



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



Report for Swale Borough Council

20 May 2016







Imperial College London Consultants

#### Report to:

Kent Nature Partnership Health & Nature Subgroup

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#### **Report for Swale Borough Council**

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#### 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 Borough of Swale. 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

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

<sup>&</sup>lt;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'5:

#### 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

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

<sup>&</sup>lt;sup>5</sup> Ibid

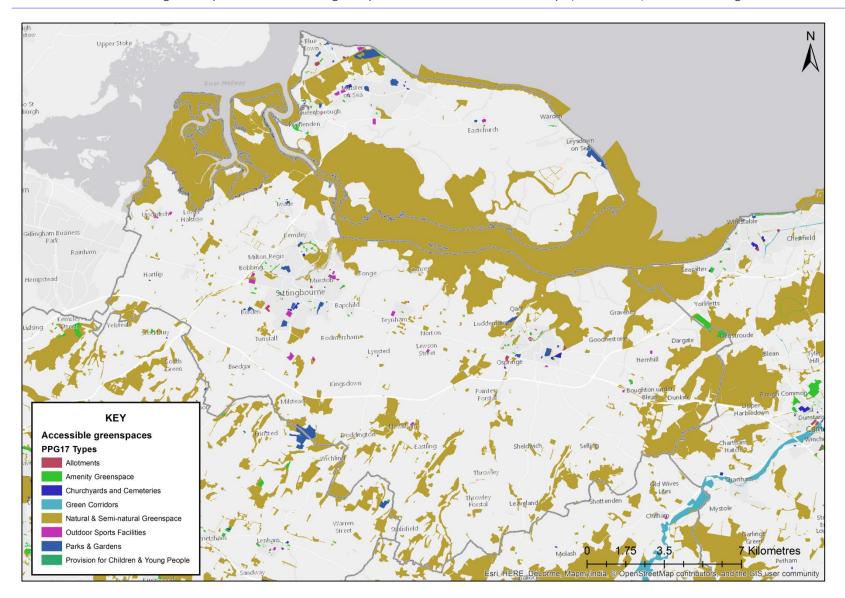


Figure 1: Greenspace in Swale Borough mapped according to PPG17 typologies.

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.

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

<sup>&</sup>lt;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.

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

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

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

# 3. Results covering the Borough of Swale

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 (Swale Borough Council Report Appendix A) and allocation methods (Swale Borough 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 (Table 1) using the service area method. These data can be compared with the Kent figures (Swale Borough Council Report Appendix C).

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Table 1: Percentage of population in Swale Borough meeting accessibility standards.

Greenspace accessibility criteria	Naturalness levels 1, 2 & 3	Naturalness level 1
ANGSt		
At least 1 site >2 ha within 300 m	32% (Figure 2)	8%
At least 1 site >20 ha within 2 km	58% (Figure 3)	45%
At least 1 site >100 ha within 5 km	87% (Figure 4)	83%
At least 1 site >500 ha within 10 km	68% (Figure 5)	68%
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	52% (Figures 6 & 7)	15%

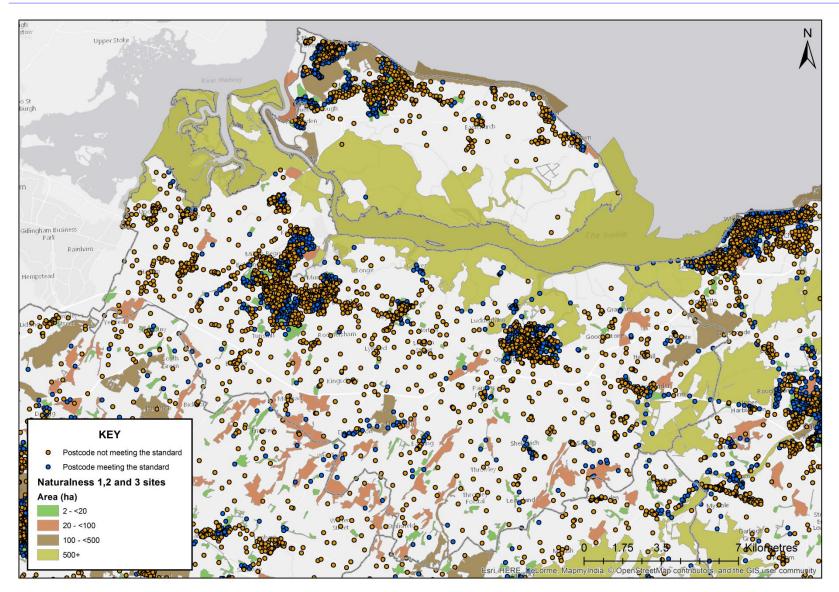


Figure 2: Swale Borough postcodes meeting and not meeting ANGSt for naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m.

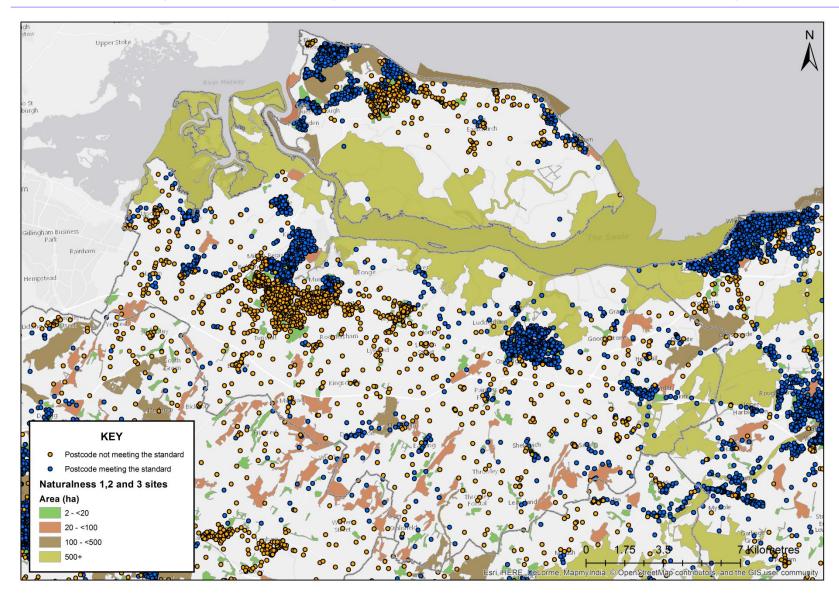


Figure 3: Swale Borough postcodes meeting and not meeting ANGSt for naturalness level 1, 2 & 3 greenspace of at least 20 ha within 2 km.

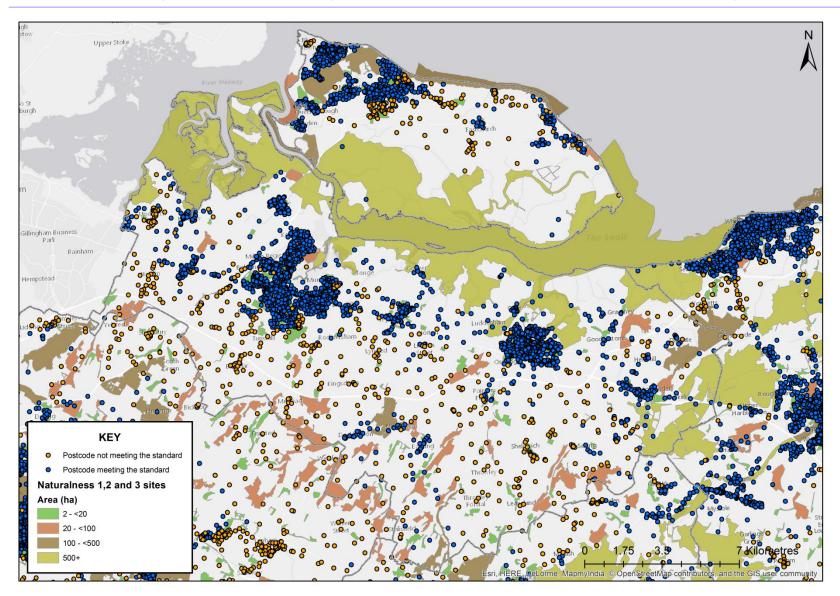


Figure 4: Swale Borough postcodes meeting and not meeting ANGSt for naturalness level 1, 2 & 3 greenspace of at least 100 ha within 5 km.

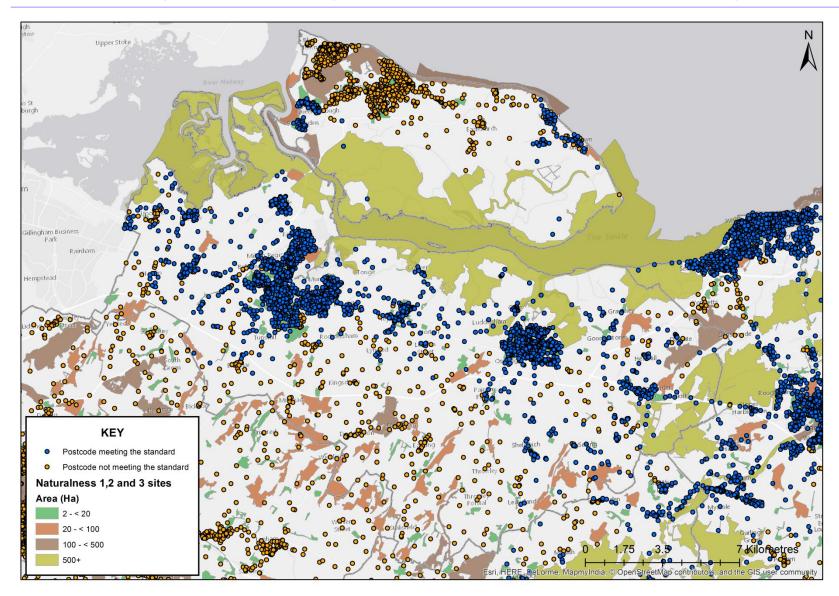


Figure 5: Swale Borough postcodes meeting and not meeting ANGSt for naturalness level 1, 2 & 3 greenspace of at least 500 ha within 10 km.

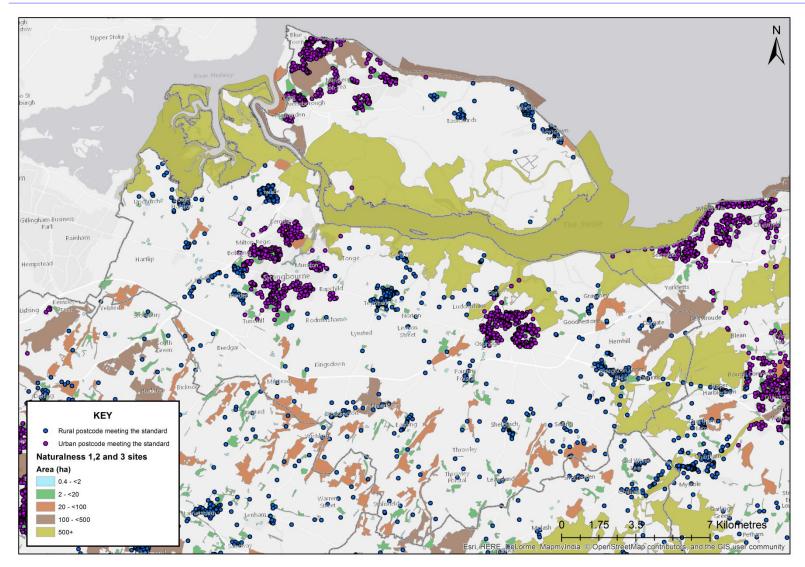


Figure 6: Swale Borough postcodes meeting the DDC standard for naturalness level 1, 2 & 3 greenspace of at least 0.4 ha within 300 m in urban areas or at least 2 ha within 1 km in rural areas.

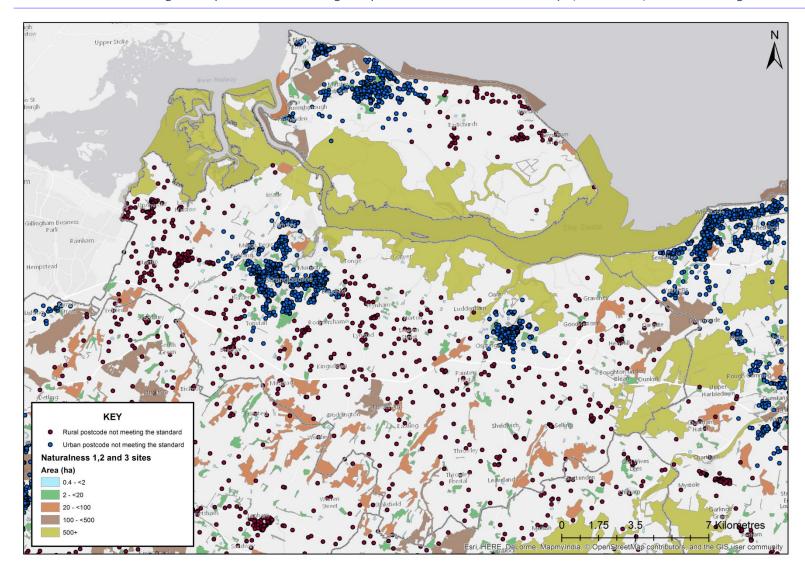


Figure 7: Swale Borough postcodes <u>not</u> meeting the DDC standard for naturalness level 1, 2 & 3 greenspace of at least 0.4 ha within 300 m in urban areas or at least 2 ha within 1 km in rural areas.

### 3.2 Populations which are physically inactive

The Experian Mosaic data used in this study also shows that 32% (based on 2013 population estimates) of the population across Swale Borough 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 Swale Borough Council Report Appendix D).

Table 2: Physically inactive priority groupings and reference to matrices for Swale Borough.

Priority	Population grouping	Number of LSOAs	Matrix
Physically inactive priority 1	>80% population physically inactive	6	Matrix 1
Physically inactive priority 2	>60% to 80% of the population physically inactive	6	Matrix 2
Physically inactive priority 3	>40% to 60% of the population physically inactive	17	Matrix 3
Physically inactive priority 4	>20% to 40% of the population physically inactive	23	Matrix 4
Physically inactive priority 5	0% to 20% of the population physically inactive	33	Matrix 5

Measures have been proposed for increasing opportunities for physical activity in greenspace across Swale Borough, 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 Swale Borough 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.

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

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>&</sup>lt;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

- Nearly half (48%) 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 a 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.

<sup>&</sup>lt;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 Swale Borough to which the interpretation and measures apply).

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

	Naturalnes	ss 1, 2 & 3		Naturalne	ess level 1				N	umb	er of	LSO	As
Servic	ce area	Buffer in	tersection	Service area	Buffer intersection		Primary	Secondary				x	
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	within	ANGSt: % population within 300 m of >2 ha	Interpretation	proposed intervention	proposed intervention	1	2	3	4	5
						within a 300 m buffer of such sites.	sites.						
0% to 10%						Accessibility to greenspace very low  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	1	1	5	7
0% to 10%		>50%				Accessibility to greenspace very low but greenspace present in vicinity 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 but 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.	greenspace.	0	0	0	4	1
>10% to 50%						Accessibility to greenspace low 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).	greenspace of	Encourage physical activity in greenspace.	0	1	2	3	6

	Naturalnes	ss 1, 2 & 3		Naturaln	ess level 1				N	umb	er of	LSO	As
Servic	e area	Buffer in	tersection	Service area	Buffer intersection ANGSt: %	Primary Secondary Mate						ĸ	
population within 300 m of			population within urban-rural	population within		Interpretation		intervention	1	2	3	4	5
>2 ha	standard	>2 ha	standard	>2 ha	>2 ha								
>10% to 50%		>50%				a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from	,	Encourage physical activity in greenspace.	4	2	7	3	9
>50% to 90%						a naturalness level 1, 2 & 3 greenspace of at	1	Create more accessible greenspace of at least 2 ha within LSOA.	2	1	6	4	9
>90%						Accessibility to greenspace very high Over 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.		0	0	0	1	0

# Appendix A: Swale Borough 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 Swale Borough meeting accessibility standards using the buffer intersection method.

Greenspace accessibility criteria	Naturalness levels 1, 2 & 3	Naturalness level 1
ANGSt		
At least 1 site >2 ha within 300 m	62%	21%
At least 1 site >20 ha within 2 km	93%	80%
At least 1 site >100 ha within 5 km	100%	100%
At least 1 site >500 ha within 10 km	100%	100%
DDC standard		
At least 1 site >0.4 ha within 300 m in		
urban areas or at least 1 site >2 ha	83%	38%
within 1 km in rural areas		

## **Appendix B: Swale Borough 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 Swale Borough meeting accessibility standards using the allocation method.

Greenspace accessibility criteria	Naturalness levels 1, 2 & 3	Naturalness level 1
ANGSt		
At least 1 site >2 ha within 300 m	54%	16%
At least 1 site >20 ha within 2 km	90%	77%
At least 1 site >100 ha within 5 km	100%	99%
At least 1 site >500 ha within 10 km	100%	100

# Appendix C: Population across Kent meeting accessibility standards

Kent data using the service area method (Table C1) provided for comparison with Swale Borough 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: Swale Borough prioritisation matrices 1, 2, 3, 4 & 5

Swale Borough Matrix 1: More than 80% of the population with prevalence for physically inactivity – 6 LSOA.

								Naturalnes	ss 1, 2 & 3		Naturalne	ess level 1
							Service area		Buffer int	tersection	Service area	Buffer intersection
	Kent LSOA name	Ward name	ccg	Local Authority	Rural-Urban	IMD decile	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
E01024584	Swale 010B	Milton Regis	Swale CCG	Swale	Urban city and town	1	39%	39%	81%	81%	0%	0%
E01024563	Swale 015D	Davington Priory	Canterbury & Coastal CCG	Swale	Urban city and town	1	44%	65%	99%	100%	3%	31%
E01024615	Swale 002C	Sheerness West	Swale CCG	Swale	Urban city and town	1	49%	72%	96%	100%	38%	93%
E01024616	Swale 002D	Sheerness West	Swale CCG	Swale	Urban city and town	1	49%	80%	93%	100%	72%	75%
E01024614	Swale 002B	Sheerness West	Swale CCG	Swale	Urban city and town	1	62%	69%	62%	100%	0%	10%
E01024597	Swale 005C	Queenborough and Halfway	Swale CCG	Swale	Urban city and town	1	79%	93%	100%	100%	15%	49%

Swale Borough Matrix 2: More than 60% and less than or equal to 80% of the population with prevalence for physical inactivity – 6 LSOAs.

								Naturalnes	ss 1, 2 & 3		Naturalne	ess level 1
		Ward name	ccg				Service area		Buffer intersection		Service area	Buffer intersection
LSOA reference	Kent LSOA name			Local Authority	Rural-Urban	IMD decile	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
E01024621	Swale 004E	Sheppey Central	Swale CCG	Swale	Urban city and town	1	0%	0%	0%	3%	0%	0%
E01024590	Swale 010C	Murston	Swale CCG	Swale	Urban city and town	1	8%	8%	39%	45%	0%	0%
E01024580	Swale 006A	Leysdown and Warden	Swale CCG	Swale	Rural village and dispersed	1	13%	55%	30%	68%	0%	2%
E01024627	Swale 014F	Watling	Canterbury & Coastal CCG	Swale	Urban city and town	1	35%	87%	90%	100%	0%	32%
E01024600	Swale 011D	Roman	Swale CCG	Swale	Urban city and town	2	38%	38%	71%	71%	0%	0%
E01024552	Swale 015B	Abbey	Canterbury & Coastal CCG	Swale	Urban city and town	2	71%	87%	98%	100%	7%	30%

Swale Borough Matrix 3: More than 40% and less than or equal to 60% of the population with prevalence for physical inactivity – 17 LSOAs.

								Naturalnes	ss 1, 2 & 3		Naturalne	ess level 1
							Servic	e area	Buffer int	tersection	Service area	Buffer intersection
	Kent LSOA name	Ward name	ccg	Local Authority	Rural-Urban	IMD decile	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
E01024613	Swale 002A	Sheerness West	Swale CCG	Swale	Urban city and town	1	44%	60%	54%	80%	40%	50%
E01024604	Swale 014C	St Ann's	Canterbury & Coastal CCG	Swale	Urban city and town	2	53%	94%	100%	100%	53%	100%
E01024608	Swale 010E	St Michaels	Swale CCG	Swale	Urban city and town	3	9%	45%	19%	89%	0%	0%
E01024567	Swale 009C	Grove	Swale CCG	Swale	Urban city and town	3	21%	60%	76%	94%	0%	6%
E01024583	Swale 007F	Milton Regis	Swale CCG	Swale	Urban city and town	3	32%	32%	55%	55%	0%	0%
E01024596	Swale 005B	Queenborough and Halfway	Swale CCG	Swale	Urban city and town	3	88%	100%	100%	100%	31%	74%
E01024560	Swale 012A	Chalkwell	Swale CCG	Swale	Urban city and town	4	11%	86%	29%	100%	0%	0%
E01024587	Swale 003B	Minster Cliffs	Swale CCG	Swale	Urban city and town	4	45%	44%	100%	100%	20%	85%
E01024582	Swale 009E	Milton Regis	Swale CCG	Swale	Urban city and town	4	89%	89%	100%	100%	0%	0%

								Naturalne	ss 1, 2 & 3		Naturalne	ess level 1
		Ward name	CCG	Local Authority			Service area		Buffer in	tersection	Service area	Buffer intersection
	Kent LSOA name				Rural-Urban	IMD decile	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
E01024595	Swale 004A	Queenborough and Halfway	Swale CCG	Swale	Urban city and town	5	37%	73%	46%	94%	0%	0%
E01024594	Swale 005A	Queenborough and Halfway	Swale CCG	Swale	Urban city and town	5	53%	53%	100%	100%	15%	41%
E01024598	Swale 004B	Queenborough and Halfway	Swale CCG	Swale	Urban city and town	5	60%	60%	97%	97%	2%	20%
E01024601	Swale 011E	Roman	Swale CCG	Swale	Urban city and town	5	60%	71%	93%	100%	0%	0%
E01024592	Swale 011B	Murston	Swale CCG	Swale	Urban city and town	7	0%	0%	18%	26%	0%	0%
E01024630	Swale 012D	Woodstock	Swale CCG	Swale	Urban city and town	7	29%	32%	60%	74%	0%	0%
E01024564	Swale 014A	Davington Priory	Canterbury & Coastal CCG	Swale	Urban city and town	8	42%	89%	94%	100%	42%	94%
E01024632	Swale 012E	Woodstock	Swale CCG	Swale	Urban city and town	10	37%	37%	93%	94%	0%	0%

Swale Borough Matrix 4: More than 20% and less than or equal to 40% of the population with prevalence for physical inactivity – 23 LSOAs.

								Naturalnes	ss 1, 2 & 3		Naturalne	ess level 1
			ccg	Local Authority	Rural-Urban		Service area		Buffer in	tersection	Service area	Buffer intersection
LSOA reference	Kent LSOA name	Ward name				IMD decile	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
E01024585	Swale 003A	Minster Cliffs	Swale CCG	Swale	Urban city and town	1	0%	0%	27%	27%	0%	14%
E01024618	Swale 006D	Sheppey Central	Swale CCG	Swale	Rural village and dispersed	1	5%	37%	59%	99%	1%	22%
E01024581	Swale 006B	Leysdown and Warden	Swale CCG	Swale	Rural town and fringe	1	40%	90%	80%	100%	35%	80%
E01024612	Swale 001D	Sheerness East	Swale CCG	Swale	Urban city and town	1	69%	69%	76%	90%	21%	73%
E01024559	Swale 010A	Chalkwell	Swale CCG	Swale	Urban city and town	2	0%	28%	0%	72%	0%	0%
E01024599	Swale 010D		Swale CCG	Swale	Urban city and town	2	3%	15%	64%	69%	0%	0%
E01024570	Swale 008A	Hartlip, Newington and Upchurch	Swale CCG	Swale	Rural village and dispersed	3	0%	0%	2%	33%	0%	2%
E01024620	Swale 005D	Sheppey Central	Swale CCG	Swale	Urban city and town	3	0%	13%	1%	32%	0%	1%
E01024586	Swale 006C	Minster Cliffs	Swale CCG	Swale	Urban city and town	3	5%	21%	35%	51%	5%	35%

					Rural-Urban			Naturalne	ss 1, 2 & 3		Naturalne	ess level 1
			ccg				Service area		Buffer in	tersection	Service area	Buffer intersection
LSOA reference	Kent LSOA name	Ward name		Local Authority		IMD decile	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
E01024591	Swale 011A	Murston	Swale CCG	Swale	Urban city and town	3	19%	19%	46%	62%	1%	1%
E01024622	Swale 016C	Teynham and Lynsted	Canterbury & Coastal CCG	Swale	Rural village and dispersed	3	54%	71%	70%	99%	54%	58%
E01024593	Swale 011C	Murston	Swale CCG	Swale	Urban city and town	3	99%	99%	100%	100%	0%	0%
E01024561	Swale 009B	Chalkwell	Swale CCG	Swale	Urban city and town	4	0%	0%	41%	41%	0%	0%
E01024562	Swale 012B	Chalkwell	Swale CCG	Swale	Urban city and town	4	0%	11%	9%	76%	0%	0%
E01024619	Swale 004D	Sheppey Central	Swale CCG	Swale	Urban city and town	4	12%	12%	41%	41%	0%	0%
E01024623	Swale 016D	Teynham and Lynsted	Swale CCG	Swale	Rural town and fringe	4	23%	100%	86%	100%	0%	0%
E01024589	Swale 003D	Minster Cliffs	Swale CCG	Swale	Urban city and town	5	8%	25%	87%	92%	0%	0%
E01032653	Swale 004F	Sheppey Central	Swale CCG	Swale	Urban city and town	5	28%	19%	58%	58%	0%	0%
E01024602	Swale 015E	St Ann's	Canterbury & Coastal CCG	Swale	Urban city and town	6	0%	20%	7%	50%	0%	0%
E01024553	Swale 015C	Abbey	Canterbury & Coastal CCG	Swale	Urban city and town	6	52%	61%	87%	91%	1%	10%

								Naturalne		Naturalness level 1		
LSOA reference							Service area		Buffer intersection		Service area	Buffer intersection
	Kent LSOA name	Ward name	ccg	Local Authority	thority Rural-Urban	IMD decile	ANGSt: % population within	DDC: % population within	ANGSt: % population within	DDC: % population within	ANGSt: % population within	ANGSt: % population within
								urban-rural		urban-rural		300 m of
							>2 ha	standard	>2 ha	standard	>2 ha	>2 ha
E01024569	Swale 012C	Grove	Swale CCG	Swale	Urban city and town	7	12%	12%	38%	46%	0%	23%
E01024625	Swale 015F	Watling	Canterbury & Coastal CCG	Swale	Urban city and town	8	6%	70%	62%	91%	0%	0%
E01024631	Swale 013E	Woodstock	Swale CCG	Swale	Urban city and town	10	65%	69%	94%	99%	12%	34%

#### Swale Borough Matrix 5: 0% to 20% of the population with prevalence for physical inactivity – 33 LSOAs.

								Naturalnes	ss 1, 2 & 3		Naturalne	ss level 1
			ccg	Local Authority	Rural-Urban		Service area		Buffer int	tersection	Service area	Buffer intersection
LSOA reference	Kent LSOA name	Ward name				IMD decile	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
E01024611	Swale 001C	Sheerness East	Swale CCG	Swale	Urban city and town	1	0%	25%	46%	88%	0%	28%
E01024609	Swale 001A	Sheerness East	Swale CCG	Swale	Urban city and town	1	0%	27%	0%	100%	0%	0%
E01024610	Swale 001B	Sheerness East	Swale CCG	Swale	Urban city and town	1	43%	85%	58%	100%	10%	37%
E01024624	Swale 016E	Teynham and Lynsted	Swale CCG	Swale	Rural town and fringe	4	8%	42%	51%	89%	0%	1%
E01024566	Swale 016B	East Downs	Canterbury & Coastal CCG	Swale	Rural village and dispersed	4	51%	71%	76%	99%	26%	50%
E01024579	Swale 007E	Kemsley	Swale CCG	Swale	Urban city and town	4	53%	53%	60%	60%	0%	0%
E01024588	Swale 003C	Minster Cliffs	Swale CCG	Swale	Urban city and town	5	14%	15%	97%	98%	0%	7%
E01024565	Swale 016A	East Downs	Canterbury & Coastal CCG	Swale	Rural village and dispersed	5	18%	49%	53%	99%	16%	51%
E01024577	Swale 007C	Kemsley	Swale CCG	Swale	Urban city and town	5	27%	27%	41%	58%	0%	0%
E01024551	Swale 015A	Abbey	Canterbury & Coastal	Swale	Urban city and	5	73%	74%	97%	98%	0%	3%

					Rural-Urban			Naturalnes	ss 1, 2 & 3		Naturalne	ess level 1
			ccg				Service area		Buffer in	tersection	Service area	Buffer intersection
	Kent LSOA name	Ward name		Local Authority		IMD decile	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
			CCG		town							
E01032654	Swale 004G	11.7		Swale	Urban city and town	5	90%	90%	98%	98%	0%	0%
E01024571	Swale 008B	Hartlip, Newington and Upchurch	Swale CCG	Swale	Rural town and fringe	6	2%	18%	7%	96%	2%	7%
E01024628	Swale 013C	West Downs	Swale CCG	Swale	Rural village and dispersed	6	5%	15%	31%	93%	2%	19%
E01024556	Swale 017B	Boughton and Courtenay	Canterbury & Coastal CCG	Swale	Rural village and dispersed	6	13%	40%	49%	100%	8%	45%
E01024568	Swale 009D	Grove	Swale CCG	Swale	Urban city and town	6	13%	58%	52%	88%	10%	28%
E01024557	Swale 017C	_	Canterbury & Coastal CCG	Swale	Rural town and fringe	6	19%	100%	50%	100%	0%	22%
E01024555	Swale 017A	Boughton and Courtenay	Canterbury & Coastal CCG	Swale	Rural village and dispersed	6	27%	49%	47%	95%	19%	35%
E01024606			Swale CCG	Swale	Urban city and town	6	71%	71%	94%	100%	0%	0%
E01024573		Hartlip, Newington and Upchurch		Swale	Rural town and fringe	7	0%	12%	22%	100%	0%	3%
E01024572	Swale 008C	Hartlip, Newington and Upchurch	Swale CCG	Swale	Rural village and dispersed	7	2%	11%	44%	87%	2%	40%
E01032656	Swale 007H	Iwade and Lower	Swale CCG	Swale	Rural town and	7	12%	99%	25%	100%	0%	0%

								Naturalnes	ss 1, 2 & 3		Naturalne	ess level 1
							Service area		Buffer in	tersection	Service area	Buffer intersection
	Kent LSOA name	Ward name	ccg	Local Authority	Rural-Urban	IMD decile	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
		Halstow			fringe							
E01032737	Swale 013G	St Michaels	Swale CCG	Swale	Urban city and town	7	25%	25%	66%	66%	5%	31%
E01024558	Swale 017D	Boughton and Courtenay	Canterbury & Coastal CCG	Swale	Rural village and dispersed	7	37%	80%	81%	98%	37%	81%
E01024554	Swale 009A	Borden	Swale CCG	Swale	Rural village and dispersed	7	55%	83%	83%	100%	12%	32%
E01024576	Swale 007B	Kemsley	Swale CCG	Swale	Urban city and town	7	59%	78%	100%	100%	0%	0%
E01024578	Swale 007D	Kemsley	Swale CCG	Swale	Urban city and town	7	87%	100%	100%	100%	0%	0%
E01024575	Swale 008E	Iwade and Lower Halstow	Swale CCG	Swale	Rural village and dispersed	8	14%	79%	61%	100%	14%	61%
E01024603	Swale 014B	St Ann's	Canterbury & Coastal CCG	Swale	Urban city and town	8	17%	22%	67%	74%	0%	13%
E01024605	Swale 014D	St Ann's	Canterbury & Coastal CCG	Swale	Urban city and town	8	60%	84%	80%	98%	60%	80%
E01032735	Swale 013F	St Michaels	Swale CCG	Swale	Urban city and town	9	9%	9%	64%	64%	5%	64%
E01024626	Swale 014E	Watling	Canterbury & Coastal CCG	Swale	Urban city and town	9	15%	19%	33%	44%	0%	0%
E01024629	Swale 013D	West Downs	Swale CCG	Swale	Urban city and	10	0%	38%	0%	68%	0%	0%

								Naturalne:		Naturalness level 1		
LSOA reference						Service area		Buffer intersection		Service area	Buffer intersection	
	Kent LSOA name	Ward name CCG I	ccg	Local Authority	Rural-Urban	IMD decile	ANGSt: % population	DDC: % population	ANGSt: % population	DDC: % population	ANGSt: % population	ANGSt: % population
						within 300 m of	within urban-rural	within	within urban-rural	within 300 m of	within 300 m of	
							>2 ha	standard	>2 ha	standard	>2 ha	>2 ha
					town							
E0103265	Swale 007G	Iwade and Lower Halstow	Swale CCG	Swale	Rural town and fringe	10	25%	99%	65%	100%	1%	2%