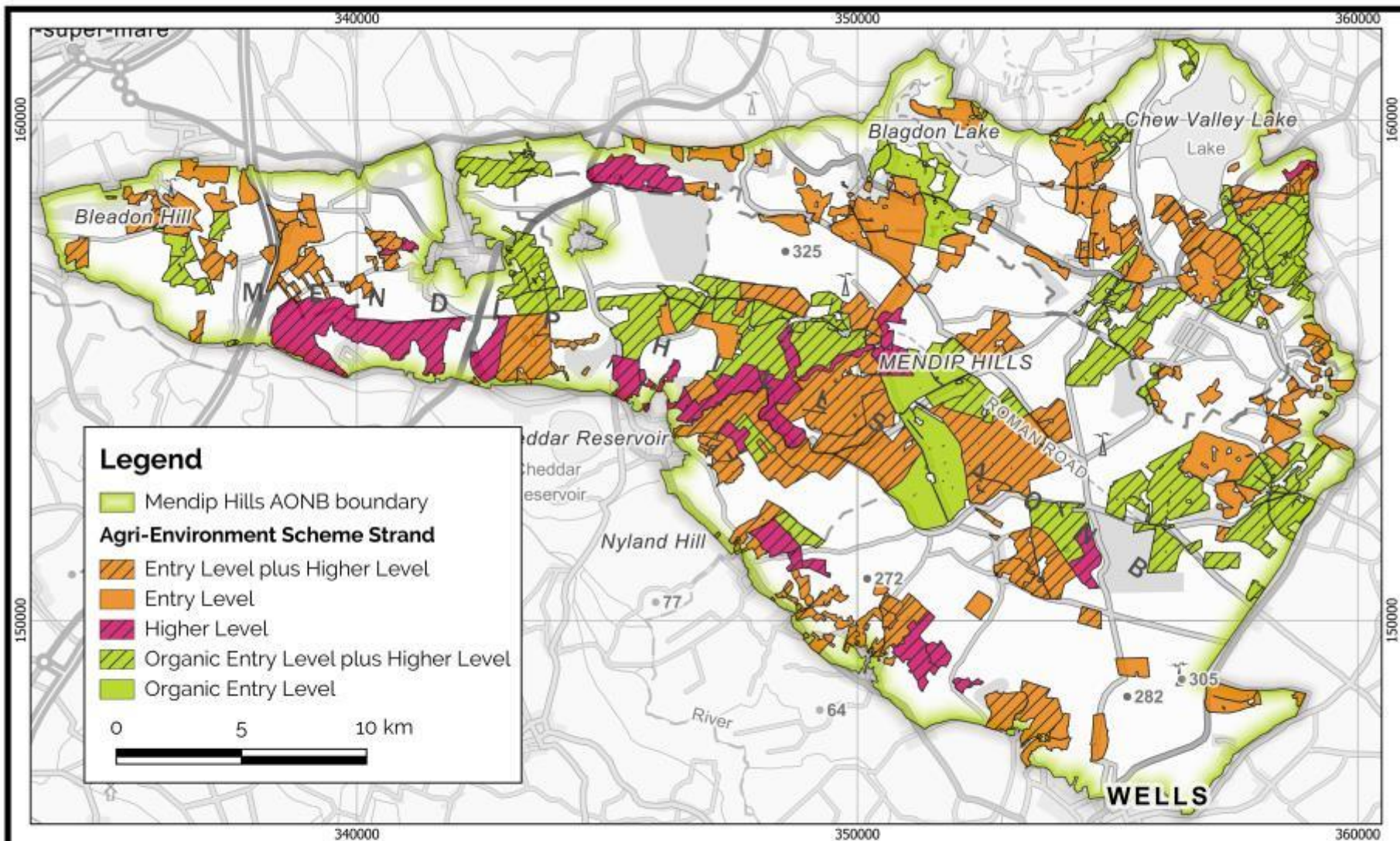
2009 agri-environment agreements – See Map 6

2017 agri-environment agreements – See Map 7

Agri-Environment Scheme Area	2009	2017	Change
Total area in Agri-environment agreements as a % of AONB area	37%	40%	+
Total area as a % of the total useable agricultural area	50%	55%	+

Note: Figures from 2017 slightly over-report the situation. This is because some of the Scheme strands straddle the AONB boundary resulting in a larger area being reported. If you strictly cut the 2017 data to the AONB boundary, then you get total area in 2017 = 35% and total expressed as a percentage of the useable agricultural area as 49%. This method of “strict” cutting has been used to calculate the 2009 areas.





Map 7
Mendip Hills AONB - Agri-Environment Schemes 2016

Scale
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Indicator 9 - The total annual value of agri-environment agreements*

* Using data from the spreadsheets supplied by Natural England – (No data was supplied from Natural England for 2009 so a proxy has been calculated based on areas and cost in 2017 projected back to 2009 (assumes value for each scheme strand have remained the same).

Agreement types	2009		2017		Change
	Area	Value	Area	Value	
ELS+HLS	365 Ha	£58,549	2,118 Ha	£346,660	+
ELS	4,855 Ha	£133,090	1,503 Ha	£48,555	-
HLS	415 Ha	£79,888	949 Ha	£263,351	+
OELS + HLS	546 Ha	£70,749	2,017 Ha	£280,995	+
OELS	1,176 Ha	£67,929	546 Ha	£31,530	-
Total	7,457 Ha	£410,210	7,134 Ha	£971,095	+

Despite a slight reduction in the area of AONB under agri-environment agreement the value of payments has increased significantly reflecting the increase in area under high level agreement and payments.

Indicator 10 - The uptake of 6 themed groups of Environmental Stewardship

Options that contribute to conserving and enhancing landscape character. No data available for 2009.

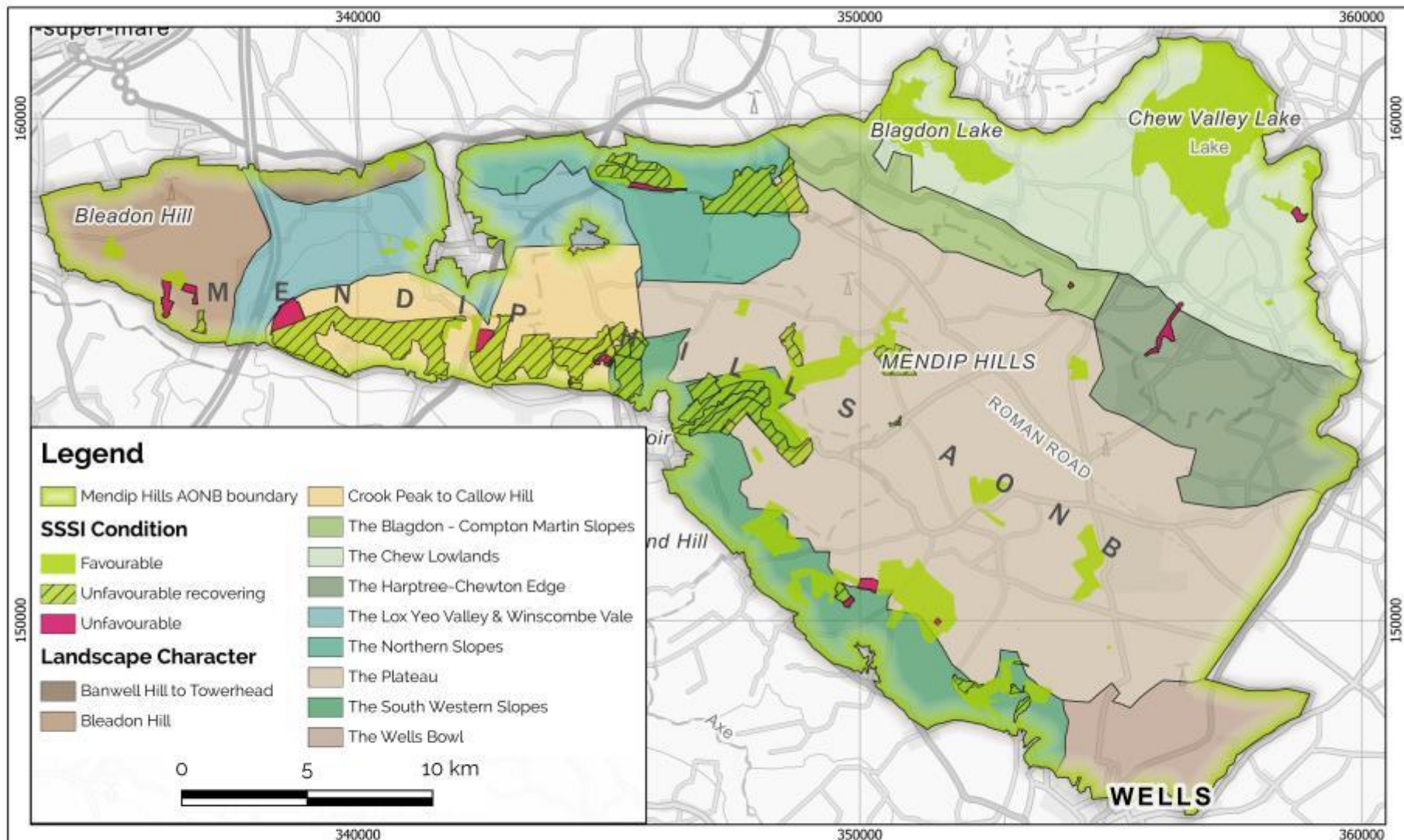
ES option themes	2009	2017	Change
The area of land under ES for the management and protection of archaeological features (Natural England)		499.4 Ha	
The number of hedgerow trees and in-field trees managed under ES		276	
The area of woodland managed and created under ES		247Ha	
The area of low input grassland managed, restored or created under ES		2668 Ha	
The area of land under ES for the management, restoration or creation of lowland heathland		29 Ha	
The area of land under ES for the maintenance, restoration or creation of moorland		10 Ha	

Indicator 11 - The area of Sites of Special Scientific Interest (SSSI) in favourable or recovering condition

SSSI Area 2009 - Map 8

SSSI Area 2017 – Map 9

SSSI Condition	2009	2017	Change
Favourable	1559 Ha	1596 Ha	+ 37Ha
Unfavourable Recovering	962 Ha	1039 Ha	+ 77Ha
Total	2521Ha	2635 Ha	+ 114Ha



Map 8 Mendip Hills AONB - SSSI Condition 2009

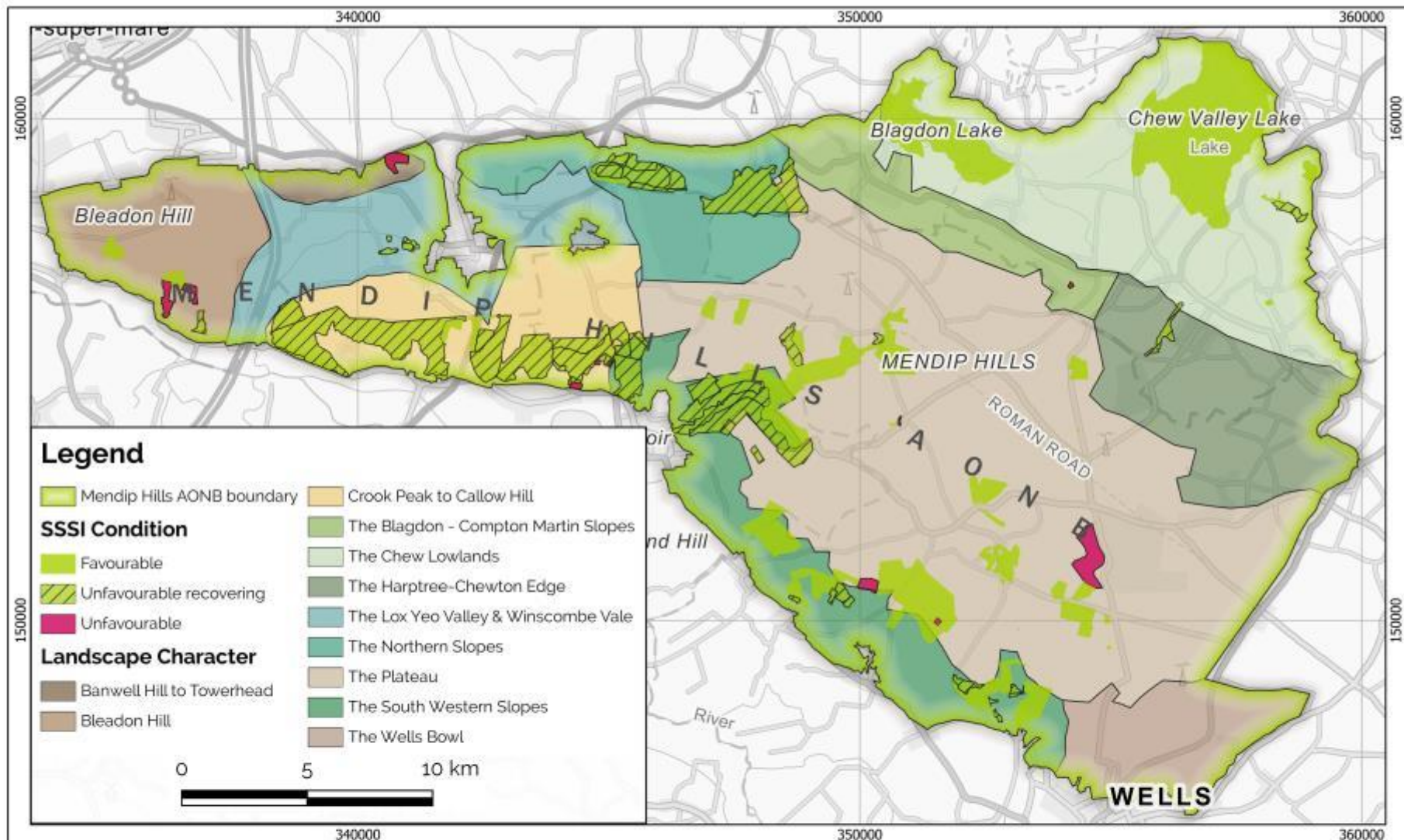
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Indicator 12 - Condition of broad habitats within SSSIs

No data available for 2009.

Habitat Type	Favourable		Unfavourable Recovering		Unfavourable No Change		Unfavourable declining		Grand Total	
	2009	2017	2009	2017	2009	2017	2009	2017	2009	2017
Acid Grassland		10				43				53
Bogs - Lowland				6						6
Broadleaved, Mixed and Yew Woodland - Lowland		91		82						173
Calcareous Grassland - Lowland		373		911		19		5		1308
Earth Heritage		277		17		14				308
Neutral Grassland - Lowland		72		22				4		98
Standing Open Water and Canals		774								774
Grand Total		1596		1039		76		10		2721

Indicator 13 - Total area of Woodland

Data provided by the Forestry Commission.

Type of Woodland	2013	2017	Change
Broadleaved	1936 Ha	1936 Ha	n/c
Conifer	414 Ha	400 Ha	-
Mixed	138 Ha	138 Ha	n/c
Felled	30 Ha	44 Ha	+
Prepared ground for planting	10 Ha	12 Ha	+
Shrub Land	34 Ha	34 Ha	n/c
Young trees	295 Ha	301 Ha	+
Total area of Woodland	2,858 Ha	2865 Ha	+

Indicator 14 - The % area of woodland under management

Data provided by the Forestry Commission. Incorporating woodlands where there has been Forestry Commission England grant scheme or felling licence activity in previous 5-10years.

Woodland Area	2013	2017	Change
Actively managed woodland	1,190 Ha = 41%	1359 Ha = 46%	+
Un managed woodland	1736 Ha	1572 Ha	-

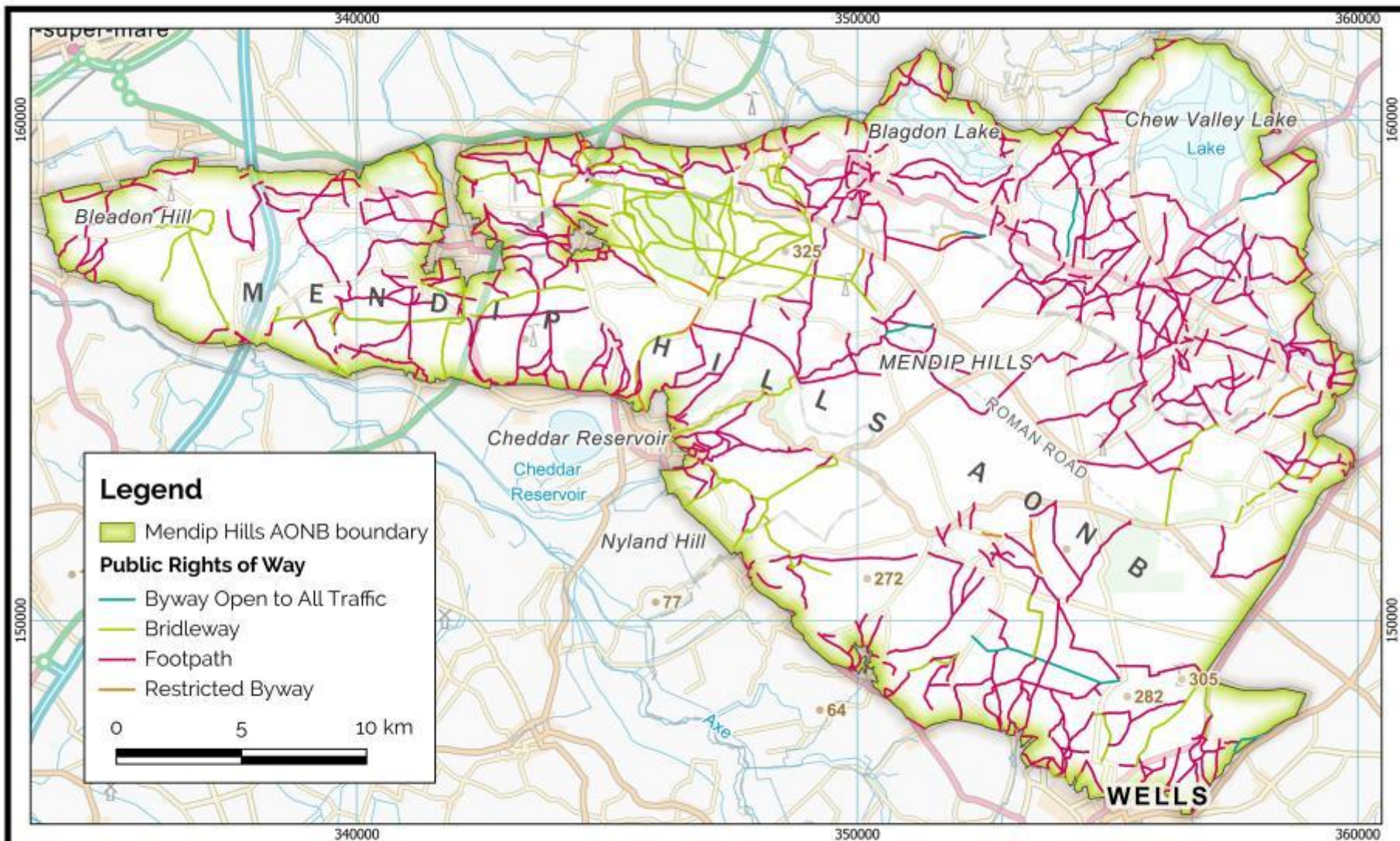
Indicator 15 - Length of Public Rights of Way

PROW totals calculated for entire AONB. Lengths made up from Authority data from Bath & North East Somerset, North Somerset and Somerset County Council. 2009 data not available.

- Footpath = 334.06 km
- Bridleway = 92.63 km
- Byway Open to All Traffic = 7.65 km
- Restricted Byway = 8.99 km

See Map 10

NB Some very small amounts of over-reporting may occur due to neighbouring Authorities' data overlapping slightly on the boundary between Authority areas. GIS layers have been visually inspected and any obvious overlaps removed to avoid double counting.



Map 10 Mendip Hills AONB - Public Rights of Way

Scale
1:100,000

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Data combined from Bath & NE Somerset, North Somerset and
Somerset County Council.



Indicator 16 – Development Monitoring

Large scale housing development (over 10 units) impacting on the Mendip Hills AONB 2011-2017.

AONB impact	Units applied for	Units granted	Site Area (ha) granted	Greenfield (Ha) granted	Decisions pending
Within AONB	101	18	2	0	21 units
Within 500m of AONB	942	458	17	17	310 units
Within 2Km (>500 units)	3,770	3,770	267	89	0
Totals	4,813	4,246	286	106	321

Source: Glenigan Data (2017) provided by CPRE.

State of the AONB 2018



Mendip Hills AONB Unit
Charterhouse Centre
Blagdon
Bristol
BS40 7XR

01761 463458

mendip@mendiphillsaonb.org.uk

mendiphillsaonb.org.uk

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