

# A Needs Assessment relating to the Provision of Natural Greenspace in areas with Low Levels of Physical Activity



Report for Sevenoaks District Council

20 May 2016

Report to:  
Kent Nature Partnership  
Health & Nature Subgroup

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with Low Levels of Physical Activity**

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## Contents

1.	Introduction.....	4
2.	Method summary.....	6
3.	Results covering the District of Sevenoaks .....	10
3.1	Populations meeting accessibility standards .....	10
3.2	Populations which are physically inactive .....	18
4.	Prioritisation of areas for action .....	19
Appendix A:	Sevenoaks District buffer intersection results.....	24
Appendix B:	Sevenoaks District allocation results .....	25
Appendix C:	Population across Kent meeting accessibility standards .....	26
Appendix D:	Sevenoaks District prioritisation matrices 1, 2, 3, 4 & 5.....	27

# 1. Introduction

This report is one in a series regarding a needs assessment of natural greenspace provision in areas of Kent where the population is physically inactive. It presents the results covering the District of Sevenoaks. The methodology is reported separately. The background to the study and the results for the whole of Kent are covered in the Main Report.

This study set out to establish the proximity, accessibility and naturalness of greenspace in areas of Kent where the population is characterised by low levels of physical activity. Subsequently, this assessment was used to prioritise areas for future action and investment, based on levels of population deprivation, size and need.

Throughout the report 'accessibility to greenspace' (including 'access of greenspace') refers to a site being accessible via some form of public right of way. However, this does not necessarily mean that the site is accessible to all sectors of society (e.g. individuals with a physical disability); accounting for the quality of the access route was beyond the scope of this project.

Greenspace is defined as '*places where human control and activities are not intensive so that a feeling of naturalness is allowed to predominate*' (as described by Natural England<sup>1</sup>). Greenspace includes '*all open space of public value, including not just land, but also areas of water such as rivers, canals, lakes and reservoirs which offer important opportunities for sport and recreation and can also act as a visual amenity*'<sup>2</sup>.

Physical activity is defined on the basis of '*body movement that expends energy and raises the heart rate*'<sup>3</sup>.

The specific objectives for the Kent-wide project were to:

1. Produce a needs assessment that identified accessible greenspace within the Lower Super Output Areas (LSOAs) of Kent, particularly those with the highest levels of deprivation and where a high proportion of the population are physically

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<sup>1</sup> Natural England (2010) '*Nature Nearby*' *Accessible Natural Greenspace Guidance*. <http://webarchive.nationalarchives.gov.uk/20160323000001/http://publications.naturalengland.org.uk/publication/40004>. Accessed 24/3/16.

<sup>2</sup> ODPM (2002) *Planning Policy Guidance 17: Planning for open space, sport and recreation*. HMSO

<sup>3</sup> Public Health England (2014) *Everybody active, every day: An evidence-based approach to physical activity*.

inactive. The methods used were to be transparent and repeatable, thus facilitating future updates for Kent or application of the same approach in different counties.

2. Stratify and prioritise LSOAs where future action should be taken to improve provision of greenspace or increase use of existing greenspace in order to improve population health by promoting increased outdoor physical activity and engagement with the natural environment.

## 2. Method summary

A more detailed description of the methodology can be found in the dedicated Methodology report, as well as the Main Report for Kent. An outline of the methods used is provided here to assist in data interpretation.

The study used four types of spatial data for Kent covering boundaries, access routes, greenspace (Figure 1) and population. Interpretation of a 'feeling of naturalness' is guided by a four stage rating as a proxy for measuring naturalness<sup>4</sup> (Box 1). This guidance was used to assign a level of naturalness to each area of greenspace.

### **Box 1: Naturalness levels according to Natural England (2010) 'Nature Nearby' Accessible Natural Greenspace Guidance.**

Categories for 'feeling of naturalness'<sup>5</sup>:

#### **Level 1**

- Nature conservation areas, including Sites of Special Scientific Interest (SSSIs)
- Local sites, including local wildlife sites, Regionally Important Geological Sites (RIGS)
- Local Nature Reserves (LNRs)
- National Nature Reserves (NNRs)
- Woodland
- Remnant countryside (within urban and urban fringe areas)

#### **Level 2**

- Formal and informal open space
- Unimproved farmland
- Rivers and canals
- Unimproved grassland
- Disused/derelict land, mosaics of formal and informal areas of scrub etc
- Country parks
- Open access land

#### **Level 3**

- Allotments
- Church yards and cemeteries
- Formal recreation space

#### **Level 4**

- Improved farmland

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<sup>4</sup> Natural England (2010) 'Nature Nearby' Accessible Natural Greenspace Guidance.

<sup>5</sup> Ibid



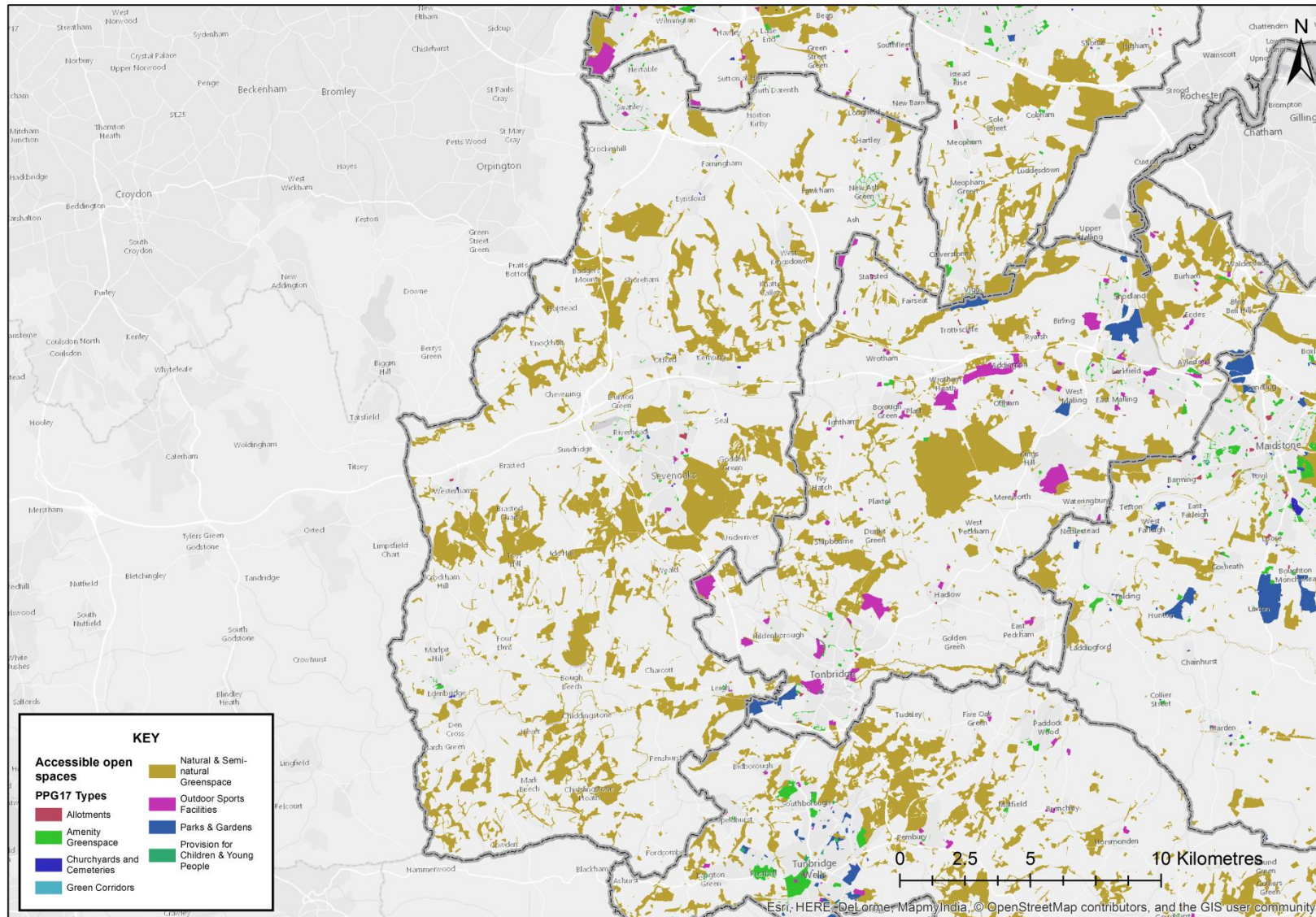


Figure 1: Greenspace in the Borough of Sevenoaks mapped according to PPG17 typologies.

Two sets of accessibility standards were used to identify greenspace provision for the population at each postcode: Access to Natural Greenspace Standard<sup>6</sup> (ANGSt) and Dover District Council accessibility standard<sup>7</sup> (Box 2). The analyses were repeated for two combinations of site naturalness: (i) naturalness level 1, 2 & 3 and, (ii) naturalness level 1 (more 'natural' greenspaces). The analyses used distance along access routes (footpaths and pavements) from postcodes to greenspace entrance points.

#### **Box 2: Accessibility standards used in this study**

ANGSt:

- At least 1 site >2 ha within 300 m of where people live
- At least 1 site >20 ha within 2 km of where people live
- At least 1 site >100 ha within 5 km of where people live
- At least 1 site >500 ha within 10 km of where people live

DDC accessibility standard:

- At least 1 site >0.4 ha within 300 m of where people live in urban locations or at least 1 site >2 ha within 1 km of where people live in rural locations

Three methods of assessing greenspace provision were explored:

- Service area – which determines the potential distance travelled to access a greenspace via an entry point, following an access route (this method underpins most of the presented results).
- Buffer intersection – a Euclidean, or straight-line, method which assumes that greenspace is accessible to the public at any point around the edge of the site.
- Allocation – which uses Euclidean distance from postcode to greenspace entry points, rather than assuming that a site can be entered at any point along its edge.

Each method has its pros and cons due to complexity of execution and the assumptions made (see Methodology report). Following consultation with KCC, the service area method and results are presented as the core analyses.

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<sup>6</sup> Natural England (2010) '*Nature Nearby*' *Accessible Natural Greenspace Guidance*.

<sup>7</sup> DDC Parks and Amenity Open Space Strategy 2013 & Land Allocations Local Plan 2015.



Data were analysed at the geographic resolution of Lower Super Output Area (LSOA) and subsequently categorised by Rural-Urban classification<sup>8</sup>, the Index of Multiple Deprivation (IMD)<sup>9</sup>, physical inactivity, district and Clinical Commissioning Group.

Physical activity is measured through Sport England's Active People Survey. The survey forms the benchmark for reporting on physical inactivity and shows that 28% of the Kent population is physically inactive<sup>10</sup>. However, these data are not available at LSOA level and so instead physical inactivity data from Experian Mosaic were used in the analyses.

In order to identify priority areas for action, LSOAs were divided into five groups based on the level of inactivity, with the highest priority given to the most physically inactive populations. Within each priority group, LSOAs were ordered by level of deprivation (most deprived LSOAs listed first) followed by the percentage population meeting accessibility standards (with the lowest percentage population meeting standards listed first).

Recommendations are made for improving access to greenspace based on the priorities.

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<sup>8</sup> <http://www.ons.gov.uk/ons/guide-method/geography/products/area-classifications/2011-rural-urban/index.html>.

<sup>9</sup> <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>.

<sup>10</sup> <http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000042/pat/6/ati/102/page/0/par/E12000008/are/E10000016>

### **3. Results covering the District of Sevenoaks**

The results presented here should be interpreted bearing in mind the following important methodological caveats:

- Accessible greenspace provision for LSOAs near the county border will be an underestimate, as sites over the Kent border were not included in the analyses.
- The population defined as active might not be using greenspace for physical activity, using indoor facilities instead (e.g. gyms) or being outdoors but restricting their exercise to built-up areas (e.g. running along residential streets).
- It is likely that the service area method will underestimate greenspace provision in rural locations.
- It is likely that the service area method will increasingly underestimate accessible greenspace provision as ANGSt distances get larger, as access routes excluded roads, assuming that people would travel to a site on foot.
- The ANGSt and DCC standards, as investigated in this report, are met by the first applicable greenspace per postcode. Variation in physical activity could be due to the proximity/accessibility of multiple greenspace, which is not taken into account in these analyses.
- Many other social factors influence the attractiveness of a greenspace as a location for undertaking physical activity, such as people's perceptions of the area (e.g. due to the available facilities, litter, graffiti, fear of crime).

All reported results have been derived using the service area method, unless otherwise stated. Fewer postcodes meet accessibility standards using the service area method when compared to the buffer intersection (Sevenoaks District Council Report Appendix A) and allocation methods (Sevenoaks District Council Report Appendix B).

#### **3.1 Populations meeting accessibility standards**

Comparisons were made of the results obtained for populations meeting accessibility standards for naturalness level 1, 2 & 3 and naturalness level 1 greenspace (Table1) using the service area method. These data can be compared with the Kent figures (Sevenoaks District Council Report Appendix C).

**Table 1: Percentage of population in the District of Sevenoaks meeting accessibility standards.**

<b>Greenspace accessibility criteria</b>	<b>Naturalness levels 1, 2 &amp; 3</b>	<b>Naturalness level 1</b>
ANGSt		
At least 1 site >2 ha within 300 m	20% (Figure 2)	13%
At least 1 site >20 ha within 2 km	60% (Figure 3)	54%
At least 1 site >100 ha within 5 km	66% (Figure 4)	64%
At least 1 site >500 ha within 10 km	0% (Figure 5)	0%
DDC standard		
At least 1 site >0.4 ha within 300 m in urban areas or at least 1 site >2 ha within 1 km in rural areas	48% (Figures 6 & 7)	30%

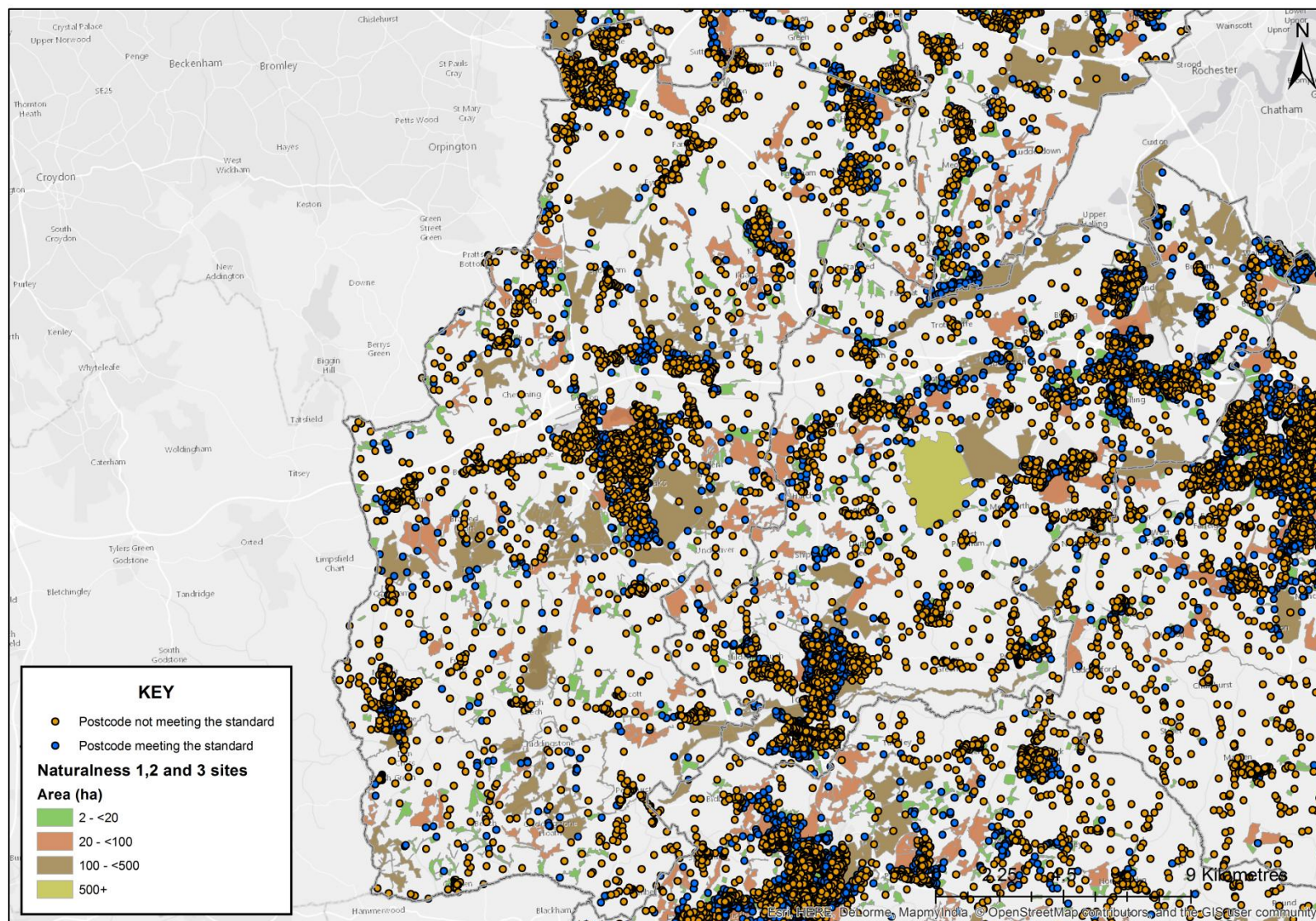
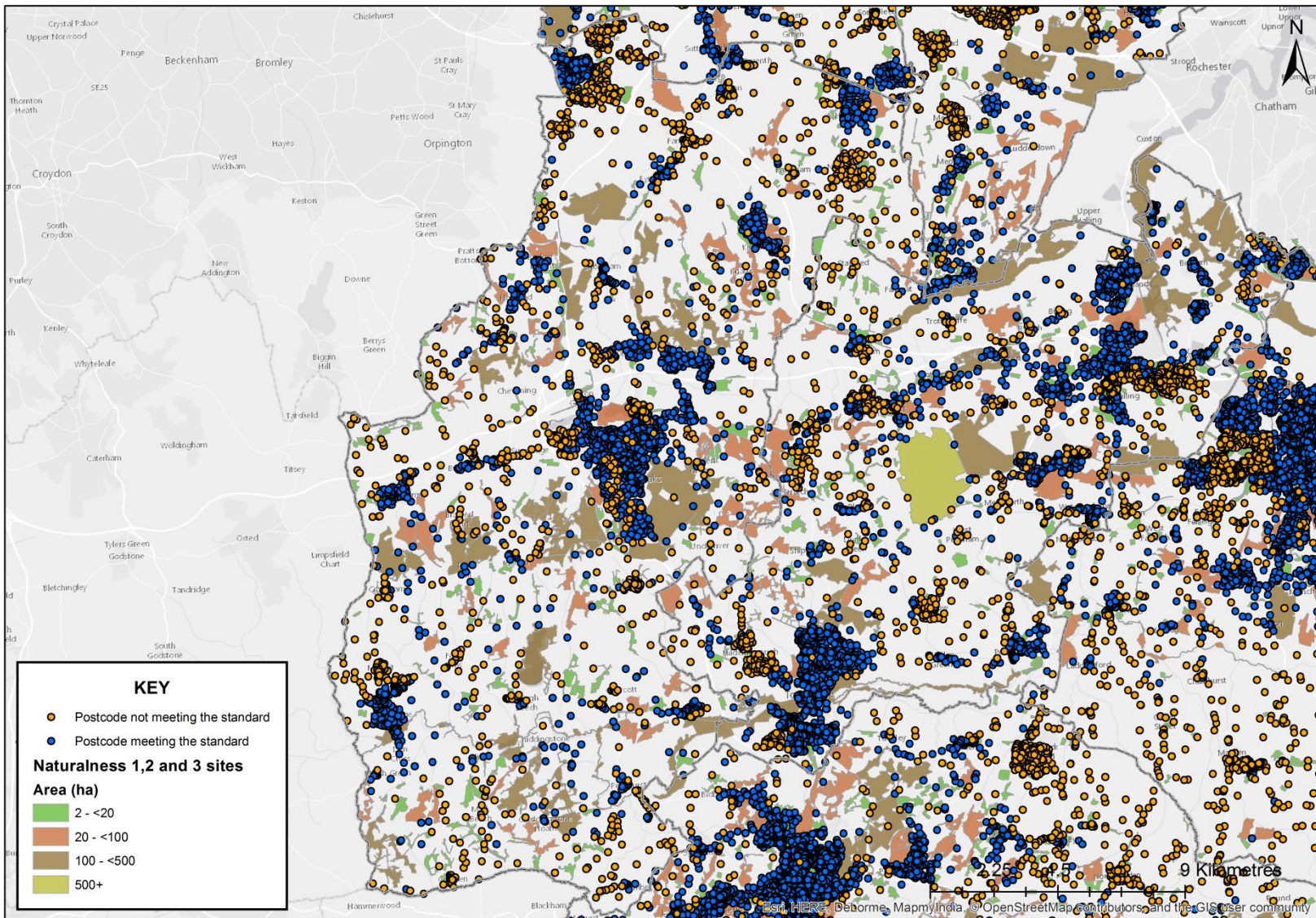


Figure 2: Sevenoaks District postcodes meeting and not meeting ANGSt for naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m.







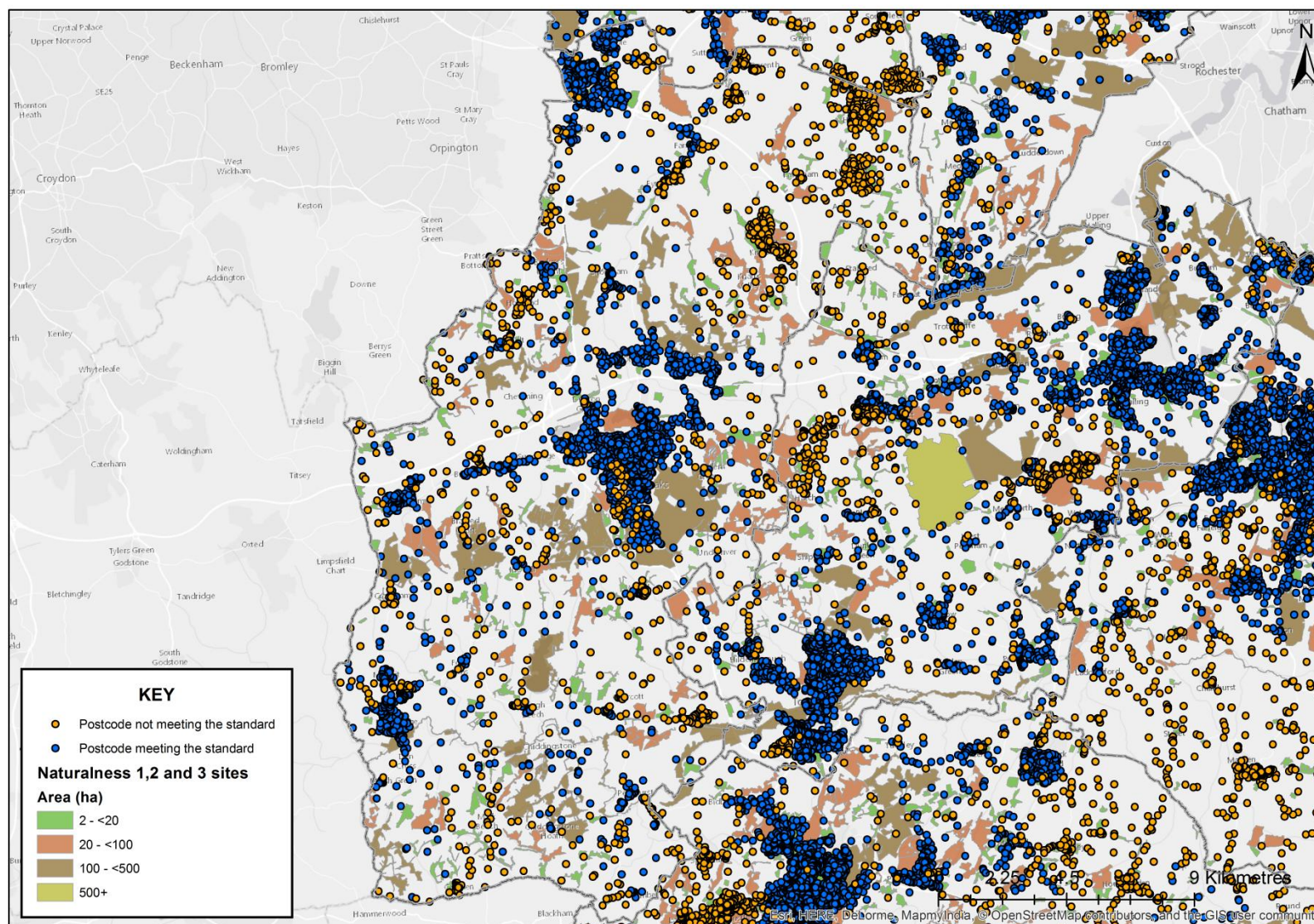


Figure 4: Sevenoaks District postcodes meeting and not meeting ANGSt for naturalness level 1, 2 & 3 greenspace of at least 100 ha within 5 km.



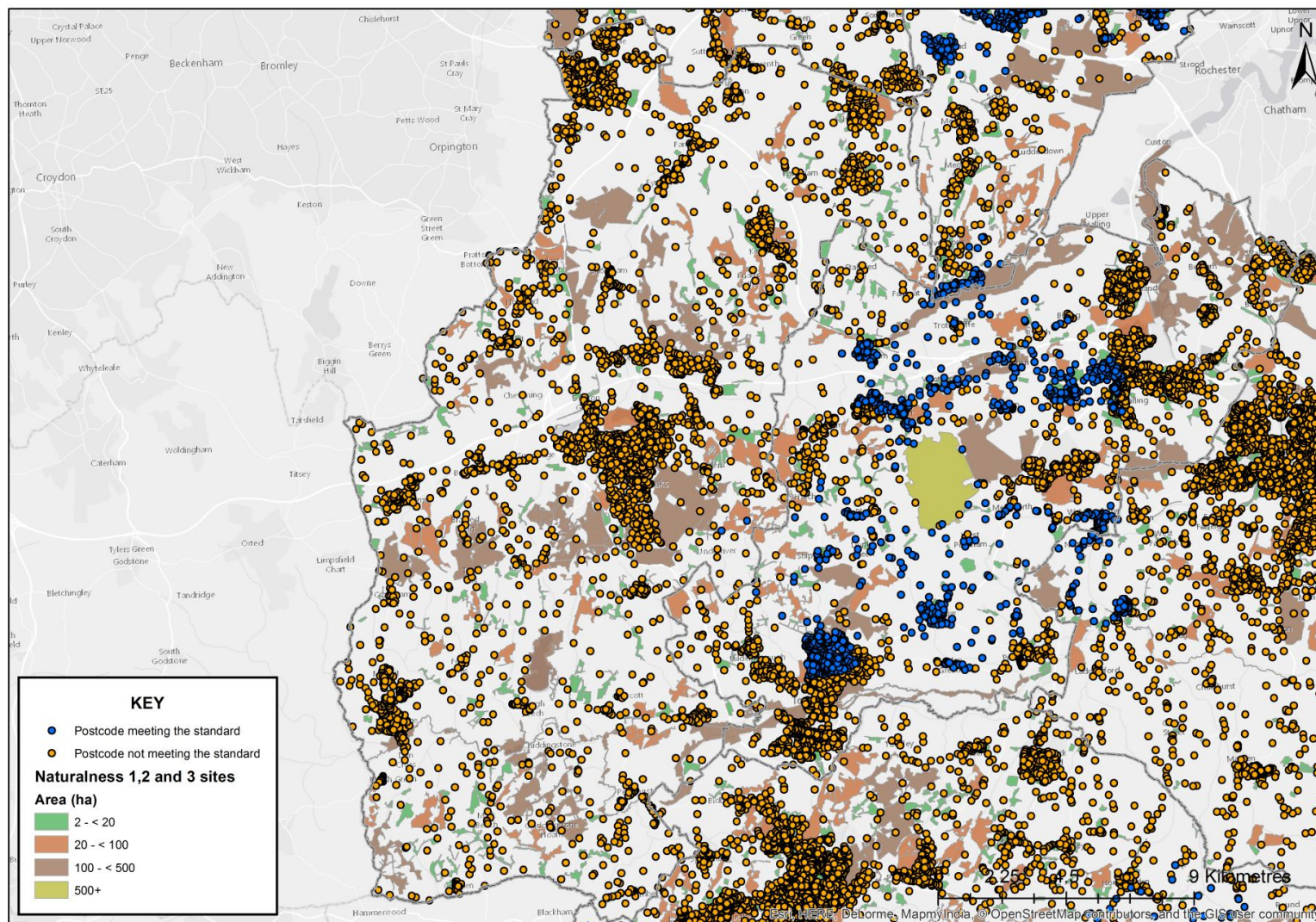
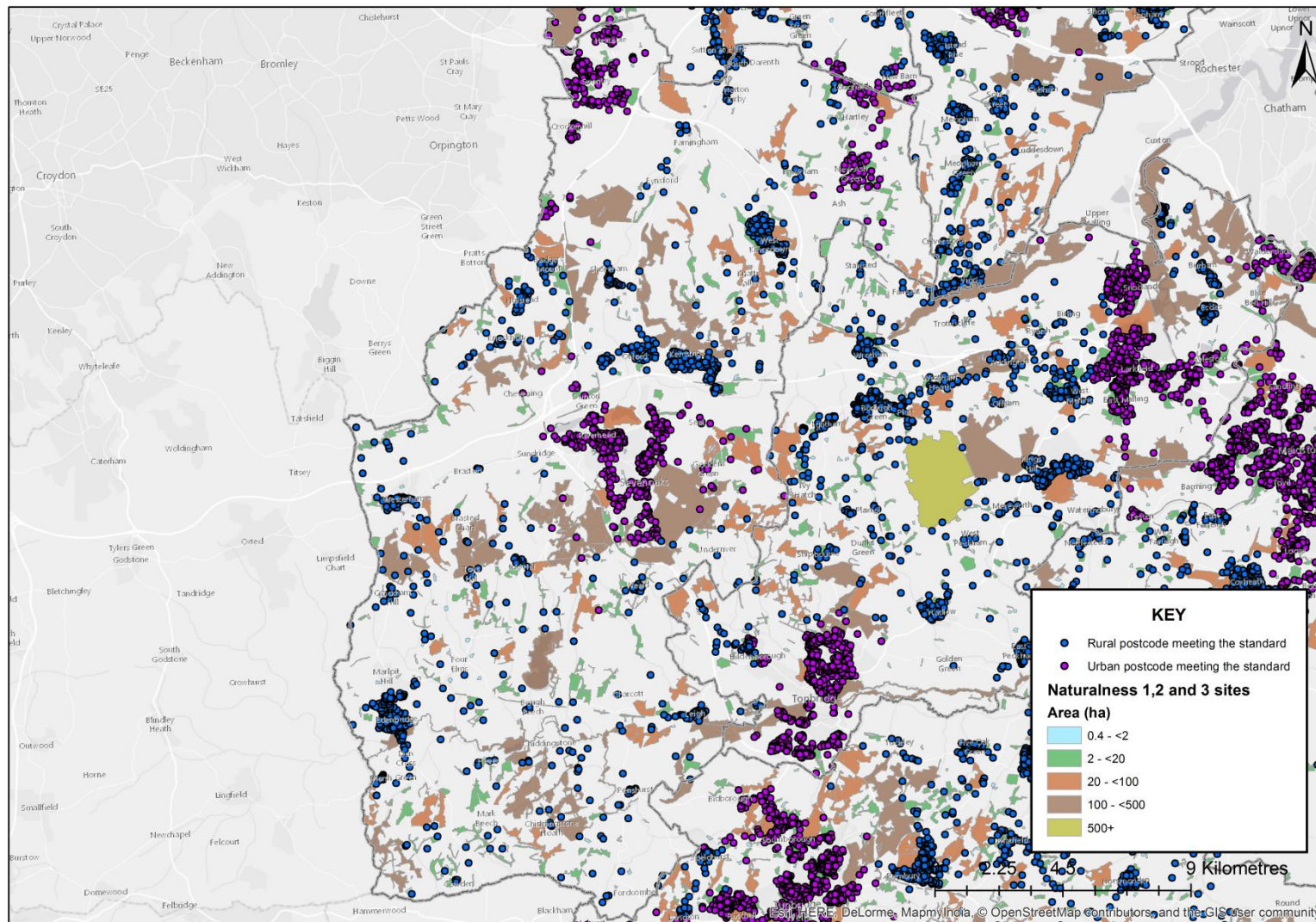


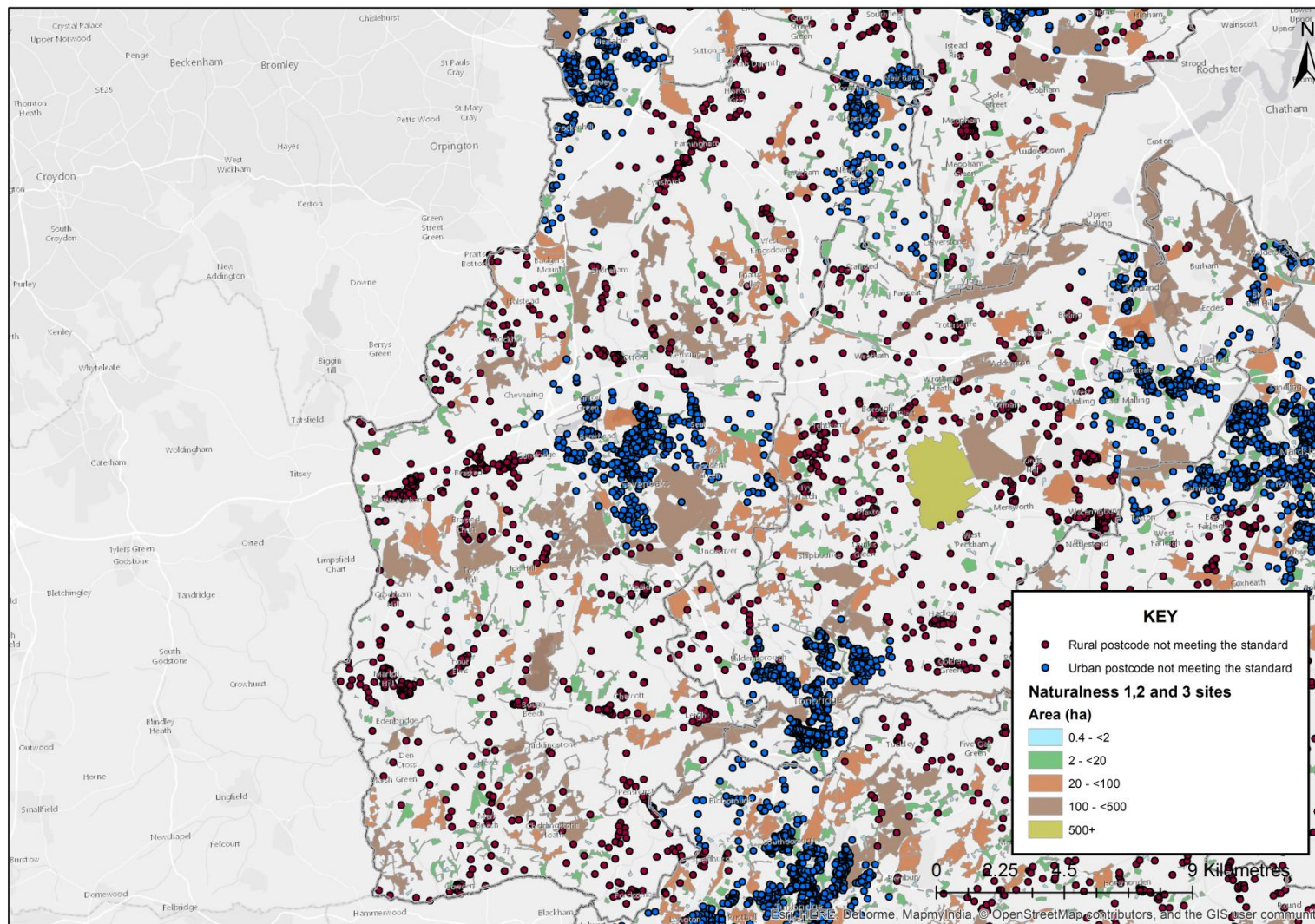
Figure 5: Sevenoaks District postcodes meeting and not meeting ANGSt for naturalness level 1, 2 & 3 greenspace of at least 500 ha within 10 km.





**Figure 6: Sevenoaks District postcodes meeting the DDC standard for naturalness level 1, 2 & 3 greenspace of at least 0.4 ha within 300 m in urban areas or at least 2 ha within 1 km in rural areas.**





**Figure 7: Sevenoaks District postcodes not meeting the DDC standard for naturalness level 1, 2 & 3 greenspace of at least 0.4 ha within 300 m in urban areas or at least 2 ha within 1 km in rural areas.**

## **3.2 Populations which are physically inactive**

The Experian Mosaic data used in this study shows that 12% (based on 2013 population estimates) of the population across the District of Sevenoaks are considered physically inactive.

## 4. Prioritisation of areas for action

LSOA populations have been grouped and prioritised according to the proportion that is physically inactive (Table 2 and Sevenoaks District Council Report Appendix D).

**Table 2: Physically inactive priority groupings and reference to matrices for the District of Sevenoaks.**

Priority	Population grouping	Number of LSOAs	Matrix
Physically inactive priority 1	>80% population physically inactive	0	Matrix 1
Physically inactive priority 2	>60% to 80% of the population physically inactive	0	Matrix 2
Physically inactive priority 3	>40% to 60% of the population physically inactive	3	Matrix 3
Physically inactive priority 4	>20% to 40% of the population physically inactive	13	Matrix 4
Physically inactive priority 5	0% to 20% of the population physically inactive	58	Matrix 5

Measures have been proposed for increasing opportunities for physical activity in greenspace across the District of Sevenoaks, associated with each priority (Table 3).

In addition, the results from the analyses and evidence from the literature point to some general actions which could be taken in Sevenoaks District to improve provision/access to greenspace and encourage physical activity in greenspace:

- Evidence from the scientific literature has shown that people are more likely to visit natural greenspace in close proximity to where they live<sup>11,12,13</sup>. We therefore propose that priority should be given to increasing accessible greenspace in LSOAs where less than 50% of the population was found to meet ANGSt for greenspace of at least 2 ha within 300 m of home.

<sup>11</sup> Carter, M. and P. Horwitz (2014). "Beyond proximity: the importance of green space useability to self-reported health." *Ecohealth* **11**(3): 322-332.

<sup>12</sup> Dallimer, M., Davies, Z.G., Irvine, K.N., Maltby, L., Warren, P.H., Gaston, K.J. & Armsworth, P.R. (2014) What Personal and Environmental Factors Determine Frequency of Urban Greenspace Use? *International Journal of Environmental Research and Public Health*, **11**: 7977-7992.

<sup>13</sup> Giles-Corti, B., Broomhall, M.H., Knuiman, M., Collins, C., Douglas, K., Ng, K., Lange, A. & Donovan, R.J. (2005) Increasing walking: how important is distance to, attractiveness, and size of public open space? *American Journal of Preventative Medicine* **28**(2): 169–176

- Over half (52%) of the population did not meet the DDC accessibility standard (for naturalness level 1, 2 & 3 greenspace of at least 0.4 ha within 300 m of home in urban areas or 2 ha within 1 km in rural areas). In urban LSOAs, where less than 10% of the population met the DDC standard, creation of greenspace of at least 0.4 ha is recommended.
- The percentage of the population that is physically inactive was higher in urban areas across Kent compared to rural. Creation of new greenspace and/or increasing accessibility to existing greenspace in urban compared to rural areas.
- Analyses of data for Kent found a significant relationship was found between physical inactivity and the accessibility of naturalness level 1 greenspace of at least 2 ha within 300 m of where people live in urban areas. Again, creation of new greenspace and/or increasing accessibility to existing greenspace in urban LSOAs should be prioritised over rural LSOAs.
- In some LSOAs the percentage of the population meeting ANGSt for naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m of home was found to be much lower using the service area compared to the buffer intersection method. In these areas we suggest that, where possible, improvements are made to increase access routes to the existing available greenspace.
- In line with other studies we found that populations in Kent who are not active enough for good health are more likely to have higher levels of deprivation. Promoting physical activity outdoors in deprived areas where there is adequate provision of accessible greenspace is recommended.
- High levels of physical inactivity occur despite availability of accessible greenspace (see Matrix 1). In addition to encouraging physical activity in these areas, it is important to identify the barriers stopping people from using their local greenspace for physical activity.
- Some research suggests that people with an existing "orientation" towards nature are more likely to walk or travel to parks and greenspace<sup>14</sup>. Therefore, long-term approaches to increase people's interest in the natural environment should be considered, as a means of encouraging physical activity in greenspace.

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<sup>14</sup> Lin BB, Fuller RA, Bush R, Gaston KJ, Shanahan DF (2014) Opportunity or Orientation? Who Uses Urban Parks and Why. PLoS ONE 9(1): e87422. doi:10.1371/journal.pone.0087422



**Table 3: Interpretation of the colour coding used in the matrices and proposed measures for increasing opportunities for physical activity in greenspace within 300 m of where people live (and the number of LSOAs in each category in the District of Sevenoaks to which the interpretation and measures apply).**

Naturalness 1, 2 & 3				Naturalness level 1		Interpretation	Primary proposed intervention	Secondary proposed intervention	Number of LSOAs				
Service area		Buffer intersection		Service area	Buffer intersection				Matrix				
ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha				1	2	3	4	5
0% to 10%	0% to 10%					Accessibility to greenspace extremely low 10% or less of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home <u>and</u> less than 10% meet the DDC accessibility standard (greenspace of at least 0.4 ha within 300 m walking distance in urban areas or 2 ha within 1 km in rural areas).	Create new accessible greenspace of at least 0.4 ha within urban LSOAs.	Encourage physical activity in greenspace.	0	0	1	0	4
0% to 10%	0% to 10%	>50%				Accessibility to greenspace extremely low but <u>greenspace present in vicinity</u> 10% or less of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home <u>and</u> less than 10% meet the DDC accessibility standard (greenspace of at least 0.4 ha within 300 m walking distance in urban areas or 2 ha within 1 km in rural areas), but over 50% are	Create new accessible greenspace of at least 0.4 ha within urban LSOAs and, if possible, improve access to existing	Encourage physical activity in greenspace.	0	0	0	0	2

Naturalness 1, 2 & 3				Naturalness level 1		Interpretation	Primary proposed intervention	Secondary proposed intervention	Number of LSOAs				
Service area		Buffer intersection		Service area	Buffer intersection				Matrix				
ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha				1	2	3	4	5
						within a 300 m buffer of such sites.	sites.						
0% to 10%						<u>Accessibility to greenspace very low</u> Less than 10% of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home.	Create new accessible greenspace of at least 2 ha within LSOA.	Encourage physical activity in greenspace.	0	0	1	6	12
0% to 10%		>50%				<u>Accessibility to greenspace very low but greenspace present in vicinity</u> Less than 10% of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home <u>but</u> more than 50% are within a 300 m buffer of such sites.	Create accessible greenspace of at least 2 ha within LSOA and/or, if possible, improve access to existing sites.	Encourage physical activity in greenspace.	0	0	0	0	2
>10% to 50%						<u>Accessibility to greenspace low</u> Between >10% and 50% of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home (service area method).	Create new accessible greenspace of at least 2 ha within LSOA.	Encourage physical activity in greenspace.	0	0	0	1	7

Naturalness 1, 2 & 3				Naturalness level 1		Interpretation	Primary proposed intervention	Secondary proposed intervention	Number of LSOAs				
Service area		Buffer intersection		Service area	Buffer intersection				Matrix				
ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha				1	2	3	4	5
>10% to 50%		>50%				<u>Accessibility to greenspace low but greenspace present in vicinity</u> Between >10% and 50% of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home (service area method) <u>but</u> more than 50% are within a 300 m buffer of such sites.	Create accessible greenspace of at least 2 ha within LSOA and/or, if possible, improve access to existing sites.	Encourage physical activity in greenspace.	0	0	0	4	27
>50% to 90%						<u>Accessibility to greenspace relatively high</u> Between >50% and 90% of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home.	Encourage physical activity in greenspace.	Create more accessible greenspace of at least 2 ha within LSOA.	0	0	1	2	4

## Appendix A: Sevenoaks District buffer intersection results

Comparisons were made of the results obtained for populations meeting accessibility standards for naturalness level 1, 2 & 3 and naturalness level 1 greenspace (Table A1).

**Table A1: Percentage of population in the District of Sevenoaks meeting accessibility standards using the buffer intersection method.**

<b>Greenspace accessibility criteria</b>	<b>Naturalness levels 1, 2 &amp; 3</b>	<b>Naturalness level 1</b>
ANGSt		
At least 1 site >2 ha within 300 m	54%	39%
At least 1 site >20 ha within 2 km	98%	94%
At least 1 site >100 ha within 5 km	95%	93%
At least 1 site >500 ha within 10 km	38%	38%
DDC standard		
At least 1 site >0.4 ha within 300 m in urban areas or at least 1 site >2 ha within 1 km in rural areas	91%	73%

## Appendix B: Sevenoaks District allocation results

Comparisons were made of the results obtained for populations meeting ANGSt for naturalness level 1, 2 & 3 and naturalness level 1 greenspace (Table B2).

**Table B2: Percentage of population in the District of Sevenoaks meeting accessibility standards using the allocation method.**

<b>Greenspace accessibility criteria</b>	<b>Naturalness levels 1, 2 &amp; 3</b>	<b>Naturalness level 1</b>
ANGSt		
At least 1 site >2 ha within 300 m	41%	29%
At least 1 site >20 ha within 2 km	98%	94%
At least 1 site >100 ha within 5 km	95%	91%
At least 1 site >500 ha within 10 km	38%	38%

## Appendix C: Population across Kent meeting accessibility standards

Kent data using the service area method (Table C1) provided for comparison with Sevenoaks district data.

**Table C1: Percentage of population in Kent meeting accessibility standards using the service area method.**

Greenspace accessibility criteria	Naturalness levels 1, 2 & 3	Naturalness level 1
ANGSt		
At least 1 site >2 ha within 300 m	34% (Figures 9 & 10)	15%
At least 1 site >20 ha within 2 km	72% (Figures 11 & 12)	64%
At least 1 site >100 ha within 5 km	85% (Figures 13 & 14)	79%
At least 1 site >500 ha within 10 km	46% (Figures 15 & 16)	44%
DDC standard		
At least 1 site >0.4 ha within 300 m in urban areas or at least 1 site >2 ha within 1 km in rural areas	56% (Figures 17 & 18)	27%



## **Appendix D: Sevenoaks District prioritisation matrices 1, 2, 3, 4 & 5**

**Sevenoaks District Matrix 1: More than 80% of the population with prevalence for physical inactivity – 0 LSOAs.**

**Sevenoaks District Matrix 2: More than 60% and less than or equal to 80% of the population with prevalence for physical inactivity – 0 LSOAs.**

**Sevenoaks District Matrix 3: More than 40% and less than or equal to 60% of the population with prevalence for physical inactivity – 3 LSOAs.**

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
E01024481	Sevenoaks 002E	Swanley White Oak	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban major conurbation	3	5%	31%	22%	78%	0%	0%
E01024429	Sevenoaks 014E	Edenbridge South and West	West Kent CCG	Sevenoaks	Rural town and fringe	4	60%	100%	87%	100%	30%	36%
E01024478	Sevenoaks 002C	Swanley St Mary's	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban major conurbation	5	0%	5%	0%	61%	0%	0%

**Sevenoaks District Matrix 4: More than 20% and less than or equal to 40% of the population with prevalence for physical inactivity – 13 LSOAs.**

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
E01024477	Sevenoaks 002B	Swanley St Mary's	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban major conurbation	1	0%	51%	22%	94%	0%	0%
E01024482	Sevenoaks 002F	Swanley White Oak	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban major conurbation	2	0%	50%	3%	82%	0%	3%
E01024480	Sevenoaks 002D	Swanley White Oak	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban major conurbation	2	17%	42%	31%	75%	17%	26%
E01024427	Sevenoaks 014C	Edenbridge North and East	West Kent CCG	Sevenoaks	Rural town and fringe	4	0%	28%	3%	100%	0%	3%
E01024447	Sevenoaks 001C	Hextable	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban major conurbation	6	0%	17%	20%	60%	0%	9%
E01024428	Sevenoaks 014D	Edenbridge South and West	West Kent CCG	Sevenoaks	Rural town and fringe	6	48%	91%	84%	100%	0%	0%
E01024436	Sevenoaks 007B	Fawkham and West Kingsdown	Dartford, Gravesham & Swanley CCG	Sevenoaks	Rural town and fringe	6	51%	81%	93%	100%	51%	91%
E01024460	Sevenoaks 010B	Sevenoaks Eastern	West Kent CCG	Sevenoaks	Urban city and town	6	52%	55%	100%	100%	52%	89%
E01024475	Sevenoaks 003D	Swanley Christchurch and	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban major conurbation	8	0%	38%	43%	100%	0%	0%

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
		Swanley Village										
E01024418	Sevenoaks 011B	Brasted, Chevening and Sundridge	West Kent CCG	Sevenoaks	Urban city and town	10	0%	36%	0%	89%	0%	0%
E01024441	Sevenoaks 004A	Hartley and Hodsoll Street	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban city and town	10	26%	32%	71%	71%	9%	47%
E01024443	Sevenoaks 004C	Hartley and Hodsoll Street	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban city and town	10	29%	29%	66%	70%	29%	66%
E01024467	Sevenoaks 011F	Sevenoaks Northern	West Kent CCG	Sevenoaks	Urban city and town	10	41%	89%	57%	97%	6%	32%

**Sevenoaks District Matrix 5: 0% to 20% of the population with prevalence for physical inactivity – 58 LSOAs.**

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
E01024476	Sevenoaks 002A	Swanley St Mary's	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban major conurbation	2	20%	82%	35%	100%	0%	0%
E01024444	Sevenoaks 004D	Hartley and Hodsoll Street	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban city and town	4	67%	67%	100%	100%	13%	51%
E01024485	Sevenoaks 013E	Westerham and Crockham Hill	West Kent CCG	Sevenoaks	Rural town and fringe	5	0%	8%	0%	100%	0%	0%
E01024413	Sevenoaks 016A	Ash and New Ash Green	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban city and town	5	46%	73%	100%	100%	21%	94%
E01024432	Sevenoaks 005B	Farningham, Horton Kirby and South Darenth	Dartford, Gravesham & Swanley CCG	Sevenoaks	Rural village and dispersed	6	4%	31%	15%	83%	4%	15%
E01024452	Sevenoaks 008E	Otford and Shoreham	West Kent CCG	Sevenoaks	Rural village and dispersed	6	4%	55%	29%	100%	4%	28%
E01024457	Sevenoaks 010A	Seal and Weald	West Kent CCG	Sevenoaks	Urban city and town	6	5%	5%	19%	55%	5%	19%
E01024456	Sevenoaks 015D	Penshurst, Fordcombe and Chiddingstone	West Kent CCG	Sevenoaks	Rural village and dispersed	6	12%	19%	32%	100%	4%	19%
E01024472	Sevenoaks	Swanley	Dartford, Gravesham	Sevenoaks	Urban major	6	12%	53%	38%	91%	0%	3%

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
	001D	Christchurch and Swanley Village	& Swanley CCG		conurbation							
E01024420	Sevenoaks 015A	Cowden and Hever	West Kent CCG	Sevenoaks	Rural village and dispersed	6	14%	25%	64%	100%	11%	59%
E01024421	Sevenoaks 003A	Crockenhill and Well Hill	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban city and town	6	17%	50%	60%	71%	4%	15%
E01024455	Sevenoaks 015C	Penshurst, Fordcombe and Chiddingstone	West Kent CCG	Sevenoaks	Rural village and dispersed	6	23%	44%	66%	100%	17%	61%
E01024425	Sevenoaks 014A	Edenbridge North and East	West Kent CCG	Sevenoaks	Rural town and fringe	6	31%	100%	75%	100%	18%	47%
E01024417	Sevenoaks 013A	Brasted, Chevening and Sundridge	West Kent CCG	Sevenoaks	Rural village and dispersed	7	0%	2%	2%	70%	0%	2%
E01024465	Sevenoaks 010D	Sevenoaks Northern	West Kent CCG	Sevenoaks	Urban city and town	7	0%	2%	98%	100%	0%	98%
E01024433	Sevenoaks 005C	Farningham, Horton Kirby and South Darenth	Dartford, Gravesham & Swanley CCG	Sevenoaks	Rural village and dispersed	7	0%	14%	11%	100%	0%	8%
E01032619	Sevenoaks 016D	Ash and New Ash Green	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban city and town	7	5%	65%	38%	90%	5%	34%
E01024422	Sevenoaks	Dunton Green and	West Kent CCG	Sevenoaks	Urban city and	7	13%	17%	83%	96%	13%	83%



LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
	008A	Riverhead			town							
E01024459	Sevenoaks 012B	Seal and Weald	West Kent CCG	Sevenoaks	Rural village and dispersed	7	13%	35%	84%	100%	13%	84%
E01024479	Sevenoaks 001E	Swanley White Oak	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban major conurbation	7	16%	42%	76%	91%	16%	76%
E01024466	Sevenoaks 010E	Sevenoaks Northern	West Kent CCG	Sevenoaks	Urban city and town	7	26%	44%	79%	100%	26%	79%
E01024439	Sevenoaks 008C	Halstead, Knockholt and Badgers Mount	West Kent CCG	Sevenoaks	Rural village and dispersed	7	33%	77%	71%	100%	32%	71%
E01024435	Sevenoaks 007A	Fawkham and West Kingsdown	Dartford, Gravesham & Swanley CCG	Sevenoaks	Rural town and fringe	7	38%	60%	97%	100%	38%	97%
E01024430	Sevenoaks 014F	Edenbridge South and West	West Kent CCG	Sevenoaks	Rural town and fringe	7	44%	81%	81%	100%	44%	80%
E01024437	Sevenoaks 007C	Fawkham and West Kingsdown	Dartford, Gravesham & Swanley CCG	Sevenoaks	Rural town and fringe	7	55%	57%	91%	100%	52%	91%
E01024434	Sevenoaks 005D	Farningham, Horton Kirby and South Darenth	Dartford, Gravesham & Swanley CCG	Sevenoaks	Rural town and fringe	8	0%	34%	51%	97%	0%	51%
E01024448	Sevenoaks 009A	Kemsing	West Kent CCG	Sevenoaks	Rural town and fringe	8	0%	77%	9%	100%	0%	9%
E01024451	Sevenoaks	Leigh and	West Kent CCG	Sevenoaks	Rural village and	8	20%	46%	68%	100%	18%	68%

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
	015B	Chiddingstone Causeway			dispersed							
E01024419	Sevenoaks 013B	Brasted, Chevening and Sundridge	West Kent CCG	Sevenoaks	Rural village and dispersed	8	24%	31%	68%	100%	24%	68%
E01024414	Sevenoaks 016B	Ash and New Ash Green	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban city and town	8	39%	62%	85%	97%	0%	19%
E01024446	Sevenoaks 001B	Hextable	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban major conurbation	9	0%	29%	42%	92%	0%	42%
E01024445	Sevenoaks 001A	Hextable	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban major conurbation	9	1%	62%	46%	100%	0%	9%
E01024431	Sevenoaks 005A	Eynsford	Dartford, Gravesham & Swanley CCG	Sevenoaks	Rural town and fringe	9	6%	16%	27%	100%	6%	27%
E01024454	Sevenoaks 009E	Otford and Shoreham	West Kent CCG	Sevenoaks	Rural town and fringe	9	10%	60%	12%	100%	2%	8%
E01024442	Sevenoaks 004B	Hartley and Hodsoll Street	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban city and town	9	13%	13%	69%	79%	13%	69%
E01024416	Sevenoaks 011A	Brasted, Chevening and Sundridge	West Kent CCG	Sevenoaks	Urban city and town	9	16%	42%	29%	56%	16%	29%
E01024440	Sevenoaks 008D	Halstead, Knockholt and	West Kent CCG	Sevenoaks	Rural village and dispersed	9	20%	51%	50%	100%	18%	47%

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
		Badgers Mount										
E01024438	Sevenoaks 007D	Fawkham and West Kingsdown	Dartford, Gravesham & Swanley CCG	Sevenoaks	Rural town and fringe	9	20%	96%	72%	100%	20%	69%
E01024458	Sevenoaks 012A	Seal and Weald	West Kent CCG	Sevenoaks	Urban city and town	9	22%	22%	55%	59%	22%	50%
E01024450	Sevenoaks 009C	Kemsing	West Kent CCG	Sevenoaks	Rural town and fringe	9	23%	93%	36%	100%	22%	32%
E01024484	Sevenoaks 013D	Westerham and Crockham Hill	West Kent CCG	Sevenoaks	Rural village and dispersed	9	28%	53%	65%	100%	24%	59%
E01024473	Sevenoaks 003B	Swanley Christchurch and Swanley Village	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban major conurbation	9	38%	60%	81%	100%	0%	0%
E01024462	Sevenoaks 012C	Sevenoaks Kippington	West Kent CCG	Sevenoaks	Urban city and town	9	44%	60%	97%	100%	34%	95%
E01024415	Sevenoaks 016C	Ash and New Ash Green	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban city and town	9	59%	68%	100%	100%	59%	100%
E01024468	Sevenoaks 010F	Sevenoaks Town and St John's	West Kent CCG	Sevenoaks	Urban city and town	10	0%	0%	66%	66%	0%	27%
E01024426	Sevenoaks 014B	Edenbridge North and East	West Kent CCG	Sevenoaks	Rural town and fringe	10	0%	1%	1%	46%	0%	1%
E01024469	Sevenoaks 012D	Sevenoaks Town and St John's	West Kent CCG	Sevenoaks	Urban city and town	10	0%	15%	16%	70%	0%	0%

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
E01024470	Sevenoaks 012E	Sevenoaks Town and St John's	West Kent CCG	Sevenoaks	Urban city and town	10	0%	22%	0%	69%	0%	0%
E01024483	Sevenoaks 013C	Westerham and Crockham Hill	West Kent CCG	Sevenoaks	Rural town and fringe	10	6%	61%	18%	100%	6%	18%
E01024471	Sevenoaks 012F	Sevenoaks Town and St John's	West Kent CCG	Sevenoaks	Urban city and town	10	9%	55%	76%	95%	5%	52%
E01024423	Sevenoaks 008B	Dunton Green and Riverhead	West Kent CCG	Sevenoaks	Urban city and town	10	11%	79%	29%	100%	0%	8%
E01024463	Sevenoaks 011D	Sevenoaks Kippington	West Kent CCG	Sevenoaks	Urban city and town	10	15%	55%	72%	100%	12%	44%
E01024464	Sevenoaks 011E	Sevenoaks Kippington	West Kent CCG	Sevenoaks	Urban city and town	10	20%	47%	73%	88%	9%	41%
E01024461	Sevenoaks 010C	Sevenoaks Eastern	West Kent CCG	Sevenoaks	Urban city and town	10	33%	57%	81%	98%	6%	13%
E01024424	Sevenoaks 011C	Dunton Green and Riverhead	West Kent CCG	Sevenoaks	Urban city and town	10	36%	44%	93%	100%	0%	17%
E01024474	Sevenoaks 003C	Swanley Christchurch and Swanley Village	Dartford, Gravesham & Swanley CCG	Sevenoaks	Urban major conurbation	10	43%	62%	90%	100%	0%	0%
E01024449	Sevenoaks 009B	Kemsing	West Kent CCG	Sevenoaks	Rural town and fringe	10	48%	89%	71%	100%	48%	71%

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
E01024453	Sevenoaks 009D	Otford and Shoreham	West Kent CCG	Sevenoaks	Rural village and dispersed	10	57%	75%	96%	100%	44%	85%