

# **THE BALDONS NEIGHBOURHOOD DEVELOPMENT PLAN**

## **Appendix B: Baseline Data**

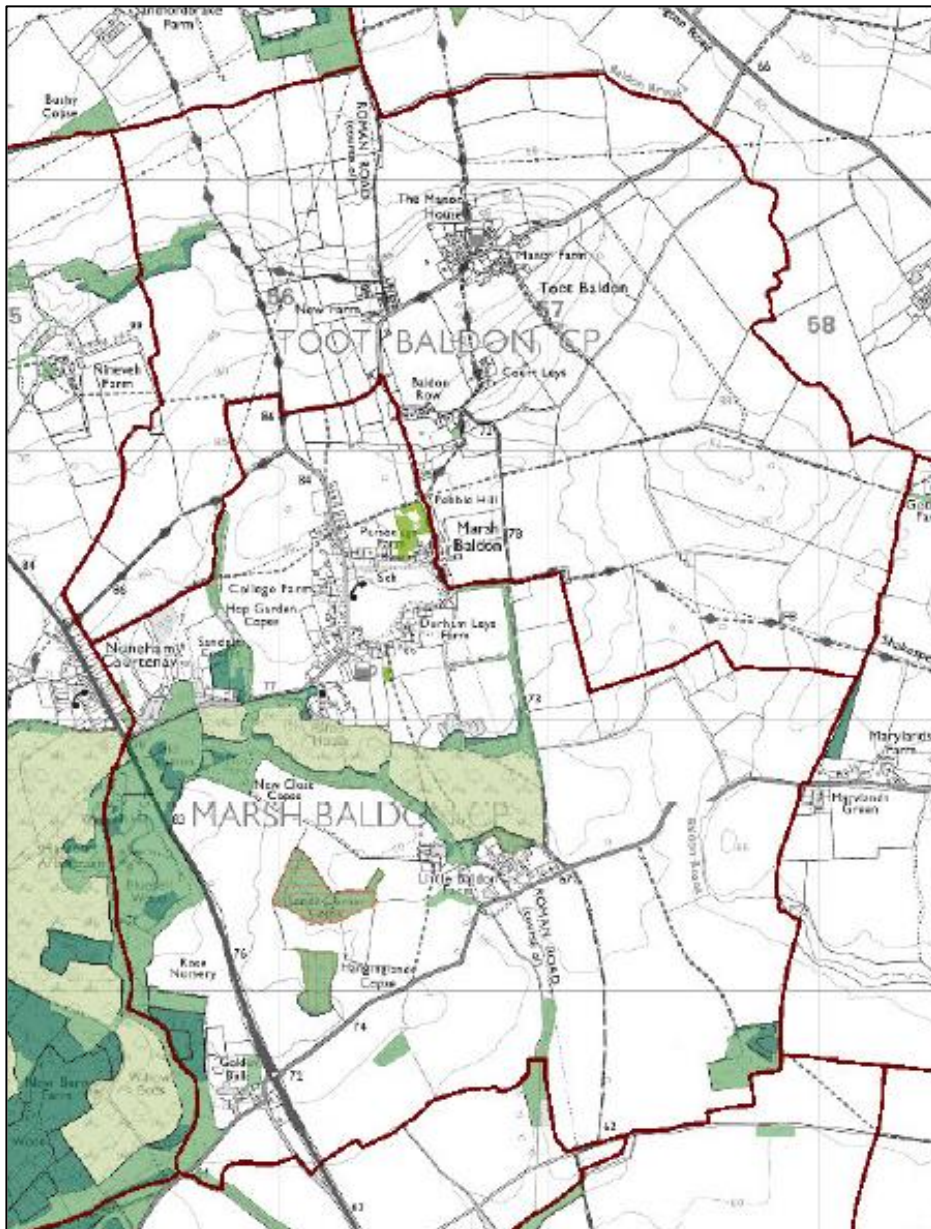
**June 2017**

## **APPENDIX B: Baseline Assessment**

### **1 Biodiversity, fauna and flora**

The landscape of the parishes of Marsh and Toot Baldon are described in the Oxfordshire Wildlife and Landscape Study. This defines the south and west of the parishes as Wooded Estate lands, with the main residential areas of the villages described as Lowland Village Farmland. To the east and north the landscape is described as Alluvial Lowland, while the south eastern corner is described as Vale Farmland.

The predominant land use is arable farmland with woodland areas. As a result the entire area is designated as important habitat for farmland and grassland birds, notably Corn Bunting, Yellow Wagtail, Lapwing, Redshank and Stone Partridge.



**Figure 1.1: Distribution of Woodland and Orchard in the Baldons**

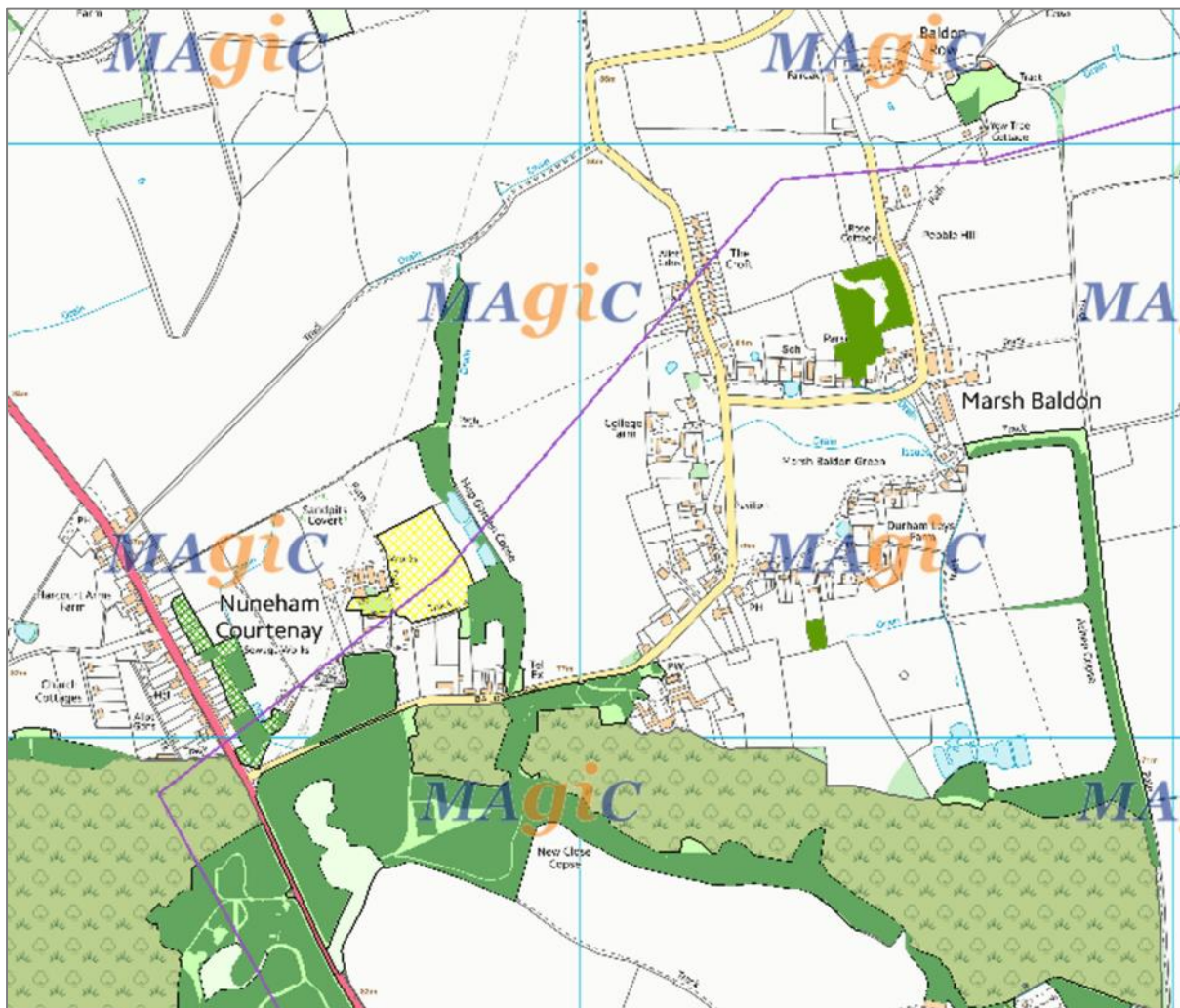
Generally all the woodland in the Baldons parishes is designated to be of high priority from a biodiversity perspective. The majority of this woodland is mixed deciduous (mid green), with small amounts of coniferous woodland (dark green). Some areas are designated as “Woodpasture and Parkland Priority Habitat” (pale green), particularly around Baldon House and the eastern margins of the Harcourt Arboretum, which falls within Marsh Baldon parish.

In addition, two areas, at Parsonage Farm and to the south of the Green, are designated as “Traditional Orchards” (bright green). The mid green area with red cross hatching, known as Sands Corner Copse is “Ancient Replanted Woodland”, while further to the south, Hanginglands Copse is “Ancient and Semi-Natural Woodland”

There has been considerable hedge replanting in recent years, using mixed native species such as hawthorn, blackthorn and elm, which has improved the potential for biodiversity in the parish by providing habitats and corridors for birds, mammals and insects.

Sources: <http://owls.oxfordshire.gov.uk/wps/wcm/connect/occ/OWLS/Home/>

The darker green areas in the map below are designated deciduous woodland high priority habitats.



<http://magic.defra.gov.uk/MagicMap.aspx>

There are no EU designated nature sites such as Special Areas of Conservation or Sites of Special Scientific Interest near the Baldons.

The whole parish and surrounding areas are designated a Nitrate Vulnerable Zone (NVZ). NVZs were set up under Council Directive 91/676/EEC and have been established in areas where nitrate from agricultural land is causing, or could cause, pollution of the water environment. Measures include a requirement for farmers to limit their applications of livestock manures and, in some circumstances, to observe closed periods for the application of organic manure to agricultural land. (ref <http://magic.defra.gov.uk/MagicMap.aspx>)

## 2 Population, Housing and Human Health

### 2.1 Population

At the 2011 census there were 458 people living in the Baldons, distributed as shown in Table 2.1:

*Table 2.1: Population*

	<b>Toot Baldon</b>	<b>Marsh Baldon</b>	<b>Total Baldons</b>	<b>South Oxfordshire</b>
Population	148	310	458	134,257
of which				
- female (%)	48	55	53	51
- male (%)	52	45	47	49
- under 18	23	30	28	20
- 18 – 65	54	54	54	60
- Over 65`	23	16	18	18
Mean age	42.5	37.4	39	40.9

As a whole there is a significantly higher percentage of under 18's in the Baldons than in South Oxfordshire as a whole, whereas the proportion of over 65's is the same as in the region. However there are remarkable disparities within the Baldons: the mean age in Marsh Baldon is 5 years less than that in Toot, reflecting that the under 18's represent 30% of the Marsh population but only 23% of that of Toot.

### 2.2 Housing

There are 176 houses in the Baldons, with a mean occupancy of 2.6 persons per house. The distribution of housing by Council Tax Band is shown in Table 2.2

*Table 2.2: Housing*

<b>Council tax band</b>	<b>Toot</b>	<b>Marsh</b>	<b>Total Baldons</b>	<b>South Oxfordshire</b>
Total houses	58	118	176	
of which (%)	0	7	5	4
- Band A	2	4	3	9
- Band B	19	19	19	27
- Band C	7	13	11	23
- Band D	16	23	20	16

- Band E	29	14	19	10
- Band F	21	19	20	10
- Band G	7	2	3	1
- Band H				

These data show that the Baldons have considerably less housing in the lower tax bands (the smaller houses) than has South Oxfordshire in general. The percentage of Baldon houses in the expensive tax bands F, G and H is about twice that of South Oxfordshire.

A housing needs survey was commissioned by the Baldons Parish Council (CFO, March 2016) the results of which are summarised in Appendix A.2.

### 2.3 Health

The percentage of Baldon residents whose day to day activities are limited by long term illness or disability is slightly lower than that for South Oxfordshire as a whole, as shown in Table 2.3

*Table 2.3: Health*

	<b>Toot</b>	<b>Marsh</b>	<b>Total</b>	<b>South Oxfordshire</b>
Activity limited a lot	0.7	2.3	1.7	5.6
Activity limited slightly	7.4	9.4	8.7	8.2
Activity not limited	92	88	90	86

## 3 Economy and Employment

The Baldons are predominantly a rural economy, with most residents working outside the villages and travelling to work in Oxford, Reading, Didcot, Swindon or London. The majority of people in employment drive to work (c. 70% ONS data) with an average distance to work on c 14-16 kilometres. There is a significant number (c.20- 25% ONS data) working mainly from home.

There are [3] main farms in the parishes, with many smaller holdings turned over to agriculture or related uses. The surrounding land is actively farmed with a mixture of arable (predominantly cereal crops and oilseed rape) and beef cattle. Changes in farming practice have resulted in reduced direct employment in farming and the change in some landuses – for example to stabling and pasture for horses and other recreational uses such as caravanning.

These changes have also resulted in the development and conversion of farm buildings for commercial use. The best example is at Little Baldon, where a range of buildings have been converted to business uses and are fully let and occupied. There has also been some conversion in the “Chicken Sheds” at Marsh Baldon, although businesses here have been less actively encouraged and the buildings themselves are less adaptable. The practice of conversion to business use is now becoming challenged by the governments permitted conversion to residential uses – which in many cases can provide enhanced financial returns compared to business uses.

Within the villages there are now on two commercial premises – both public houses; The Mole and the Seven Stars, which is a community owned asset. Despite the problems besetting many rural pubs, both establishments are trading successfully – possibly due to their being in private ownerships and not tied. There is one purpose built office building on Baldon Lane which is currently unoccupied.

Table 3.1 shows the proportion of economically active persons in each parish.

*Table 3.1: Economically activity*

	<b>Marsh Baldon</b>	<b>Toot Baldon</b>
All people aged 16-74	<b>189</b>	<b>103</b>
Economically Active Employed Full time (Persons March 2011)	39%	36%
Economically Active Employed Part time (Persons March 2011)	15%	24%
Economically Active Employed Self employed (Persons March 2011)	16%	17%
Economically active Unemployed persons (march 2011)	1%	3%
Values derived from ONS by aggregating data supplied using the Neighbourhood Statistics Geography Hierarchy.		

These numbers are broadly consistent with the wider district

Table 3.2 shows the types of employment in each parish.

*Table 3.2: Types of Employment*

	<b>Marsh Baldon</b>	<b>Toot Baldon</b>
Managers Directors and senior officials	24.5%	13.5%
Professional occupations	28.5%	32.4%
Associate Professional and Technical Occupations	15.9%	13.5%
Administrative and Secretarial occupations	9.9%	10.8%
Skilled, Unskilled trades, caring and leisure (each<4%)	14.5%	11.7%
Elementary occupations	6.6%	8.1%
Values derived from ONS by aggregating data supplied using the Neighbourhood Statistics Geography Hierarchy.		

There is no predominant occupation. The ONS data suggests a very low number in Agriculture and a rather high proportion in Wholesale and retail and motor vehicle repair. Which does not match with perceived occupations on the ground. Health continues to be a significant employer.

The 2011 census data is likely to underplay the importance of homeworking to the local economy. The arrival of superfast broadband and changes to business practice means that many more people

are conducting a proportion of their business from home. This ranges from professionals undertaking occasional home working through to consultants who might administer their entire business from the home computer and new enterprises that start up using the Internet and can be operated from anywhere. The mobile, connected environment will have a profound effect on the evolution of cities and villages.

## 4 Physical Environment

### 4.1 Soil

Soils covering most of the Plan area are free draining slightly acidic sandy soil derived from the limestones and calcareous sandstones of the Portland Group. By contrast in the north and west fringes of the area the soil is a richer loam derived from the Kimmeridge clay formation. The latter soil has better moisture retention characteristics and is rather more fertile than the sandy soil covering the bulk of the area

British Geological Survey. <http://www.bgs.ac.uk/data/mapviewers>. Developed by Cranfield University, supported by Defra.. <http://www.landis.org.uk/soilscapes>

### 4.2 Water

The only area of flood risk within the Baldon parishes is associated with Baldon Brook which forms the eastern boundary of the Plan area and which is uninhabited, as shown in Figure 4.1:



**Figure 4.1: Flood map of the Baldons** (ref Env Agency flood map <http://maps.environment-agency.gov.uk/>)

The entire Baldons Neighbourhood Plan area is designated as both a Nitrate Vulnerable zone and a drinking water safeguard zone.



### 4.3 Air quality

The Environment Agency air pollution maps does not record any issues for The Baldons

Environmental Agency – interactive maps for air quality and pollution. Accessed January 2016.

<http://maps.environment-agency.gov.uk>

### 4.4 Climate

The Intergovernmental Panel on Climate Change Fifth Assessment Report concluded that “warming of the climate system is unequivocal” and “it is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century”. Carbon dioxide emissions from South Oxfordshire decreased between 2005 and 2012, from 8.2 to 7.0 tonnes CO<sub>2</sub> per capita. (source DEFRA CO<sub>2</sub> emissions data). This is below the Oxfordshire average of 7.3 tonnes per capita. Just over 36% of South Oxfordshire’s CO<sub>2</sub> emissions come from industrial and commercial sources, 37% from domestic sources, 27% from road traffic. (DEFRA “Local and Regional CO<sub>2</sub> emissions Estimates for 2005-2012” June 2014).

The nearest Met Office weather station to the Baldons is located at Benson. Thirty year averages (1981-2010) from this station indicate the following averages for the local area:<sup>1</sup>

- Average annual max temperature 14.4°C (warmest month July 22.6°C)
- Average annual min temperature 5.9°C (coldest month February 0.8°C)
- Average annual rainfall 112.3mm (highest rainfall month November 11.1mm)

Climate change projections, according to a high emissions scenario (known as A1F1) – and therefore the worst case – indicate that the climate for the south east of England (finest resolution of current projections) can be summarised as changing as follows for 2050 and 2080:<sup>2</sup>

*Table 4.1: Climate change projections*

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1 Met Office: thirty year data for Benson. Accessed January 2016.  
[www.metoffice.gov.uk/public/weather/climate](http://www.metoffice.gov.uk/public/weather/climate)

2 UK Climate Projections (UKCP09). Accessed January 2015.  
<http://ukclimateprojections.metoffice.gov.uk>

	<b>2050</b>	<b>2080</b>
Winter mean temperate	increase of 2.5°C	increase of 3.7°C
Summer mean temperature	increase of 3.1°C	increase of 4.9°C
Summer mean daily maximum	increase of 4.3°C	increase of 6.7°C
Annual mean precipitation	increase of 0%	increase of 1%
Winter mean precipitation	increase of 19%	increase of 30%
Summer mean precipitation	decrease of 19%	decrease of 29%

In summary, it is likely that the changes with the greatest effect will arise from significantly higher winter rainfall – which would exacerbate seasonal flooding – while summer drought is likely to impact on farming and other businesses that require water.

## 5 Listed Buildings

There are 55 Listed Buildings in the Baldons:

- St Lawrence’s Church dating from 12<sup>th</sup> & 13<sup>th</sup> centuries
- Toot Manor, Court House & Barn Court
- Other houses & The Crown in Toot Baldon
- Houses in Baldon Row & Pebble Hill
- Houses around The Green and in Baldon Lane
- St Peter’s Church dating from 14<sup>th</sup> & 15<sup>th</sup> centuries
- Baldon House area, including its landscape features
- Dairy cottages at Little Baldon

The location of the listed buildings is indicated in Figure 5.1.



<http://magic.defra.gov.uk/MagicMap.aspx>

Figure 5.1: Listed Buildings