

Oikos Place Analysis



Denmead Parish Neighbourhood Plan Evidence

April 2013









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Introduction

This report presents the results of the Oikos Analysis for Denmead Parish, Hampshire. Oikos is an evidence base and analysis specifically designed to identify and understand the interactions between the natural, social and economic 'capital' (or assets) of a place. It provides a snap-shot of what it present now rather than a prediction of what capital might be present in the future.

The analysis covers specific indicators agreed with the Denmead Neighbourhood Planning Steering Group which address specific gaps in knowledge and can contribute to the neighbourhood planning evidence.

Olkos provides a solid basis for developing neighbourhood planning proposals in the context of local and national planning policy. Its real strength is that it focuses on Denmead Parish and uses technical specialists to provide interpretation of evidence and comment on the neighbourhood planning opportunities, challenges and risks associated with a given indicator. There are limitations of

the tool however as it is relatively 'light touch' compared with the background studies commissioned for local planning and further investigation is suggested in the case of 2-3 indicators. The analysis offers planning-ready information for neighbourhood planning.

The report is divided into three themes: Natural, Social and Economic Capital. Each theme presents a base maps, graphs and interpretation together with local trends and comparisons where it is possible. The information may be used to inform and support the Steering Group's draft policy proposals and housing sites review.

With thanks to the Denmead Parish Council and its steering group for allowing us to pilot this new tool in their neighbourhood.

Stuart Woodin and Maria Paez, URS

Cover pictures:

http://www.flickr.com/photos/vamoose627/2728903636/

Natural Capital: The land and its ecosystems

Introduction

Natural Capital covers the land and its 'ecosystems' in terms of open space in both built up areas and open countryside. It focuses on the functions and resources provided by nature based (but not necessarily natural) elements such as water, vegetation, landscapes and habitats. These are increasingly seen as vital to the quality of life of people and natural habitats, providing a wide range of benefits as well as space for new development, recreation and infrastructure.

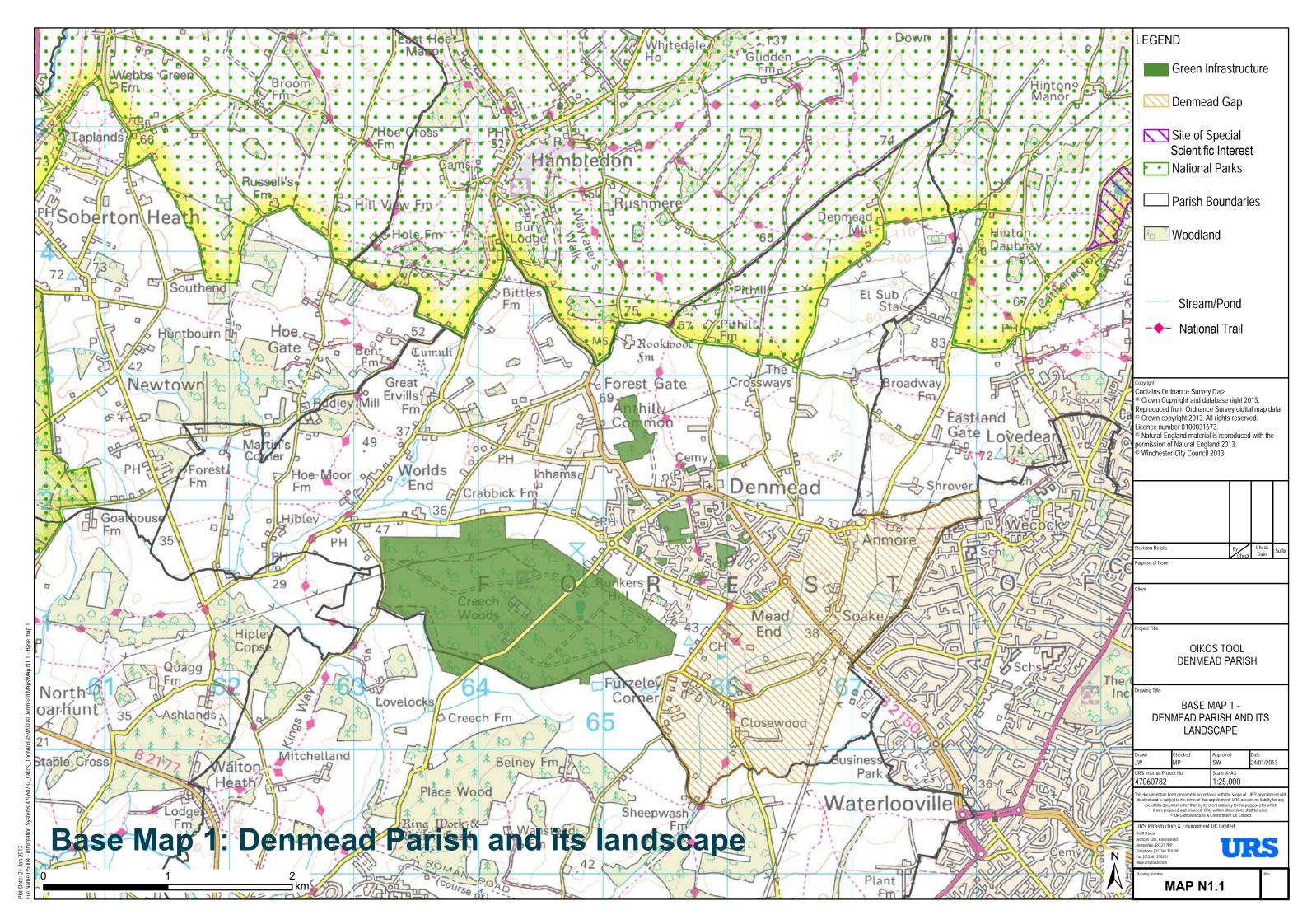
Indicators focused on

The following indicators were chosen to complement existing knowledge and information already in the hands of or easily accessed by Denmead's Neighbourhood Planning Steering Group:

- N1.1 Denmead Parish and its landscape
- N1.2 Potential goods and services derived from current site habitats
- N2.1, N2.2 and N3.1 Open space, recreation, distribution and development particularly within village envelope (Denmead and Anthill)
- N4.1 and N4.2 Current/potential noise sources and presence of any local noise criteria
- N5.1 and 5.2 River systems, ground water and flood risk

Picture: http://www.flickr.com/photos/vamoose627/2728903636/

¹ "Ecosystem services are the benefits provided by ecosystems that contribute to making human life both possible and worth living" UK National Ecosystem Assessment.



N1.1 Denmead Parish and its landscape

Base Map (See Map N1.1 on page 4). It shows key natural features including: Sites of Special Scientific Interest (SSSI), national parks, woodland, fluvial systems, rights of way, contours and green infrastructure. This map shows Denmead Parish relevant information required for local planning decision processes.

N1.2 Potential goods and services derived from current site habitats

Table 1 (on page 8): Goods and services from nature, which may be affected or enhanced by potential developments in Denmead Parish area, particularly the gap.

Introduction

This indicator is designed to provide a greater understanding of the benefit of maintaining or improving the habitats and landscapes across the Parish for residents, visitors and those working in the parish. The indicator uses an ecosystem services analysis which starts with a landscape character assessment to understand rural character and strengths, the presence of 'special' landscape characteristics and the benefits of preserving or enhancing current landscape. The analysis focuses in particular on the Denmead Gap, a strategic gap of mostly open countryside between the village and Waterlooville which faces particular development pressures.

Why is this important for Denmead?

More informed decision making; evidence for investment in habitats; identification of potential benefits for nature and for

society (economic and well-being). Ecosystem Services (See Table 1) are three categories of measurable benefits that Governments are taking increasingly serious in terms of understanding environmental impacts and services - many of which are hidden.

Potential goods and services from nature - checklist

Table 1 lists those goods and services (benefits) present and provides a starting point for identification and discussion around the likely goods and services provided by the current habitats that exist in the Denmead Neighbourhood Plan Area. Many of these benefits will be found throughout the parish, but the analysis focuses on the Denmead Gap as an urban fringe area with potential development pressures.

Habitats registered within the Denmead Neighbourhood Plan area:

Traditional orchards, Purple Moor Grass and Rush Pasture, Floodplain Grazing, Marsh, Lowland meadows, Ancient woodlands (semi-natural or replanted), Woodland registered in National Inventory of Woodland and Trees (including coniferous, broadleaved and mixed).

Opportunities

The main opportunities of keeping the gap are:

- Protecting the village's distinct identity
- Understanding, maintaining and developing the valuable ecosystem services identified in the gap
- Creating new recreation opportunities (e.g. connecting up and increasing rights of way through the area)

- Helping to mitigate the increase in flood risk further down water course affecting Southwick area
- <u>Farming</u>: Loss of crop and livestock agriculture (pig) production, loss of traditional orchards which may be of cultural importance, loss of horse grazing paddocks, loss of income for farmers in area, and disruption to traditional land use
- <u>Recreation and Tourism:</u> Loss of dog walking areas, 2 country walks, fishing lakes and potential closure / impact on golf course
- <u>Landscape quality</u>: Development may permanently detract from the aesthetic value of the natural landscape
- Flood risk management: Development on a flood plain is likely to increase the damages of any floods. The use of impermeable surfaces in new development is likely to increase the level of surface runoff and thereby increase the risks of flood events.

Challenges

- Pollution, noise and access requirements of small commercial undertakings in gap that wish to be encouraged and fewer planning restrictions allowing more existing homes to extend.
- Further data is required to identify and prioritise ecosystem goods and services in the area in terms of habitat types, local population, activities, tourism and businesses located in gap.

Risks

The principal risk that further developments in the gap area will lead a reduction or dissappearance of the priority ecosystem

services identified in Table 1.

Sources:

UK National Ecosystem Assessment (NEA) Synthesis Report Habitat inventories: www.magic.gov.uk

Table 1: Potential ecosystem services provided within the gap area and the priority services associated with them

Ec	osystem goods - services	Explanation	Priorit y
	Crops	Gap area includes fields which could be used for growing crops and grazing and an area of traditional orchards. The potential loss of productive agricultural land makes this a priority service.	Ø
	Agriculture	Gap area includes area of grazing marsh which could be used by livestock as well as an area for pig production.	
Provisioning	Fish	Streams and waterbodies on site could be used for recreational fishing although scale is likely to be small and other watercourses are available in the area.	
visi	Trees/vegetation	Gap area includes an area of ancient and semi-natural woodland. These habitats are of national importance making this a priority service.	$\overline{\checkmark}$
Pro	Water supply	Waterbodies and streams on site may be used for agricultural abstractions although use is unlikely to be significant.	
	Wild species diversity	Area includes several habitat types, the loss of which may affect biodiversity, however, the habitats are replicated elsewhere and species are likely to be able to use alternative areas. The gap links two developed areas so is unlikely to provide an important wildlife corridor (although check north-south).	
_	Recreation- tourism	Area is used for dog walking and recreation activities such as golf. The potential loss of such opportunities makes this a priority service. The area is used for horse stabling, training and trails.	Ø
Cultural	Landscape quality	The gap makes up an important part of the aesthetics of the landscape. Development may permanently change the aesthetic quality of the landscape meaning this is a priority service.	V
8	Education	Unlikely that the area is used for research / educational purposes. The National Park to the north and the Creech Woods to the west are more likely to provide habitats / features of research / educational interest.	
	Climate regulation	The relatively small number of trees within the area means that the contribution to climate regulation (through sequestration and storage) is likely to be minimal.	
	Hazard: Flood risk management and erosion control	 The gap area is a floodplain and any increase in impermeable surfaces due to development may increase the flood risk. The area is unlikely to provide any significant protection from soil erosion. 	V
ation	Pollination	The area may provide habitat/food sources for pollinators such as bees although such habitat is likely to be replaceable. The impact could be more significant if the traditional orchard is lost.	
Regulation	Noise	Unlikely to be any significant noise attenuation services provided in the area although the presently undeveloped nature of the gap may be valued for providing relative peace and quiet to surrounding communities. Developing this area will reduce the amenity value to those who benefited from the relatively low noise environment.	
	Detoxification and purification: — Water quality — Air quality	 The floodplain and woodlands may play a role in water quality regulation for the stream running north-south through the gap although if use is minimal this is not likely to be a priority service. The relatively small number of trees within the area means that the impact of any development on air quality regulation is likely to be minimal. Similar to noise regulation, any increase in population / housing and associated traffic will reduce air quality in the gap although the impact is unlikely to be noticeable. 	

N2.1 Open space and recreation (Denmead and Anthill)

Introduction

To identify opportunities on provision of green space in Denmead, we have consulted the NPPF open space policies and the Open Space Strategy (background paper) (OSS) to the adopted Winchester Distric Local Plan Review.

The OSS identified deficits and put forward proposals for Winchester open sace improvements. We have identified other local green areas not currently classified by the Winchester Council but that can be considered in Denmead Neighbourhood Plan. Presence of open recreational space, woodland and green ways are shown in the Base Map 2 (page 10).

Table 2 Denmead's play areas for children

Area	Hectar es	Age group	Number of types equipment
Ashling Park Play Areas*	1.3	All ages	10
The Barn	0.1	All ages	5
Creech view	0.1	6 months (toddler) - 5y	2
Hatchmore Road	0.8	All ages	4
Mill Close	0.03	All ages	1
Geranium Nurseries	0.03	All ages	No
Ashling Gardens	0.03	All ages	No
TOTAL	2.4		

Children's play areas include play equipment and unequiped areas for children's casual play. There are currently seven sites that are formally defined as play areas in Denmead Parish. Table 2 shows current play areas, size, age group and number of types

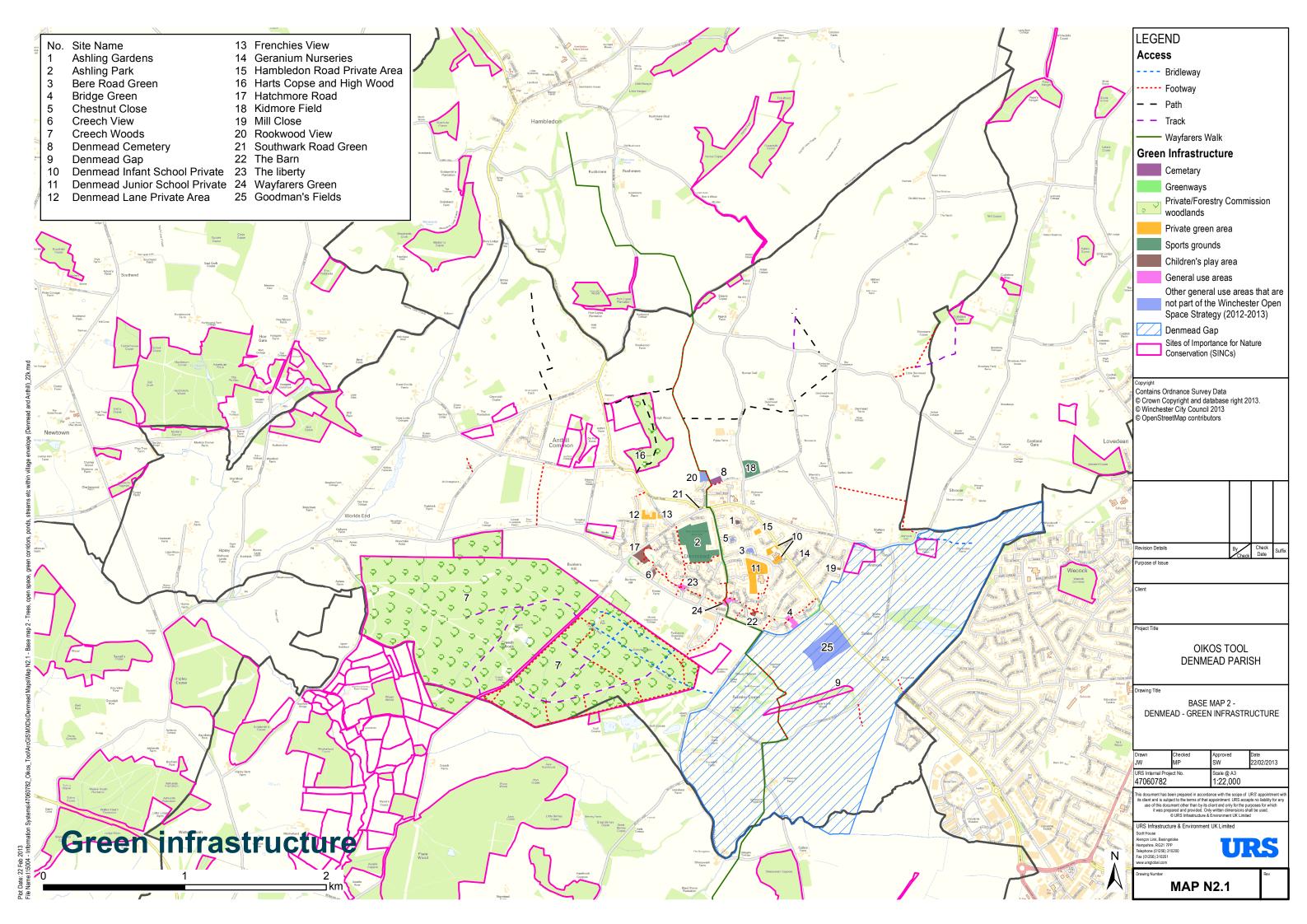
(not pieces) of equipment available. This information was provided by local residents and the Clerk at Denmead Parish Council.

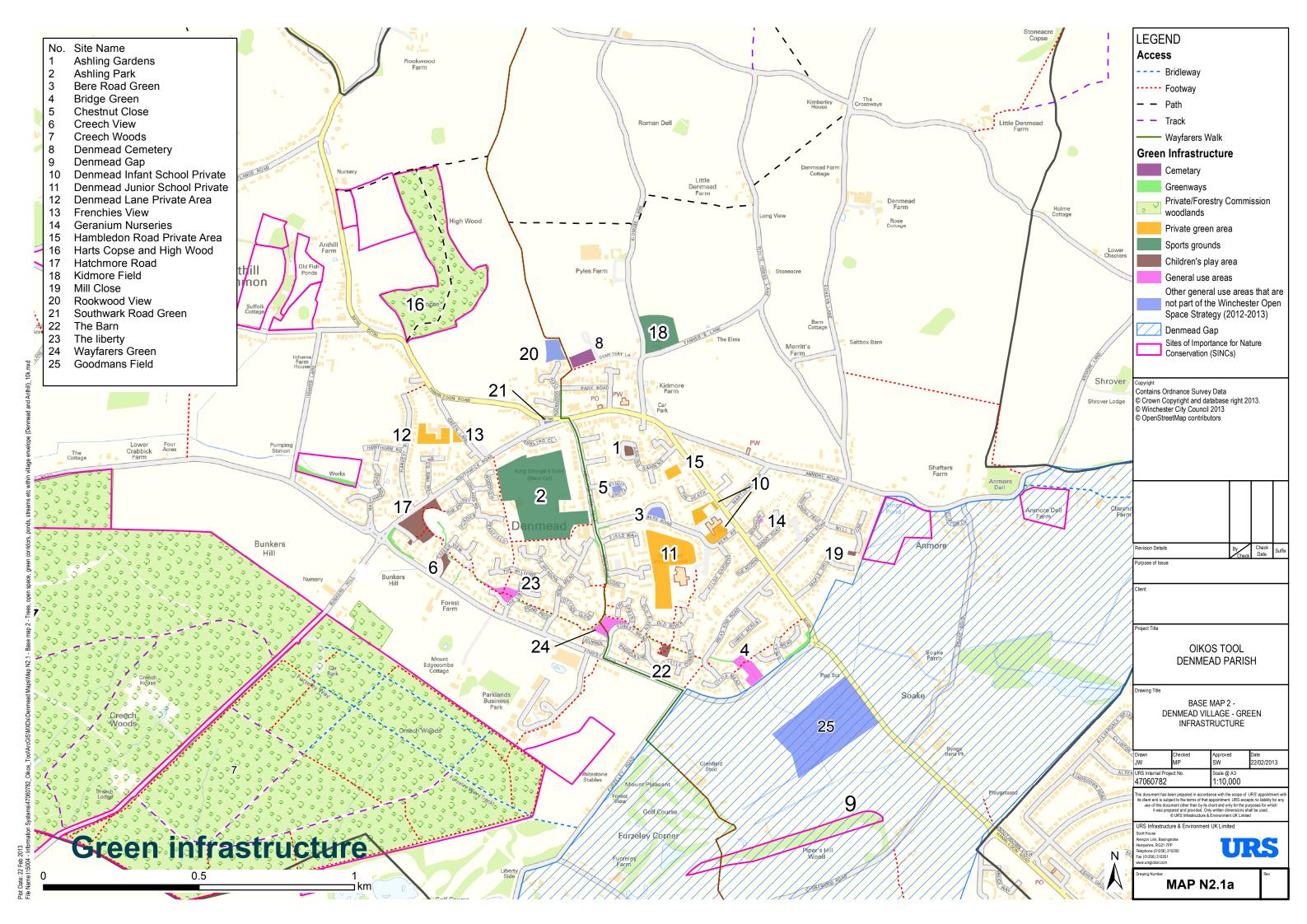
- The Clerk at the Denmead Parish Council reported that "Roman Green" area has been removed from the list of play areas.
- Creech Woods (Forestry Commission area) includes a toddler play area and a climbing trail.
- Denmead Parish Council:
 - o Has a skate park in the KGV Ashling Park.
 - o Has a play area policy that is inclusive for all ages.
 - Will install an outdoor gym soon which will be aimed at the older generation.
 Play equipments are modular, so whilst there may be one
- Play equipments are modular, so whilst there may be one physical piece of equipment, it has multi elements to play.

The Fields in Trust (FIT) identify four categories of play area: LAP (Local Areas for Play), LEAP (Local Equipped Areas for Play), LLAP (Local Landscaped Areas for Play) and NEAP (Neighbourhood Equipped Areas for Play). A brief description of these categories is presented in the following Table 3.

Table 3: Fields in Trust categories of play areas

Type of area	Walking time (min) of home	Age group	Equipment
LAP	1	6	Low-key games or play with small equipment.
LEAP	5	8	5 items of play equipment.
LLAP	5	Imaginatively designed	Contoured using as far as possible natural materials, not necessarily play 'equipment'
NEAP	15	8 years old and teenagers	At least 8 types of play equipment.





Taking into account FIT categories and Denmead's play areas, a number of play areas do not fall into any category. These are identified as 'unclassified' in the table below. The last column shows whether there is a deficit in the area to be classified as one of the types of areas recommended by the FIT.

Table 4 Denmead potential FIT categories for children's play areas

Area	Potential category	Deficits	
Ashling Park Play Areas*	NEAP	-	
The Barn	LAP	-	
Creech view	Unclassified	Age group lower than recommended	
Hatchmore Road	LAP	-	
Mill Close	Unclassified	Equipment (more items)	
Geranium Nurseries	Unclassified	Equipment or use natural materials	
Ashling Gardens	Unclassified	Equipment or use natural materials	

The distribution of open space its standard based on FIT categories (see Table 3) standard is shown in the Map N2.2 (page 13). In the future, unclassified areas can be inproved and be classified as LAPs. These areas are enclosed by dashed lines on the map (see map on page 13).

Other open space areas available for the geral public to use free of charge are Sports Grounds and areas of General Use listed in Table 5 and Table 6.

Table 5: Denmead's Sports Grounds

Description	Area	Hectares
Areas that include pitches, courts and	Ashling Park	2.8
training areas owned by local	Kidmore Field	0.5
authorities.	TOTAL	3.3

Table 6: Denmead's Areas for General use

Description	Area	Hectares
Areas of land that can be	Wayfarers Green	0.4
used for informal	Bridge Green	0.4
recreation (walking, relaxing or picnicking).	The Liberty	0.2
relaxing of picfficking).	TOTAL	1

Private places such school play grounds might be considered as potential for community activities use (Map N2.1a – Base Map 2 on page 10). A list of incidental local open space and for local interest is shown in the following table.

Table 7 Other open space areas in Denmead

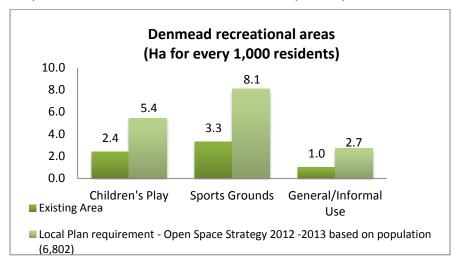
Area	Hectares	Note	
Rookwood view	0.4	Open space land owned by the Parish Council	
Chesnut Close	0.06	Incidental local open space	
Bere Road Green area	0.09	Incidental local open space	
Southwick Road Green Area	0.02	Incidental local open space	
Goodman's Fields	0.5	Area of local interest	

Along previous open space areas there are important areas in the countryside:

- Wayfarers walk: 70 miles long walk from Walbury Hill, Berkshire and Emsworth, Hampshire. It passess through five towns and ten villages including Denmead.
- Creech Wood East: Part of the Forest of Bere It is predominantly coniferous woodland and some areas of broadleaf trees like Oak and Beech.

Local Plan standard for recreational areas results:

Graph 1 Denmead recreational areas and local plan requirements



Graph shows the difference between Local Plan requirements and the current area within the village and illustrates the deficit of land for recreational areas.

Opportunities and challenges

The opportunities and challenges for the Neighbourhood Plan relate to getting the village up to the minimum standards expected and enabling the community to benefit from the assets that already do exist.

Unclassified areas (See table 4 and Map N2.2 on page 13) represent opportunities to improve current open spaces for Denmead's population at the East of the village.

Further studies

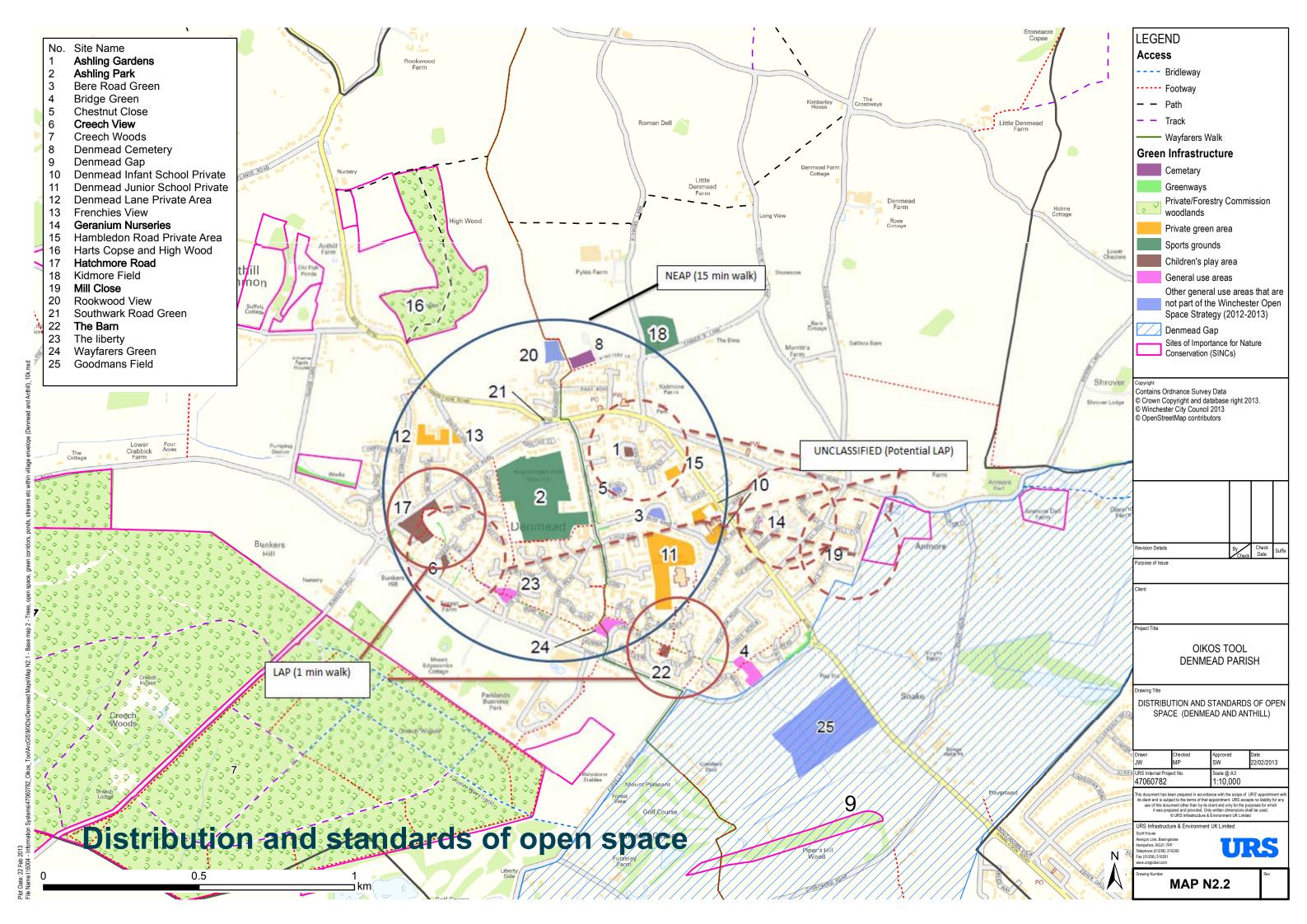
Complete assessment of recreational areas to determine adequacy and effectiveness of existing equipment.

Sources:

Winchester Open Space Strategy 2012-2013 Denmead Parish Council

Figures N2.1 and N2.1a — Base Map 2 (Denmead - Green Infrastructure shows open space distribution, access ways, greenways, private/Forestry Commission woodlands, Sites of Importance for Nature Conservation, private green areas, sports grounds, children's play areas and general use areas including unclassified areas (page 10).

Map N2.2 shows distribution and standards of open space for recreational purposes within village envelope (page 13).



N4.1 and N4.2: Current/potential noise sources and presence of any local noise criteria

Introduction

Rural tranquility is an important and positive features of life in the Parish. This indicator looks at whether noise is an issue and whether it could become one with future development. In identifying the main noise pollution sources and location, this can also feed into the land availability working group with regard to suitable places for potential developments (residential and recreational areas) depending on ambient noise levels.

The dominant noise sources incident upon all sites provided is **road traffic** noise (particularly Hambledon Road). In some instances **farm noise** (agriculture, animal production, crops and related activities) will need to be accounted for to ensure that provision of residential or commercial developments alongside farms will not restrict their trade activities.

Noise is not likely to be a significant issue at any of the proposed sites. However, some mitigation (such as façade design or acoustic barriers) may be required where properties are located close to roads.

A noise pollution map for Denmead area is not available on END noise website.

Are there Local Authority noise criteria?

Regarding noise criteria, Winchester Council – Environmental Protection Department enforces environmental legislation if noise is intrusive or excessive; and deals with statutory nuisances (Environmental Protection Act 1990).

Opportunities

Neighbourhood planning may provide an opportunity to develop specific criteria with regard to day-time and night time noise levels. In particular the EC Noise Directive provides scope for planning authorities to designate 'quiet areas' within specific open spaces and/or residential areas.

Challenges

Creation for potential sources of pollution: All new residential properties will need to be suitably protected from noise ingress from road traffic noise and potentially agricultural noise.

This can be achieved through selection of glazing and ventilation systems and where necessary noise barriers.

Risks

High noise levels (65 dBA Leq²) may lead to specification of secondary glazing and mechanical ventilation although the initial review indicates that this is not likely.

Sources:

DEFRA, END noise website
Wichester Council website (Environmental Protection)
http://www.winchester.gov.uk/environment/noise-nuisance/

² Leq is the Equivalent Continuous Level of noise.

N5.1 and N5.2 River systems, ground water and flood risk

N5.1 Risk of surface water (pluvial) flooding (Map N5.1)

Introduction

This indicator looks at the likelihood of heavy rainfall amounts exceeding the capacity of local drainage networks and water flows above ground. The water courses in the Parish are important natural features both in the countryside and the village of Denmead itself. The risk of flooding however is real and any site proposals (residential, recreational, industrial, commercial, etc) in the Neighbourhood Plan need to be discussed with the Lead Local Flood Aunthority (Hampshire) and the Environment Agency. The information provided here will help to reduce the risk of future local flooding issues, potential delays in developments and inefficient future investments.

Flood Risk map (Map N5.1 on page 17) showing estimated flood extent for River Mead through Denmead village. It shows clearly the primary watercourse in Denmead is the River Mead. This is designated as a 'Main River' and as such it is the Environment Agency's responsibility to characterise the flood risk arising from this watercourse, which they make available on their website: http://maps.environment-agency.gov.uk/wiyby/wiybyController

The Floodmap indicates there is a culverted section of the River Mead beneath Southwick Road which is not designated as Main River. This stretch of watercourse may be the responsibility of the Local Highway Authority, Lead Local Flood Authority or sewerage undertaker (Portsmouth Water).

A tributary of the River Mead flows from Anthilly Common. This is

designated as an 'ordinary watercourse' and is therefore the responsibility of the Lead Local Flood Authority (now the Council). This watercourse may not have been investigated for flooding despite being represented on the Environment Agency Flood map.

The flood map for Denmead indicates the estimated extent of flooding for the River Mead and its tributary for the 1 in 100 year and 1 in 1000 year floods. The extents of both of these floodplains are similar.

How important is Denmead gap area in terms of flood risk attenuation?

In terms of flood risk attenuation, Denmead gap area is important for villages and areas located along the river and after (i.e. south of gap area).

Table 8 Description Flood Risk Zones

Flood Zone	Description
2	Areas that might be affected by a fluvial (river) or tidal flood with a 0.1% annual exceedance probability (1 in 1,000 year return period occurrence)
3	Areas that might be affected by a fluvial (river) flood with a 1% annual exceedance probability (1 in 100 year return period occurrence)

The following observations (Table 9) are made based on revision of potential development sites (Winchester District Strategic Housing Land Availability Assessment -SHLAA) in Denmead and Table 8.

Table 9 Observations on Flood risk and SHLAA sites

Development Site	Flood Zone	SSWMR ³
205	1	Yes
294	1	No
301	3 Partial	Yes
302	1	Yes
303	1	Yes
310	1	Yes
311	1	Yes
312	1	Yes
313	?	No
362	1	Yes
378	3 Partial	Yes
958	1	No
1776	3 Partial	Yes
1783	?	No
1841	3 Partial	No
1878	3 Partial	Yes
1917	1	Yes
1918	1	Yes
2004	1	Yes
2018	3	Yes
2054	?	No
2425	1	Yes

This table shows flood zone per each site and whether Surface Water Managemente is required.

Opportunities

The flood risk map, although a worst case scenario (and therefore to be carefully explained when engaging with local people), allows the Steering Group to understand the proximity of specific sites offered up for development to water courses and the risk of their being affected by flooding. Sites 294, 958 and 1835 are less than 1ha (i.e. relatively small in terms of surface water impact) and in flood zone 1. These sites present the greatest opportunity for development for the widest range of development types with the least restrictions due flood risk considerations.

Challenges

Sites 205, 302, 303, 310, 311, 312, 362, 475, 1841, 1917, 1918, 2004, 2425 all present a degree of challenge for development proposals and will require from promoters a demonstration of the management of flood risk to the development and/or a clear plan showing the management of surface water from the development.

Risks

Sites 301, 378, 1776, 1878 and 2018 pose the greatest risk for development from a flood risk perspective. If included in the neighbourhood plan, these sites will require from promoters a demonstration that development is safe from flooding without transferring flood risk and that surface water is managed without exacerbating flood risk elsewhere. Further hydrological studies are recommended to characterize the constraints on development.

Source:

Environmental Agency

³ SWMR: Surface water Management Requirement



Further studies:

The available information indicates several potential development sites in Denmead will have constraints with regards to flooding from fluvial sources. The Local Authority and developers will need to guarantee and demonstrate management in terms of risk to the development and the risk arising from the development.

For sites in flood zone 3 the flood extent for the site must be confirmed through hydraulic modelling. For sites requiring surface water management, conceptual designs of surface water management systems should be developed.

Local residents should be encouraged to share with local authorities any information they hold with regards to the history local flooding. Integrated local management and decisions based on local knowledge and engagement can contribute to reducing local flood risk while producing wider benefits for communities.

Each site will require consideration as if it comes forward for development. This consideration may identify the need for a full flood risk assessment.

N5.2 Geology and Risk of groundwater flooding (Map N.5.2)

Introduction

This indicator looks at the likelihood of water rising up from the underlying rocks or from water flowing from abnormal springs, especially during very wet periods. It is important to look at ground water conditions at the same time as considering fluvial systems and flood risk.

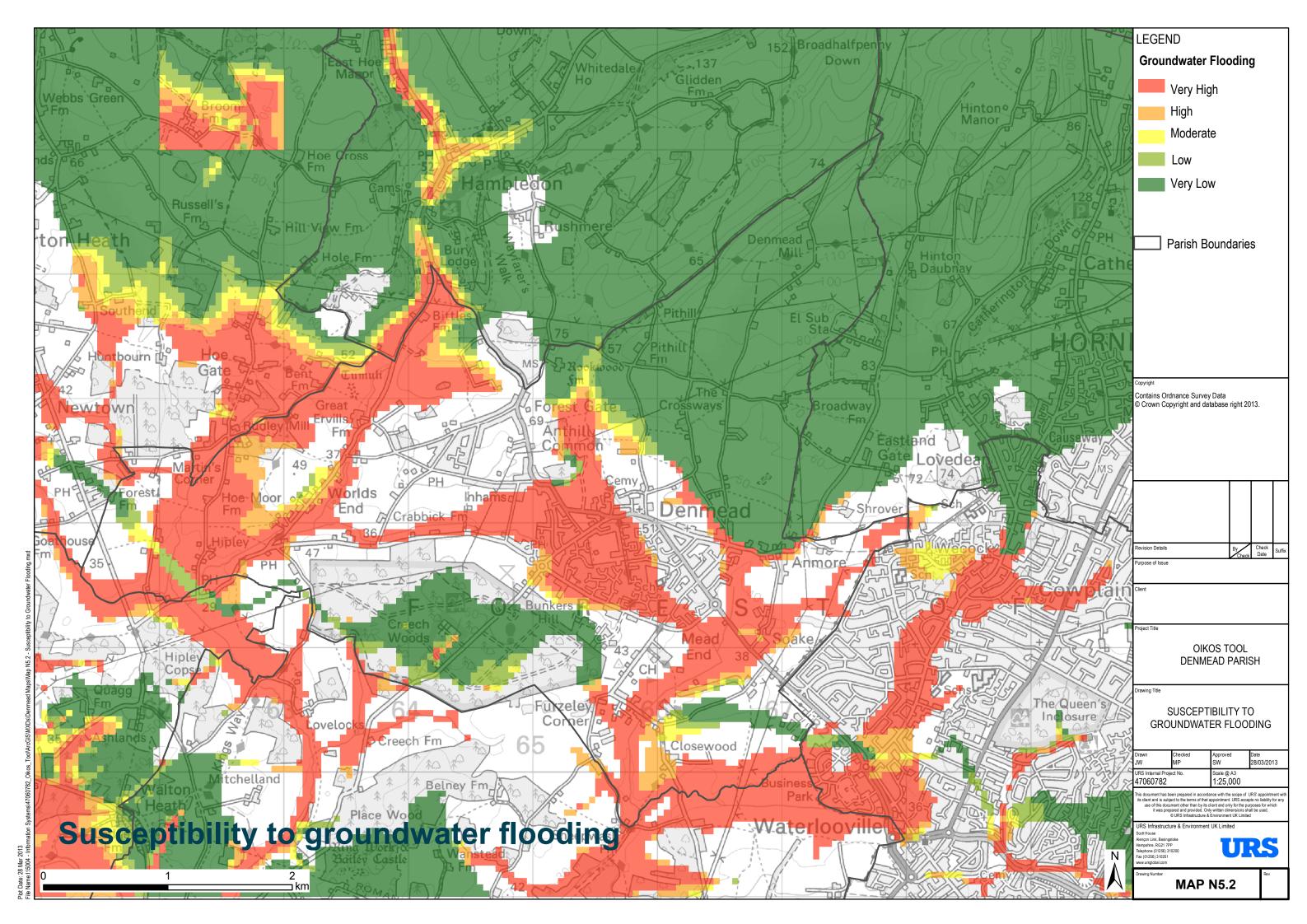
Local Planning Authorities must consult Environmental Agency before making any significant decisions on new development in flood risk areas (including groundwater flood risk areas). New developments in areas at highest risk from flooding will need to provide appropriate measures to ensure that developments are not increasing flood risk the area.

Susceptibility to groundwater flooding is linked to the topography (hills and valleys) of an area and the nature of the geology and hydrogeology. These are discussed further below for Denmead Parish Council.

Bedrock Geology

British Geological Survey data show the bedrock geology underlying much of the Denmead Parish area to be the Reading Formation of the Lambeth Group, which comprises mottled clay that is locally sandy. This pinches out towards the north of Denmead where it is no longer present.

The Tarrant Chalk Member of the Culver Chalk Formation and the Newhaven Chalk Formation outcrop at surface on higher ground to



the north of Denmead, including the area around Bittles Farm to the northwest and Denmead Mill to the north east. The Chalk dips to the south and underlies the Reading Formation at depth beneath Denmead.

The London Clay Formation overlies the Reading Formation in the southern parts of the Denmead Parish area, from Hipley in the south west to Furzeley Corner and Closewood in the south east. The London Clay Formation comprises silty clay and sand, including the Bognor Sand Member.

British Geological Survey data show the presence of significant Head deposits in the Denmead area, largely within tributary valleys of the River Wallington. These deposits comprise sandy silty clay, which is locally gravelly.

Hydrogeology

The Chalk is classified as a principal aquifer by the Environment Agency, and the Reading Formation is classified as a Secondary A aquifer. These formations are deemed to allow significant storage and movement of groundwater.

The London Clay Formation is classified as unproductive strata and is not expected to support significant movement of groundwater.

The Environment Agency classifies the superficial Head deposits as a Secondary aquifer. Where these are of substantial thickness in the Denmead area, they may store and allow movement of groundwater.

Groundwater Flooding Susceptibility

The susceptibility to groundwater flooding within the Denmead area is available as a data set from the British Geological Survey (Map N5.2).

The data suggests there is a very low susceptibility to groundwater flooding from the Chalk aquifer (dark green colour Map N5.2), except for along the outcrop boundary with the Reading Formation near Bittles Farm in the north west and Forest Gate in the north; these coincide with tributary valleys to the River Wallington (topographic lows) and have a very high susceptibility to groundwater flooding (orange and red colours on Map N5.2).

The other areas with a high susceptibility to groundwater flooding are associated with the British Geological Survey mapped Head deposits. These include the areas of Hipley in the west, and the south west part of the Denmead settlement (orange and red colours on Map N5.2).

The Reading Formation and London Clay Formation have not been allocated a groundwater flooding susceptibility category (white / grey areas on Map N5.2). This is because the British Geological Survey does not perceive these to be a source of groundwater flooding in the Denmead area.

The British Geological Survey data set only represents a high level assessment. However, in summary, the areas that are most likely to be at low risk from groundwater flooding are those with a dark green or white / grey colour on Map N5.2 (page 19).

Opportunities

There is a low risk of groundwater flooding in north east and east of Denmead village (including a fraction of Denmead gap).

These areas represent potential sites for new open space for recreational purposes (e.g. a football pitch) as it is shown in the Map N5.2 (see dark green and white areas). It should be noted that any specific site considered for development will require a detailed local assessment.

Challenges

Local geological and hydrogeological conditions should be considered in the promotion of sites in Denmead. The influence of local geology on flooding should be understood and where considered unacceptable, managed to ensure safety to existing development and new property.

Further studies:

Prior to proceeding with the development of a site, a local assessment of the potential for groundwater flooding should be completed; this would include (i) analysis of existing British Geological Survey , Environment Agency and water company borehole and water level records and (ii) further ground investigation specific to the proposed development.

Prior to proceeding with allocation of development sites an assessment of the potential to discharge surface water to ground should be made and used to inform surface water management proposals at the sites. This in turn should inform the development density of the site.

Each site will require consideration as / if it comes forward for development. This consideration may identify the need for a full flood risk assessment.

Source:

Environmental Agency British Geological Survey

Summary

- The Parish provides a high value environment which offers a wide variety of ecosystem services and open space opportunities both inside and outside the village envelope of Denmead and Anthill Common for local residents, children and local workers.
- Neighbourhood planning may provide further opportunities to improve countryside access by increasing the local rights of way and permissive pathways network.
- The extent to which the natural environment extends its presence into the village itself and contributes to high quality green infrastructure and public realm (i.e. streetscape) is currently limited. However, a neighbourhood plan can address this in terms of public realms schemes.
- The use of existing open space for improved sports, recreation and play facilities and the identification of new open space areas has been identified as a priority in the local plan and the Oikos analysis shows more clearly which spaces might be focused on and which areas are most in need of improved access.
- The potential for more and improved rights of way to provide increased access to the Denmead Gap and also those places with a history of public access needs to be considered (e.g. Harts Copse to Rookwood View/Cemetery; National trail along the Ashling Park Road).
- The most suitable development sites from a flood and groundwater perspective appear to be to the north east of the current village service centre.

Social Capital: Denmead and its people

Introduction

Social Capital covers the people resident or working in a place and their lives. This includes population demographics, heritage and culture, local networks and the health and wellbeing of local people. The indicators chosen provide insights into the current and likely future needs and aspirations of different age and social groups whichin turn can informs planning for future community infrastructure including services.

Indicators Focused on

6 indicators were chosen to complement existing knowledge and information already in the hands of or easily accessed by Denmead's Neighbourhood Planning Steering Group:

- S1.1 Current demographic profile of the parish
- S2.1 Life expectancy
- S2.2 Rank of health deprivation and disability
- S2.3 Residents own rating of health
- S2.4 People with a life-limiting long term illness
- S2.5 People who provide unpaid care

S1.1 Current child, teenage and adult density and numbers

Introduction

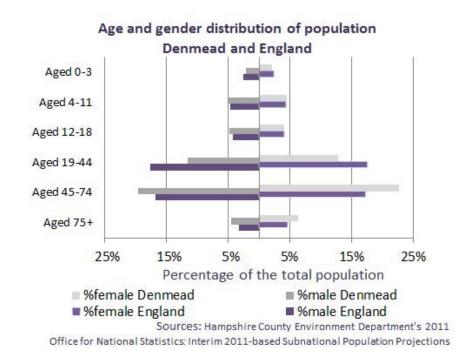
Table 10 and Graph 2 show that Denmead has a different demographic profile than average in England, across many age groups, with a significant bulge of older working age people, including the age group likely to be approaching retirement or recently retired (see the age bands 45-74 and 19-44). In contrast, Denmead has fewer younger working age people or younger adults pre-family formation. It has similar proportions to England in terms of younger children and teenagers.

The significant population bulge of the 45-74 age band indicates that Denmead has a high proportion of mid- and late-career adults as well as people who are approaching or already retired. The oldest age band (75 and over) and the youngest age band (0-3) are more consistent with England averages, suggesting movement into the area by couples with children and out of the area post-retirement. This population profile indicates services of most importance are transport to work, schools and leisure services for working age and early retired people.

Table 10 Denmead's population (Census 2011)

Age ranges	Male	Female	Total
Aged 75+	315	433	748
Aged 45-74	1359	1568	2927
Aged 19-44	807	882	1689
Aged 12-18	330	281	611
Aged 4-11	346	310	656
Aged 0-3	154	141	295
Total	3311	3615	6926

Graph 2 Age and gender distribution (Denmead's population)



Opportunities

The sizeable working age population relative to young children and very elderly means Denmead currently faces a favourable situation with regards to dependency.

Challenges

The under-representation of younger ,working age population in Denmead, as compared to the national population, suggests a need

to identify and address what makes it unattractive or hard for this group to choose to live in Denmead. Housing affordability (both of market housing and social/affordable housing) is likely to be important. Addressing these barriers for younger working age people should be prioritised if Denmead wishes to retain a balance of working age people and post-retirement people going into the future.

In the future, there may be increased demand for services for older people, though this depends on whether people choose to remain in the area or move following retirement. The sizeable proportion of working age adults suggests that a challenge may be to ensure that Denmead offers social and economic facilities that respond to the needs of a relatively high-earning working age segment.

Risks

Denmead needs to accommodate a reasonable balance between planning for three different groups in order to avoid a shifts in the existing population profile that may not be desired:

- Younger and lower income groups seeking more affordable housing, either to start a family or live near family.
- A more prosperous working age group, some of whom have high disposable income.
- Housing for older people, who may wish to downsize or live in a more supportive environment (e.g. retirement complex or residential homeit could result in

Sources:

Office for National Statistics

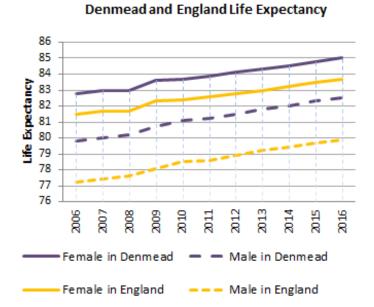
Further studies:

Further breakdown of the age band 45-75 (perhaps at 65 as the 'classic' retirement age) would be informative in terms of understanding the balance of working age and retired/reduced economic activity.

S2.1 Life expectancy

Female and male life expectancy in Denmead are projected to rise in line with national trends (see following graph). Women's life expectancy in Denmead is generally a year above England average. Male life expectancy Denmead is significantly above national average, with male life expectancy projected to continue to rise, remaining almost 4 years higher than England-average life expectancy.

Graph 3 Denmead and England life expectancy



Opportunities

Denmead's residents enjoy above average life expectancy. Considering the population self-reports good health and generally does not experience health deprivation (see S2.2 indicator), this is favourable for quality of life of Denmead residents, including active healthy lives through working age into retirement and later life.

Longer life expectancy means an increasing ageing population, consistent with national trends. However the low dependency ratio and generally good health of residents means that this is likely to be easier to address than in more deprived areas.

Challenges

Future services and public realm will need to adapt to an ageing population.

Risks

Current risks are low and neighbourhood planning, on its own is unlikely to impact on the national trends with regard to growing life expectancy. The risk of doing nothing locally however could affect the quality of life amongst older people towards the second half of the plan period.

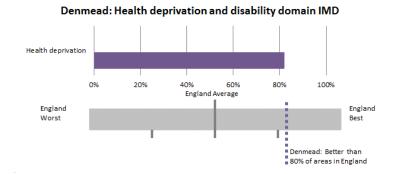
Sources

Office for National Statistics

S2.2 Rank of health deprivation and disability domain of IMD

In the latest Index of Multiple Deprivation (IMD) Denmead area was ranked. 30,174 out of 32,482 in England, where 1 was the most deprived and 32,482 the least. The IMD is broken down further by income; employment; education; health; barriers to housing and services; the living environment; and crime (England). Health deprivation includes premature deaths, impaired quality of life due to poor health and people with disabilities.

Graph 4 Health Deprivation

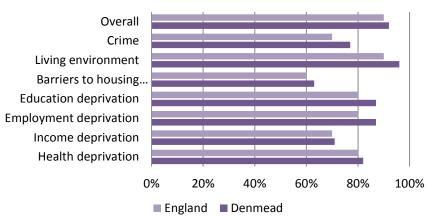


Denmead is amongst the 20% least deprived areas in the country in terms of health deprivation. Other deprivation indicators, which provide a snapshot view of 'determinants of health' show that Denmead also enjoys a high quality living environment, generally good employment and good educational attainment and status. These are important

influences on Denmead's healthy population. Of potential concern are income deprivation and barriers to housing services, where Denmead's population experiences more challenges. It is probably that low income and barriers to housing services are inter-related, with housing affordability a likely barrier to housing.

Graph 5 Index of Multiple Deprivation

Denmead: Health deprivation and Index of Multiple Deprivation



Opportunities

The general lack of deprivation limits the challenges for maintaining and improving social capital in Denmead - particularly important are favourable education, employment and health indicators.

Challenges

Increased supply of housing and other activities to tackle barriers to housing are important issues to address. Cross-referencing to 'current population' this may also include the challenge of improving the affordability of Denmead for young couples wishing to remain in the area to start a family. Opportunities to provide better paid employment for those in lower paid occupations / sectors would also be important.

Risks

The risks for this are strongly tied to national economic factors and hence the scope for the Parish Council to influence this favourably may be limited. Relevant external factors include recession, limited credit, housing shortages and affordability challenges, as well as (for some residents) the consequences of changes to national housing policy and welfare payment reform.

Sources:

http://www.uklocalarea.com/index.php?q=PO76LU

Further studies:

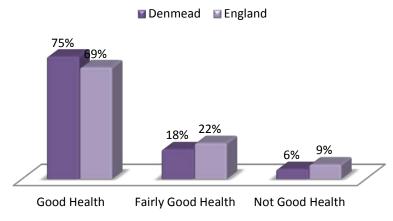
Further breakdown of the age band 45-75 (perhaps at 65 as the 'classic' retirement age) would be informative the balance of working age and retired/reduced economic activity. Household structure would also be informative.

S2.3 Residents own rating of health

2001 census data indicates that in general Denmead residents enjoy good health, outperforming national rates of reported good health. The following graph shows main results to the question: "Over the 12 months you would say your health has on the whole been: Good, fairly good, not good." The 6% of adults rating their health as not good equates to over 400 people.

Graph 6 Denmead: Own rating of health

Denmead residents own rating of health



Source: Neighbourhood statistics

Opportunities

To capitalise on generally high rates of reported health, thought needs to be given to measures to sustain this, particularly for an ageing working age and retired population.

Challenges

Overall high reported good health may limit funding opportunities for addressing specific health problems relative to areas with generally poorer health.

Risks

Generally good health may mask localised concentrations of health disadvantage experienced by low income households or very elderly.

Sources:

http://www.neighbourhood.statistics.gov.uk/

Further studies:

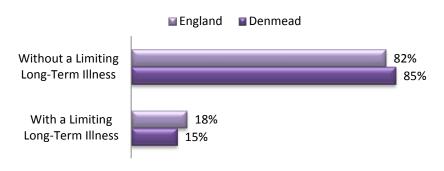
The 2011 census data will provide an important update to this. Joint Strategic Needs Assessment will provide more up-to-date information on health issues affecting specific sections of the population.

S2.4 People with a life-limiting long term illness

Denmead, in 2001, had below average number of people with limiting long term illness. This is consistent with above average rates of reported good health. It is particularly important as Denmead has a generally 'older' (though not 'very old') population profile, which would normally be associated with declining health. The 18% of adults with a limiting long-term illness equates to over 1700 people.

Graph 7 People with a life limiting long term illness

Denmead People with a life-limiting long term illness



Source: Neighbourhood statistics

Opportunities

Generally below average rates of limiting long term illness mean comparatively less demand for health and social services (and associated costs) to support wellbeing of affected people.

Challenges

The sizeable 45 - 75 age group and above-average life expectancy indicates that Denmead's future population will include a growing number of old and very old people. Depending on their lifestyle and health, this will inevitably mean an increasing rate of limiting long term illnesses, and associated costs/ demand for services. See also 'S25 Unpaid Care'

Risks

The Denmead Neighbourhood Planning Steering group's actions, by taking account of future projections of growing numbers of frail elderly people, or those with life-limiting illness, should consider provision which includes housingand services that support wellbeing of older people with increasing health and support needs.

Sources:

http://www.neighbourhood.statistics.gov.uk/

Further studies:

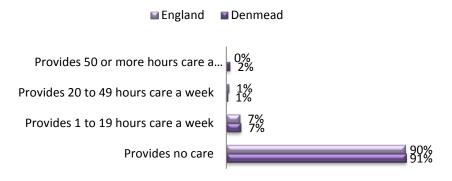
2011 census data will provide important update on this, to reflect current age profile of population. More detailed analysis could draw on the Joint Strategic Needs Assessment (JSNA) to identify what are key health issues which are likely to be linked to age and stroke/heart disease/cancer.

S2.5 People who provide unpaid care

Denmead's levels of people who provide care are consistent with national trends, with the exception that Denmead has a higher rate of people who provide very high levels of unpaid care (50 or more hours care a week). This is nevertheless quite a small number of people (100 people).

Graph 8 People who provide unpaid care

Denmead: People who provide unpaid care



Source: Neighbourhood statistics

Opportunities

Generally, care-provision is consistent and does not exceed national rates, so is not a particular challenge for Denmead at present.

Challenges

In future, it is almost inevitable that demand for family carers will grow in the future, in Denmead as elsewhere in England. Housing affordability barriers in Denmead and the wider area may mean that for some families, they do not live close enough to provide regular care without major sacrifices. Planning that supports increased provision of affordable housing will support family- and community-provided care.

Risks

Actions that worsen housing affordability or increase proportion of older/very old households relative to younger households will increase difficulty of family- provided care.

Sources:

http://www.neighbourhood.statistics.gov.uk/

Further studies:

At a later date, it is recommended that 2011 census is checked to verify how this has changed over the last 10 years. A review of the corresponding Joint Strategic Needs Assessment (JSNA) would be merited to get further information on the situation of care givers. Further research and analysis on projected growth in demand for family-provided care and the challenges for supporting this to happen could help to inform plan-making and decisions on specialist housing for older people.

Summary

Denmead's housing development over the last few decades has had a significant impact on the Parish's population profile and the health and lifestyle of its residents. The current risks to health, life expectancy and social support are low, but there is a demographic challenge that will make itself felt over the next 15 years. This will have two aspects.

- 1. Natural and development related population growth which will impact on the current school capacity which appears to show very little spare capacity, particularly in the infants' school (see page 46). This may reduce parental choice and lead to less sustainable choices in terms of school location going into the future.
- 2. With regard to the elderly, particularly those over 74, an increased demand for ever more local services, strong neighbour networks, a safe public realm, new move-on accommodation and more help for carers can be anticipated. Against this the population profile suggests a potential rich source of volunteers, knowledge, skills as well as economic capital going into the future and how the parish taps this in the years ahead will have a bearing on the quality of life of those who most need social and possibly economic support. The evidence also points towards the need to plan for a good balance of health services, community based welfare services, and physical facilities (e.g. benches, shade) for a future sizeable post-retirement population.

Opportunities to maintain Denmead's current quality of life and resident health could include designation of local roads as cycling routes (possibly linked to the Sustrans national network), provision for mobility scooters, increased public transport and and more indoor and outdoor recreational facilities. (See Map N2.1 on page 10).

Further consideration of 2011 census details and a review of the corresponding Joint Strategic Needs Assessment (JSNA) relating to carers and children numbers is suggested in liaison with Winchester Council.

Economic Capital: Infrastructure and economy

Introduction

Economic Capital embraces a wide range of economic activity and community and private infrastructure which is vital for maintaining the quality of life in the parish. The indicators chosen include services which may or may not be paid for and particularly focus on visible and accessible facilities that provide an economic as well as social function.

Indicators Focused on

11 indicators were chosen to complement existing knowledge and information already in the hands of or easily accessed by Denmead's Neighbourhood Planning Steering Group:

- E1.1 Highway safety (all accidents and accident black-spots)
- E2.1 Cycle networks, routes and connectivity
- E2.2 Bus routes, stops and frequency
- E2.3 Distance to key services
- E3.1 Community Infrastructure: Base Map 3 (first map of this section).
- E3.2, E3.3, E3.4 and E3.5 Existing and planned capacity of key services (education, health and retail)
- E4.1 Recent public realm investment (over last 5 years)
- E4.2 Housing completions over last 30 years and history of housing development

E3.1 Community Infrastructure

Base Map 3 (Map E3.1 on page 35) shows: Community, churches, schools, public phones, pubs, cash points, commercial, housing, retail and pylons. It also shows the main land use pattern within Denmead and Anthill Common Two main 'hubs' are shown in the map: a commercial one in the south and goods and services it the north.

E1.1 Highway safety (recent accidents and accident black-spots)

This indicator focuses on Highway safety at a local level. The map E1.1 on page 36 gives recorded personal injury accidents. It does not include non-injury accidents or those not reported to the police. The results should therefore be treated with some caution since the number of 'near misses' is unknown. However, the evidence can be used to highlights locations that might require further transport studies/analysis.

The accompanying map on page 36 shows accident data for the years 2009 – 2011 inclusive, categorised into slight, serious and fatal accidents for the area outlined in the map. For accidents, a study area encompassing Denmead has been reviewed. During a 3 study year period (2009 to 2011), there were 9 slight accidents, 2 serious accidents and no fatal accidents in the area.

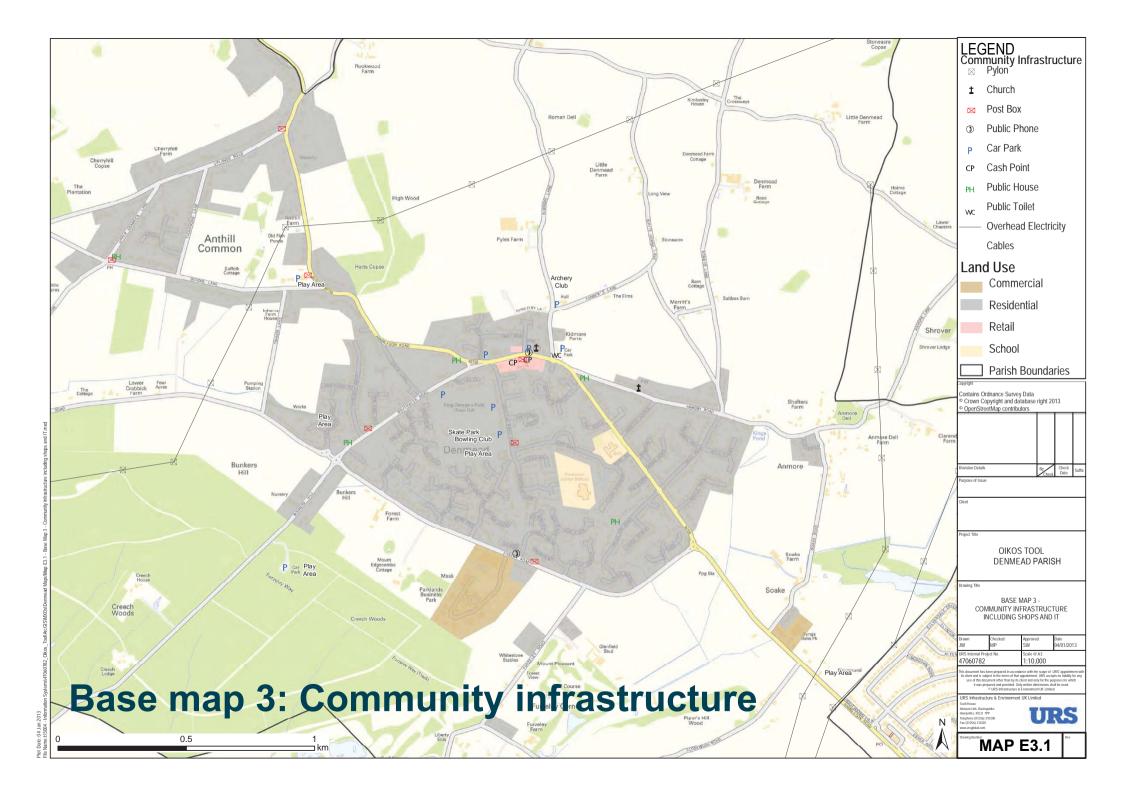
However, there were two recent fatal accidents reported by a local resident. The first one along Hambledon Road and the second one at the junction Forest Road/Bunker Hill.

From these 11 accidents (2009 – 2011), it is notable that 4 are clustered around the junction of Hambledon Road with Bere Road. This junction is in the vicinity of the access point to the infant and junior schools, which are of course busy places with a high density of cars, adults and children associated with the schools. However, further assessment would be needed to confirm this (e.g. time of day and school or holiday periods). The remaining accidents present no particular accident blackspots or concerns in the Denmead area shown in the map (page 36), although a further pattern can be seen along Southwick Road between Denmead and Worlds End which is a particularly fast stretch of road.

See Map E1.1 (page 36): Map showing where accidents were and severity (fatal, serious and slight)

Challenges

A number of further traffic calming measures should be considered along the B2150 and Southwick Road. Investigations regarding the impact of any traffic generated from any new development on accident rates will need to be assessed, as will the ability to deliver safe access to and from any development in terms of the junction with main roads.





Risks (in this case it might be considered a challenge as well)

The introduction of new access points for development or the procurement of further detail regarding accidents in the area may identify highway safety issues that cannot be determined from an initial overview of the study area. Sources:

http://www.crashmap.co.uk/

Further studies:

Review of potential access locations for the proposed development sites, to ensure appropriate access can be delivered in capacity and safety terms, as well as the impact of traffic generated from any development on accident rates.

E2.1 Cycle networks, routes and connectivity

Within a local area it is a measure of how well places are connected. Local areas with good cycle network coverage and good connectivity offer more potential for residents to use bikes to commute i.e. to access employment, to ease peak time congestion by removing short car journeys as well as for recreational and healthy living reasons.

Cycleways in the vicinity of the Denmead Site are identified and highlighted.

No cycleways are present to the north, west and south of the neighbourhood planning area. However, a cycleway exists 1km to the south-east of the site, in the form of a combined footway and cycleway alongside Hambledon Road, which integrates the road and footpath networks of Denmead and Waterlooville.

It is likely that access to this cycleway from the site location would be via the unclassified road, Inhams Lane followed by the tertiary route, Forest Road. Alternatively the secondary route, Hambledon Road (B2150), could be used. In addition, there are a number of cycle routes approximately 2km to the south-east of the site's location, in the neighbouring settlement of Waterlooville.

Beyond the boundary of the map (Map E2.1 - page 39), the cycle network of Waterlooville connects to the National Cycle Network ('NCN') route 22 (Waterlooville to Portsmouth) through a mixture of off-road on on-road cycle routes, which in turn leads to NCN route 2 (South Coast Cycle Route).

Opportunities

There are likely to be a number of actions that can be undertaken to make Denmead more cycle friendly, as identified in the cycle action scheme for Winchester e.g. improving Bridleway, addressing strategic gaps in the cycle network, altering the highway in central Denmead to remove pinch points for cyclists.

Each of these are likely to require developer funding for delivery, and therefore the action promoted would depend on the site selected for development but also discussions with the local authority to determine progress and the physical deliverability of these schemes. An important action will be ensuring good connections to the Denmead-Waterlooville cycle route and improved use of and integration with the green corridors within the village.

Challenges

- No connections are available immediately adjacent to the site, therefore if seeking to promote good cycle connectivity to the Waterlooville area, investigations in regards to providing cycle linkages to existing infrastructure may be required.
- Delivering or contributing to a scheme that ties in with the Council's cycle action plan.
- No safe cycling route between Anthill Common and shops and services in Denmead

Risks

Improvements in cycle connectivity may be restricted by road space/highway land available.

Not doing anything might help to contribute to:

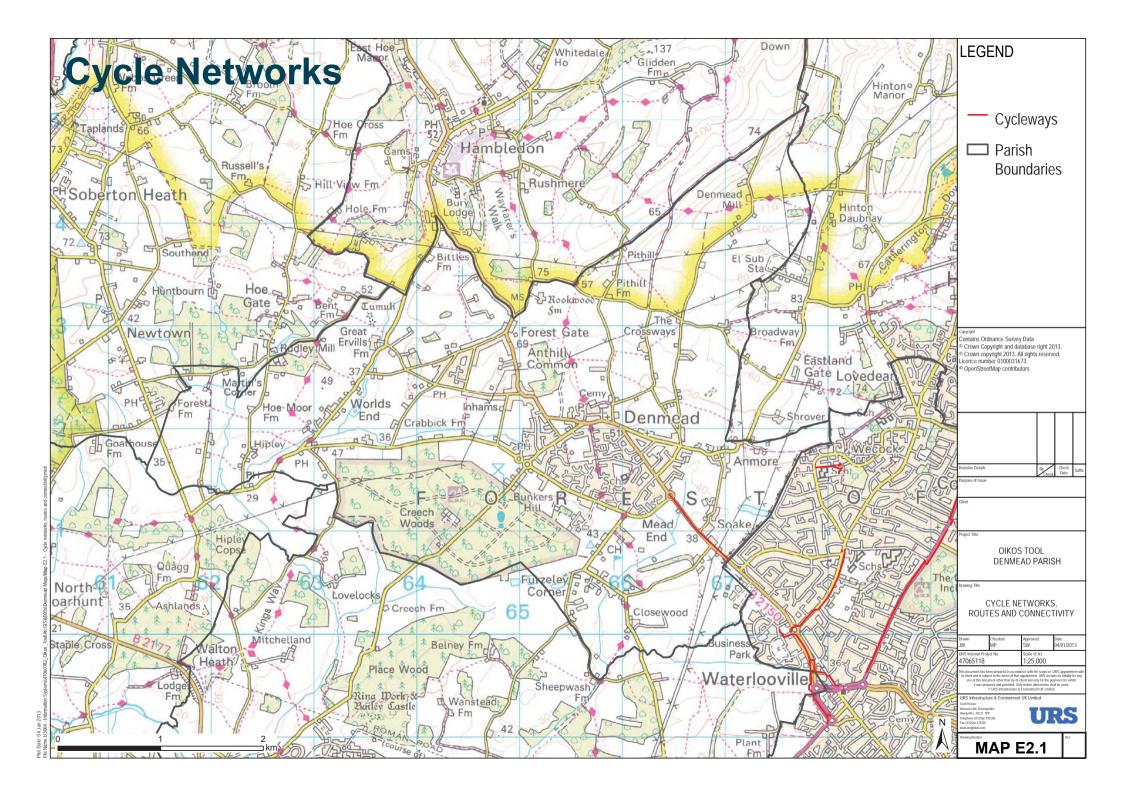
- Future generation health problems (risk factor for obesity)
- Encourage use of cars (increasing carbon emissions)
- Less mobility and physical activity, particularly amongst older residents

Sources:

Sustrans map

Further studies:

In advancing the development of the area, a study may be needed, dependent on the highway conditions along Inhams Lane, to determine suitable connectivity to the Denham-Waterlooville cycle network.



E2.2 Bus routes, stops and frequency

Map E2.2 on page 42 outlines the bus services which depart from Denmead between Monday and Friday, and the respective routes. Waterlooville and Portsmouth are the most popular destinations for residents of Denmead, due to the availability of jobs and services.

During the week, up to 32 departures occur per day from Denmead. Journeys to Portsmouth and Waterlooville are provided by Service 'X9' (previously service 45), with journeys to Waterlooville taking approximately 15 minutes by bus (X9 First bus timetable). The X9 offers up to 26 departures and arrivals per day during the week. The first departure from Denmead Green occurs at 06:43, with the final arrival at 19:00. Between 07:00 and 08:00 services run at a frequency of 3 buses per hour, reducing to two buses per hour thereafter for the remainder of the day. The X9 service is accessible from bus stops on Hambledon Road, Denmead Forrest Road and at Denmead Green.

In addition to the 'X9', the '145', which only runs on school days, provides connections between Denmead and key local locations such as Cowplain School, South Downs College and, Havant Bus Station. Four buses depart from Denmead Green between 07:55 and 08:48, whilst eight buses arrive at Denmead between 14:53 and 17:15.

The remaining bus services comprising the '300' (Chichester West Street) and the '636' (Hordean Technology College) undertake one journey per day from Denmead Green in the morning and to Denemad Green in the afternoon during the week.

Through assessing the services available during the 8:15am to 9:15am, which is defined as the period for assessment within PTAL guidance, it has been determined that Denmead has a Public Transport Accessibility Level ('PTAL') index of 2.96. This equates to a PTAL rating of 1b, described as 'Very Poor' within the guidance. However, it should be noted that the methodology is designed for use in Greater London, an area with very different transport characteristics to Denmead.

Opportunities

- Access to the bus network within the Denmead area is generally good, with bus stops located at Denmead Green (Southwick Road) and Hambledon Roadfalling within 5 minutes' walk of the centre of Denmead.
- The services available from these stops offer access to employment / recreation opportunities in Waterlooville, Havant and Portsmouth.
- The potential levels of interest in alternative transport methods such as community transport, demand responsive transport and 'supermarket' buses could be tested amongst residents and workers.

Challenges

- The deterioration in the frequency and routes of the X9 service will influence overall accessibility by public transport to and from Denmead.
- The ability to deliver enhanced public transport services given that these commonly require a high level of pump priming to continue/extend services or incentivise the use of the bus.
- The ability to deliver enhanced public transport services given that these commonly require a high level of pump priming to continue/extend services or incentivise the use of the bus.
- Increases in petrol pump prices over the plan-making period (20 – 40%). This could also be seen as an opportunity to promote public transport, if affordable fares can be delivered.
- How to increase connectivity and improve the image of bus services, particularly as a realistic alternative to the car for commuting. Currently there are no direct connections by bus between Denmead and:
 - Winchester city
 - Fareham
 - Havant (limited service). Last bus service to Denmead from Havant Bus Station is at 16:40. This affects people who work in Havant and commute on weekdays.
- Circulation between key destinations is challenged by lack of direct connections. Currently, in order to travel to key areas, Denmead residents and visitors need bus transfers at Waterlooville. The wait between buses can be long, resulting in lengthy trips, particularly after 16:40 and during school holidays.

Risks

That a reduction in funding or profitability of buses lead to further service cuts to buses in Hampshire reducing connectivity to and from Denmead by Public Transport.

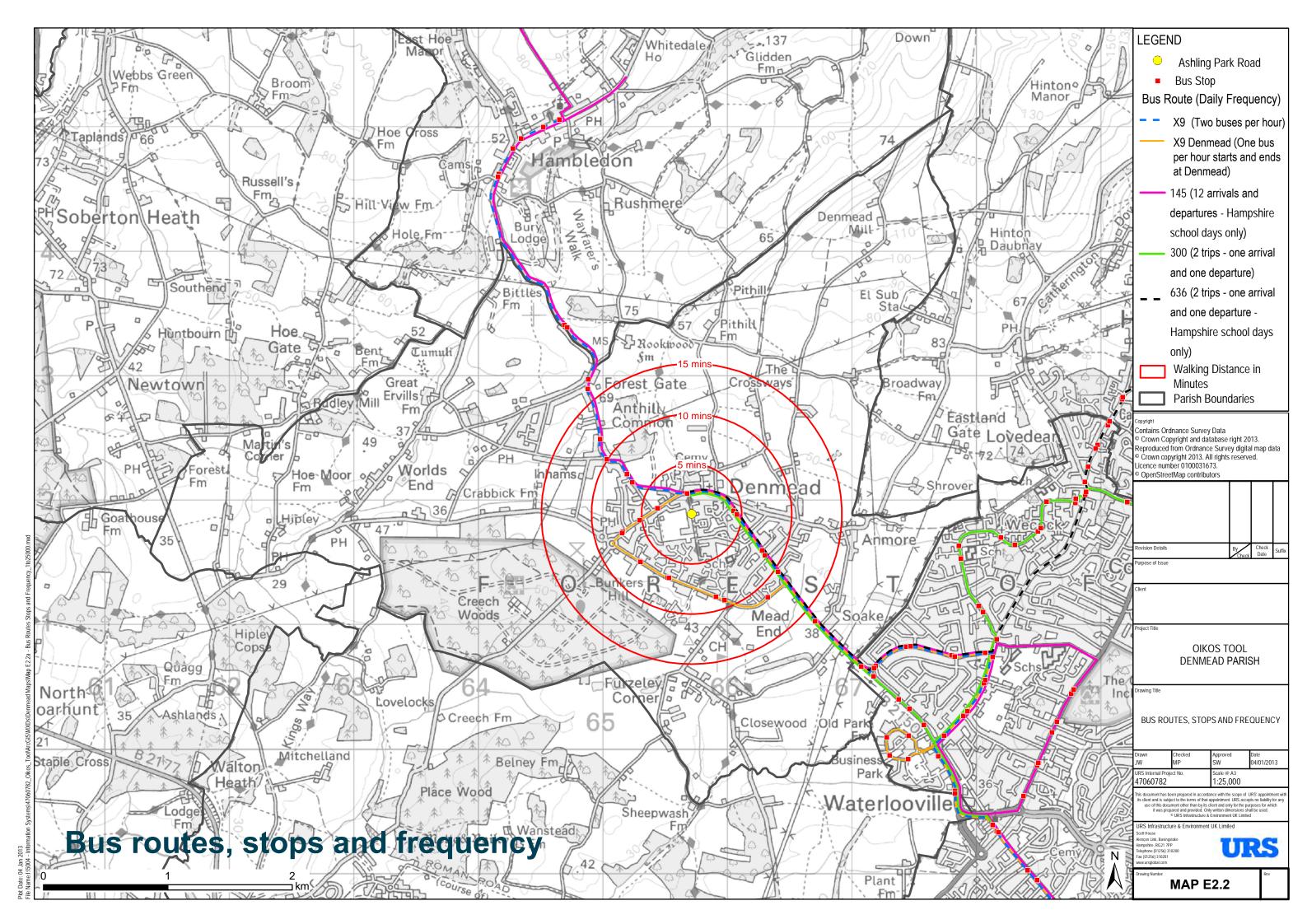
Sources:

http://www.travelinesw.com

LA portal, Traveline, DfT 'Inclusive Mobility' (2005)

Further studies:

It may be necessary to examine the bus services e.g. occupancy, demand from Waterlooville, to assess if additional connections / routes are offered/needed as part of this service. In addition, gap analysis should be carried out to identify opportunities for improved services



E2.3 Distance to key services

This indicator focuses on the location and in particular the distance of those key local services considered necessary for meeting the daily needs of parish residents. It covers social information and commercial aspects which have a strong interrelationship with each other. The geographic distribution of key services is relevant in planning terms since it indicates the transport and longer term sustainability challenges in terms of journey times and mode of transport. It also has implications for new housing developments which should be accessible to local services.

Map E2.3 shows distance to main services: Library, job centre, leisure centre, cinema, shopping centre, health centre, housing office, council office, post office, police station, vets, and weekly market (see map on page 44).

The primary retail centre for Denmead, which includes a number of shops and services, is located at the north tip the village, alongside of Hambledon Road (B2150) and east of Denmead Village Green. Premises include a convenience store, a hairdresser, food outlets and banking services. Opposite the retail area is the Denmead Health Centre, catering to the wellbeing of local residents. In addition, there are also four public houses in Denmead.

In regards to education, Denmead has an infant and a junior school, which are located centrally in the village, off Hambledon

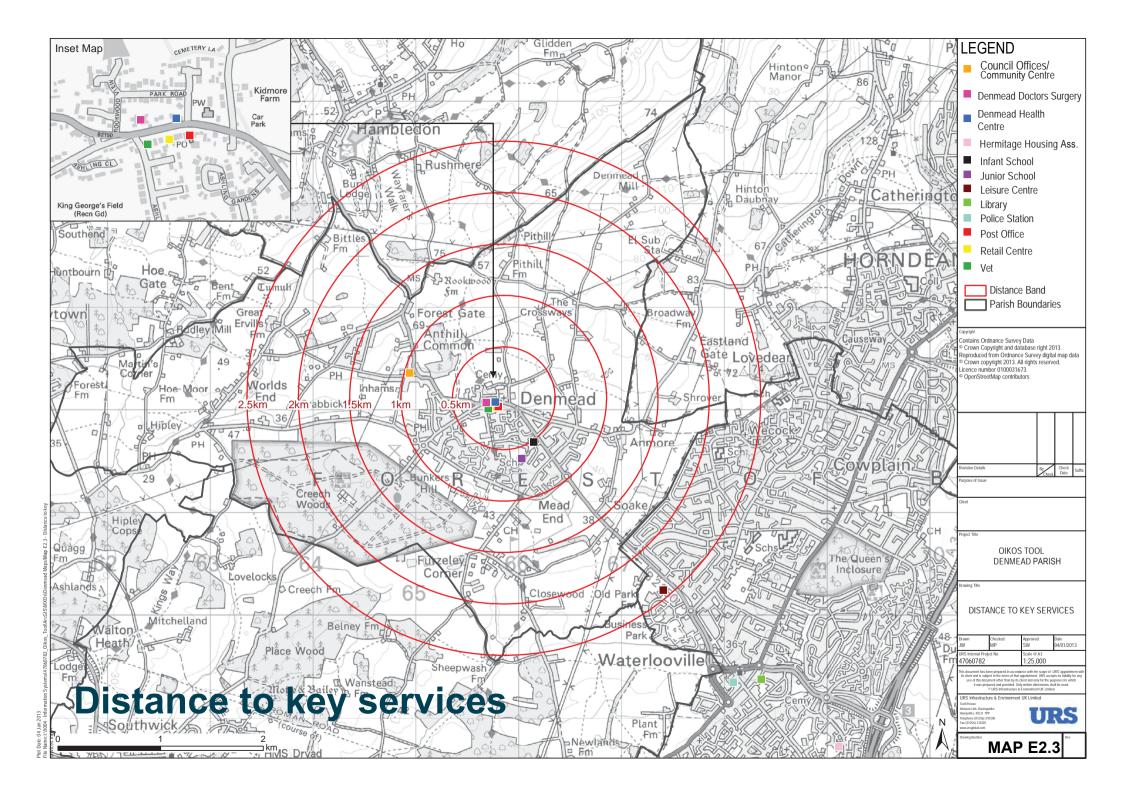
Road. Secondary, further and higher education opportunities are present in Waterlooville, Havant and Portsmouth.

The primary recreational space in Denmead consists of King George's Field, an open space with marked pitches for field sports, tennis courts and lawn bowls. The closest sports centre is located in Waterlooville, 2 miles to the south west of the site. In addition, a footpath exists alongside the River Mead and this runs through the village via a range of open spaces and nature reserves. Services at the periphery of Denmead include Denmead Community Centre to the north and Denmead Golf Course to the south.

Employment within the area is mainly provided through the retail area, but also at Parklands Business Park at the southern end of the village. Further opportunities exist in Waterlooville, Havant and the surrounding area including Portsmouth, where the closet Hospital is located (5.5 miles south).

Opportunities

Denmead has a good range of services relative to a village of its size, supported by both local residents and passing trade with the provision of further services in neighbouring Waterlooville – approximately 2km away. The West of Waterloo development is bringing on stream a range of new service. Over the next 10 to 15 years, a 'garden city' style community will be built, with two new schools, offices, retail, and two new pubs.

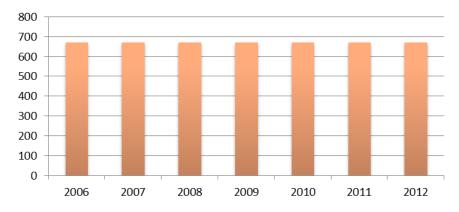


Risks

With the recent deterioration in the bus service (see indicator E2.2), the use of private transport to reach services in Waterlooville and beyond is likely to increase, resulting in greater reliance on the car, increasing traffic levels beyond what may be considered reasonable within Denmead by the Hampshire County Council. Also, as Graph 9, the number of retail outlets has remained static since 2006 in contrast to the steady increase in population (Graph 10).

Graph 9 Retail development (2006-2012)

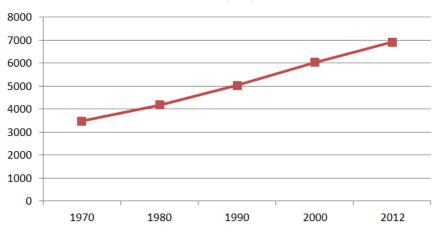
Retail development (sq m) 2006 - 2012



The number of retails units has remained relatively constant: 17 units (2007) and 20 units (2010). Sources: *Retail and Town Centre Uses Study*, 2007, 2010 and 2012 (Winchester)

Graph 10 Denmead's population (1970 - 2012)





Sources: http://maps.google.co.uk http://www.openstreetmap.org Winchester District Council, Google Maps, OpenStreetMap

Further studies:

The above interpretation indicates that good employment, recreational and convenience opportunities are available close to the site, however the capacity of the services to accommodate growth would need to be determined, together with the question of whether the village could support further retail outlets.

E3.2, E3.3, E3.4, E3.5, E4.1 Existing and planned community infrastructure

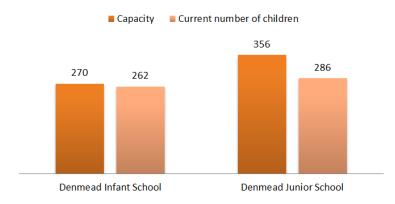
This series of indicators looks briefly at the current and any planned capacity for important community infrastructure such as schools, health centre, retail and play space

Table 11 Community Infrastructure

Infrastructure	Current and planned
Education (E3.2)	Current infant school is near capacity and no current plans for further retail or health provision in spatial terms. See Graph 11. No evidence for additional planned capacity for education.
Health care points (E3.3)	Denmead Health Centre and Doctors Surgery. No evidence for additional planned capacity.
Retail (E3.4)	Winchester Retail Studies published between 2006 and 2012 report no change in retail numbers. See Graph 9 in previous section.
Public realm (E4.1)	Investments in public realm have been reported around shopping areas (at the Southern of Denmead Parish). There have been improvements in the Barn play area.
Children's play area (E3.5)	Denmead Parish Council will install an outdoor gym soon which will be aimed at the older generation

Graph 11 School capacity

School capacity



Opportunities

New development may allow new community infrastructure needs to be met, particularly with regards to those services the community regard as essential to provide locally (e.g. nursery, infant provision, play and sports, provision, shops)

Challenges

Declining public transport and an ageing population may increase the demand for more local services

Risks

- Lack of cafes and leisure shops (e.g. outdoor sports) may result in those households with a high disposable income spending less of their leisure time and money in the village itself.
- Lack of new retail units may reduce the opportunities for new independent retailers to emerge

Sources:

Winchester Open Strategy 2012 – 2013

NHS database: http://www.nhs.uk

Edubase: http://www.education.gov.uk Winchester Council Retail

study 2007 - 2010

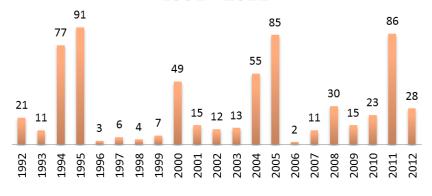
Winchester Development framework - WD Local Plan Part 1 Joint

Core Strategy - June 2012

E4.2 Housing completions 1992 - 2012

Graph 12 Housing completions (1992 - 2011)

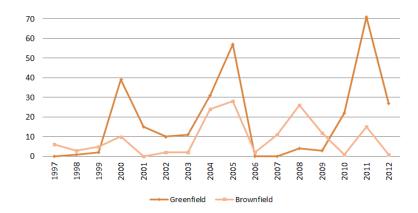
Denmead Housing completions 1992 - 2012



Source: Winchester District Council

Graph 13 Housing completions (Greenfield - Brownfield) 1997 – 2012

Denmead Housing Completions Greenfield - Brownfield 1997 - 2012



Source: Winchester District Council

Opportunities

- The village has a history of development 'spurts' (see maps following pages), although the 'mean' build rate is 15 per year. This also appears to be the rate that the neighbourhood planning steering group is most comfortable with going forward.
- New development sites identified can support community infrastructure
- Chance to re-balance village spread and build homes within a 3-5 minute walk of local services

Challenges

• Denmead is now classed as a large village in terms of

Winchesters settlement hierarchy

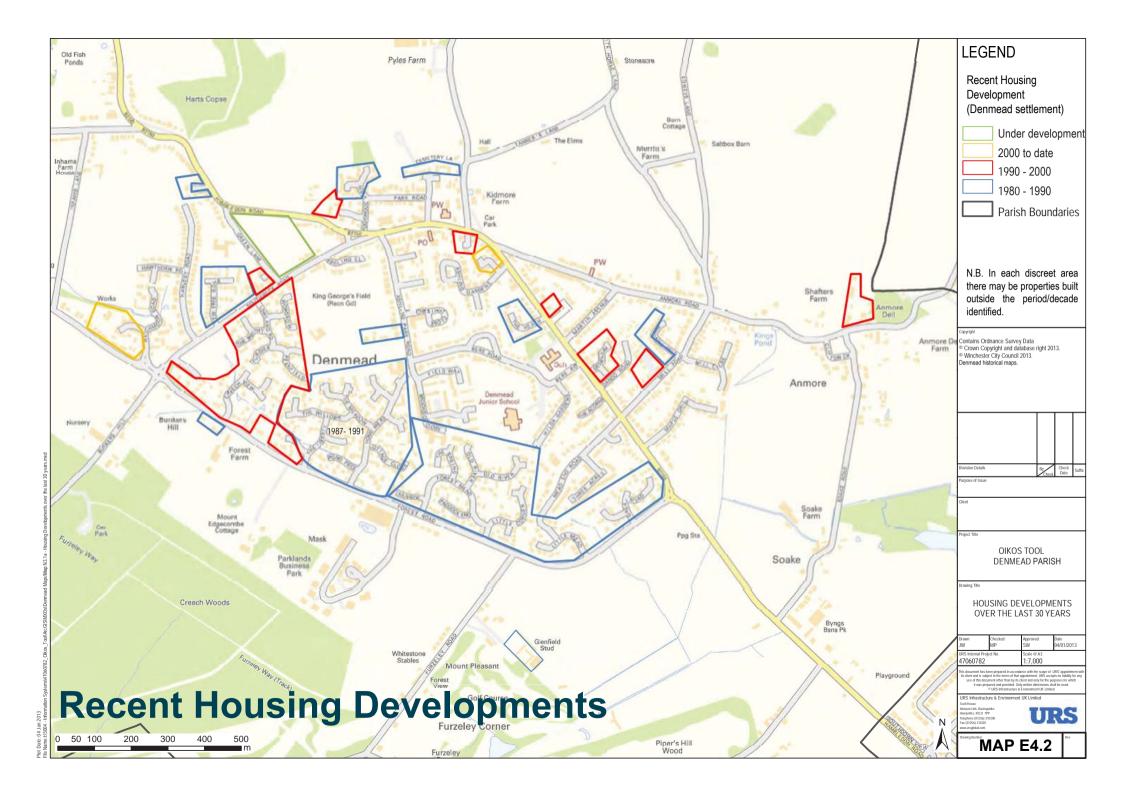
- Static retail and other service provision
- Releasing larger or more sites in first five years could fund improved infrastructure and public realm
- Car dependency walking routes are there, but very average public realm and cycling routes very limited
- Bus provision poor, but sufficient bus stops, although one or two could be re-positioned

Risks

- Increasing cost of village living going into the future
- Key businesses will move out if they can't expand

Sources:

Winchester Council



Summary

- The range of goods and services provided in the Parish and in particular the village of Denmead has remained more or less static over the last few years although in comparison with other large Hampshire villages, the service offer is still relatively good.
- There is very little industrial/commercial land available for existing successful businesses to expand or new ones to set-up.
- In the last 15 years some 436 new homes have been built in the parish. In the next 15 years the housing target is less than half of this.
- The rate and location of growth has resulted in the village service centre ending up on the edge of the village. This has some advantages in terms of passing vehicle trade, but also, when coupled with a poor rural bus, results in many casual car journeys as evidenced by the amount of land devoted to car-parking and the constant use of the parking outside the village shops during opening hours.
- The significant growth of West of Waterlooville (i.e. the major development area) just beyond the strategic gap risks the village becoming increasingly dormitory in nature and particularly in service terms significantly more dependent on Waterlooville for an increasing range of essential services, including schools.
- The linking of the existing cyclepath along the Hambledon Road into the north-south green corridor could provide a safe, pleasant
 and direct route for cyclist to the village centre (and shopping parade, health centre and other facilities), particularly if linked to
 public realm improvements along Ashling Park Road.
- Denmead and Anthill Common have very few active mechanisms to remind drivers of the current speed restrictions (such as flashing speed warnings). Traffic calming in the vicinity of the service centre and schools along the Hambledon Road might be particularly effective and also help with pedestrians crossing this road.
- Both the village and wider parish has the potential to signpost more tourist, including those visiting the national park, to local sites of
 interest including the shops, pubs, car park and toilets and national and local trails.

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