

South East – Mineral Planning Authorities

Soft Sand Position Statement

1 Introduction

- 1.1 Section 110 of the Localism Act sets out a “duty to cooperate” in relation to planning of sustainable development, under which planning authorities are required to engage constructively, actively, and on an ongoing basis in any process where there are significant cross-boundary issues or impacts. This includes the preparation of development plan documents so far as relating to “strategic matters”, such as the supply of minerals. The Duty to Cooperate therefore applies to the preparation of minerals local plans.
- 1.2 The purpose of this Position Statement is to provide an agreed source of evidence and current policy on the issue of soft sand supply in the South East. The Position Statement underpins effective cooperation and collaboration between the Minerals Planning Authorities of the South East of England in addressing the strategic cross-boundary matter of soft sand supply. It is, however, not intended to be legally binding or to create legal rights.
- 1.3 The Position Statement is intended to form the basis of any Statements of Common Ground (SoCG) to be produced by the parties and agreed by the different Mineral Planning Authorities. Any SoCGs between individual Mineral Planning Authorities will consider, in more detail, the implications of evidence provided in this Position Statement and seek to address issues on soft sand supply, and its coordination between those areas.
- 1.4 The Position Statement as a statement of fact has been agreed by Officers. SoCGs will, dependent on content, be agreed at either officer or Council Member level.
- 1.5 The Minerals Planning Authorities of the South East of England comprise the following authorities:

Bracknell Forest Council
Brighton & Hove City Council
Buckinghamshire County Council
East Sussex County Council
Hampshire County Council
Isle of Wight Council

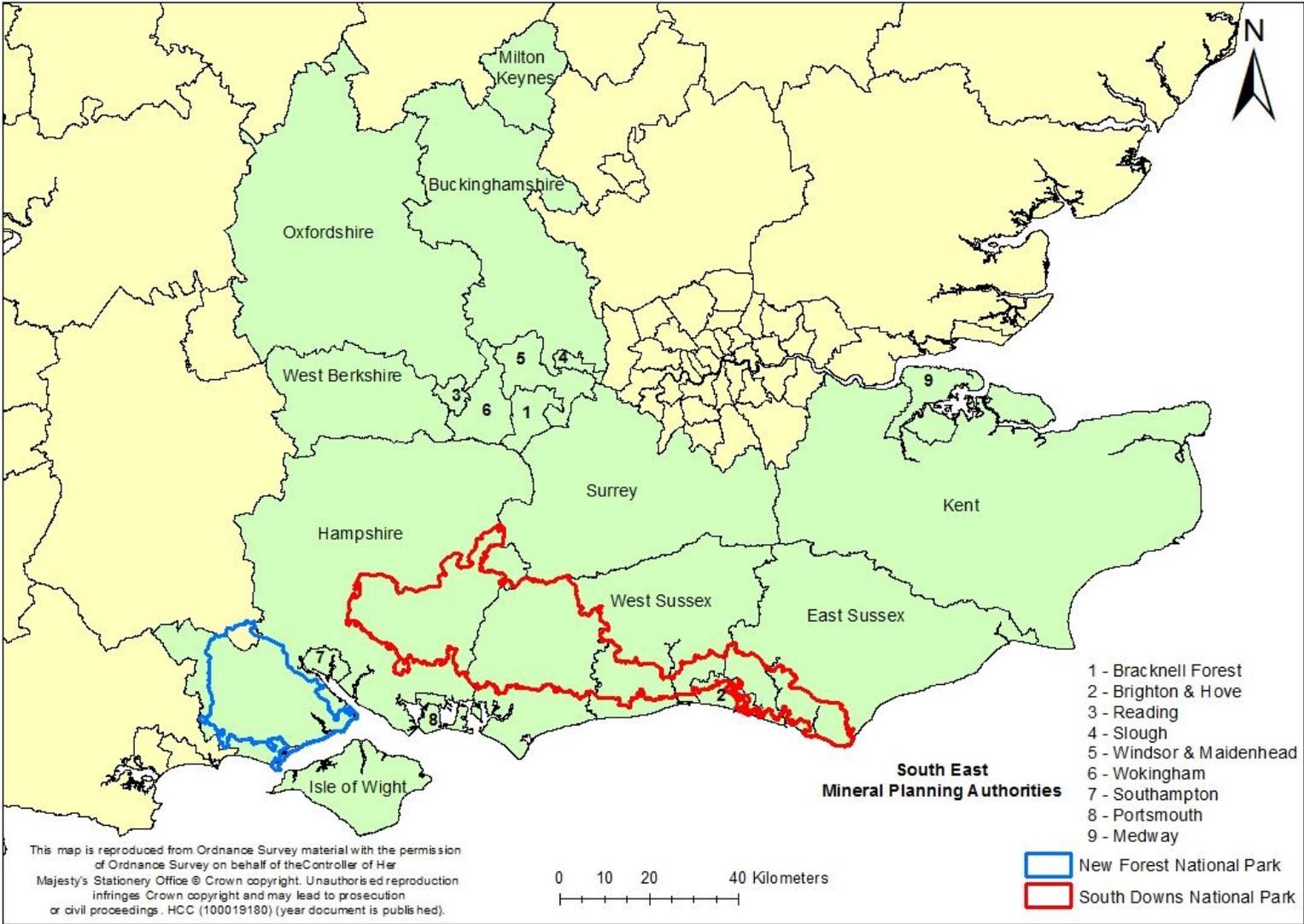
Kent County Council
Medway Council
Milton Keynes Council
New Forest National Park Authority
Oxfordshire County Council
Portsmouth City Council
Reading Borough Council
Royal Borough of Windsor and Maidenhead
Slough Borough Council
South Downs National Park Authority
Southampton City Council
Surrey County Council
West Berkshire Council
West Sussex County Council
Wokingham Borough Council

- 1.6 These authorities are all members of the South East England Aggregate Working Party (SEEAWP) and each is responsible for planning for the supply of minerals in their areas, through the preparation of minerals local plans. Figure 1 shows the location of each of the above authorities within the South East.
- 1.7 A minerals local plan can cover the area of a single Mineral Planning Authority or a larger area administered by more than one Mineral Planning Authority where they decide to act together to prepare joint plans. The following Mineral Planning Authorities have prepared or are preparing Joint Plans:
- Bracknell Forest, Reading, Windsor & Maidenhead and Wokingham;
 - Brighton & Hove, East Sussex and South Downs National Park;
 - Hampshire, Portsmouth, Southampton, New Forest National Park and South Downs National Park;
 - West Sussex and South Downs National Park.
- 1.8 Land-won soft sand in south east England is an important aggregate mineral that, for certain end uses, cannot be easily substituted by other materials (artificial substitutes are not apparently available). Soft sand in the South East is generally fine-grained and has a limited grain size distribution within the deposits. The individual grains (silicon dioxide [SiO₂]) are smooth and well-rounded thus imparting a relatively soft texture and free-flowing nature. These properties are different to those associated with sharp sand which is rough, angular, and used predominantly in concrete production.
- 1.9 Soft sands are commonly deposited in marine environments, where constant

movement results in the rounding, polishing and sorting of the grains. The fine, smooth, characteristics of soft sand lend it to be used in building mortar and asphalt by the construction industry.

- 1.10 Soft sand (often known as building sand) has historically been extracted in the south east of England given that the geology of this area includes soft sand bearing deposits. However, not all Mineral Planning Authority areas contain soft sand resources, and, in some areas, the resources are constrained by landscape and environmental designations.

Figure 1: Location of South East Mineral Planning Authorities



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2 Policy Background

2.1 This section sets out the existing policy frameworks in place for planning for soft sand supply.

National Policy

2.2 National policy for minerals is set out in the National Planning Policy Framework¹. The relevant paragraphs are set out in Appendix A.

2.3 Further guidance on the implementation of the National Planning Policy Framework is set out in the Planning Practice Guidance².

Local Policy

2.4 Many of the South East Mineral Planning Authorities have adopted policies relating to the supply and safeguarding of soft sand (see Appendix B).

¹ National Planning Policy Framework (2018) (Section 17: Facilitating the sustainable use of minerals) - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/740441/National_Planning_Policy_Framework_web_accessible_version.pdf

² Planning Practice Guidance (Minerals) - <https://www.gov.uk/guidance/minerals>

3 Issues

3.1 This section outlines the issues known to impact the supply of soft sand in the South East.

Soft sand geology in the South East

3.2 Soft sand has historically been extracted in the south east of England and is sourced from the following geological formations (see Figure 2 and Figure 3):

- the Folkestone Formation (the Folkestone Beds) in Kent, Surrey, Hampshire, West Sussex and East Sussex;
- the Corallian Group, in Oxfordshire;
- the 'Reading Beds' in the Unitary Authorities that make up the former County of Berkshire; and
- the Lower Greensand Group of the Isle of Wight.

3.3 The primary source of soft sand is the Folkestone Formation of the Lower Greensand Group. The Folkestone Formation extends from north west of Lewes in East Sussex, across West Sussex and into Hampshire to Petersfield, where it swings around to the north east and then continues east across Surrey and Kent, meeting the coast at Folkestone (see Figure 2).

3.4 The Folkestone Formation has traditionally been regarded as a source of 'soft sand' used for construction purposes, such as mortar manufacturing, and has also been a source of specialist 'silica sand' (an industrial mineral), especially in Surrey and Kent (see Figure 2). It should be noted that 'soft sand' notation around Canterbury in Figure 3 is the Thanet Sand which is not of equal quality to that of the Folkestone Formation and is for general use such as backfilling and sub-soil.

3.5 In Oxfordshire, soft sand resources are limited to the Corallian Ridge area between Oxford and Faringdon and a small area around Duns Tew in northern Oxfordshire. In West Berkshire soft sand is associated with the 'Reading Beds' formation. The Reading Beds extend into Central and Eastern Berkshire³ although there have been no excavations from the formation in this area since the early part of the century.

3.6 The Sandrock Formation within the Lower Greensand Group runs east to west across the south of the Isle of Wight. Whilst the Solent creates a physical barrier in terms of movements, the Island has active quarries which provide a degree of self-sufficiency in relation to soft sand resources.

³ Bracknell Forest, Reading, Windsor & Maidenhead and Wokingham.

3.7 It should be noted that there can be a lack of clarity in geology between soft sand and silica sand as they occur in the deposit. This may have implications for meeting soft sand supply requirements as its potential to be used as silica sand in higher value applications is increasingly being considered by the industry. Silica sand is similar but with fewer impurities (a silica content of 95% is classed as silica sand), generally lighter in colour and more commonly used for specialist end-uses, for example glass manufacture, sports pitches, golf courses and equestrian uses.

Constraints

3.8 A significant proportion of the soft sand resource within the Folkestone Bed is located within and adjacent to the following protected areas (see Figure 3):

- South Downs National Park (SDNP)
- Surrey Hills Area of Outstanding Natural Beauty
- Kent Downs Area of Outstanding Natural Beauty

3.9 In addition, historically most of the soft sand deposits from the Reading Bed Formation in West Berkshire that have been worked have been those found in the North Wessex Downs Area of Outstanding Natural Beauty, most notably, an outcrop found around Junction 13 of the M4. Soft sand is also located in the New Forest National Park in the south west of Hampshire.

3.10 The Isle of Wight Area of Outstanding Natural Beauty covers half of the land area of the Island.

3.11 Consideration of how development may impact National Parks and Areas of Outstanding Natural Beauty is a statutory requirement as provided for in Section 11A(2) of the National Parks and Access to the Countryside Act 1949 (National Parks) and Section 85 of the Countryside and Rights of Way Act 2000 (AONBs). Specifically they state that “in exercising or performing any functions in relation to, or so as to affect, land” in these areas, relevant authorities “shall have regard” to their purpose to ensure their continued protection.

3.12 This legal obligation is addressed in Paragraph 172 of the NPPF which states:

“Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in

these areas, and should be given great weight in National Parks and the Broads⁴. The scale and extent of development within these designated areas should be limited. Planning permission should be refused for major development^(*) other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

- a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.”

3.13 The footnote (*) accompanying Paragraph 172 defines major development:

“For the purposes of paragraphs 172 and 173, whether a proposal is ‘major development’ is a matter for the decision maker, taking into account its nature, scale and setting, and whether it could have a significant adverse impact on the purposes for which the area has been designated or defined”.

3.14 Other constraints to the extraction of land-won soft sand resources include European designations such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs), and nationally designated Sites of Special Scientific Interest (SSSIs) and Ancient Woodland. Urban areas and major infrastructure are also a constraint (although prior extraction during redevelopment is a possibility).

3.15 Consideration of development which may impact European and national designated environmental designations is addressed within the NPPF. Paragraph 170 (a) of the NPPF states:

“Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);”

3.16 Paragraph 171 of the NPPF also states:

“Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where

⁴ English National Parks and the Broads: UK Government Vision and Circular 2010 provides further guidance and information about their statutory purposes, management and other matters.

consistent with other policies in this Framework⁵; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.”

3.17 Figure 3 shows the distribution of National Parks and Areas of Outstanding Natural Beauty within the South East. These and other environmental designations may impact on the supply of soft sand within the South East.

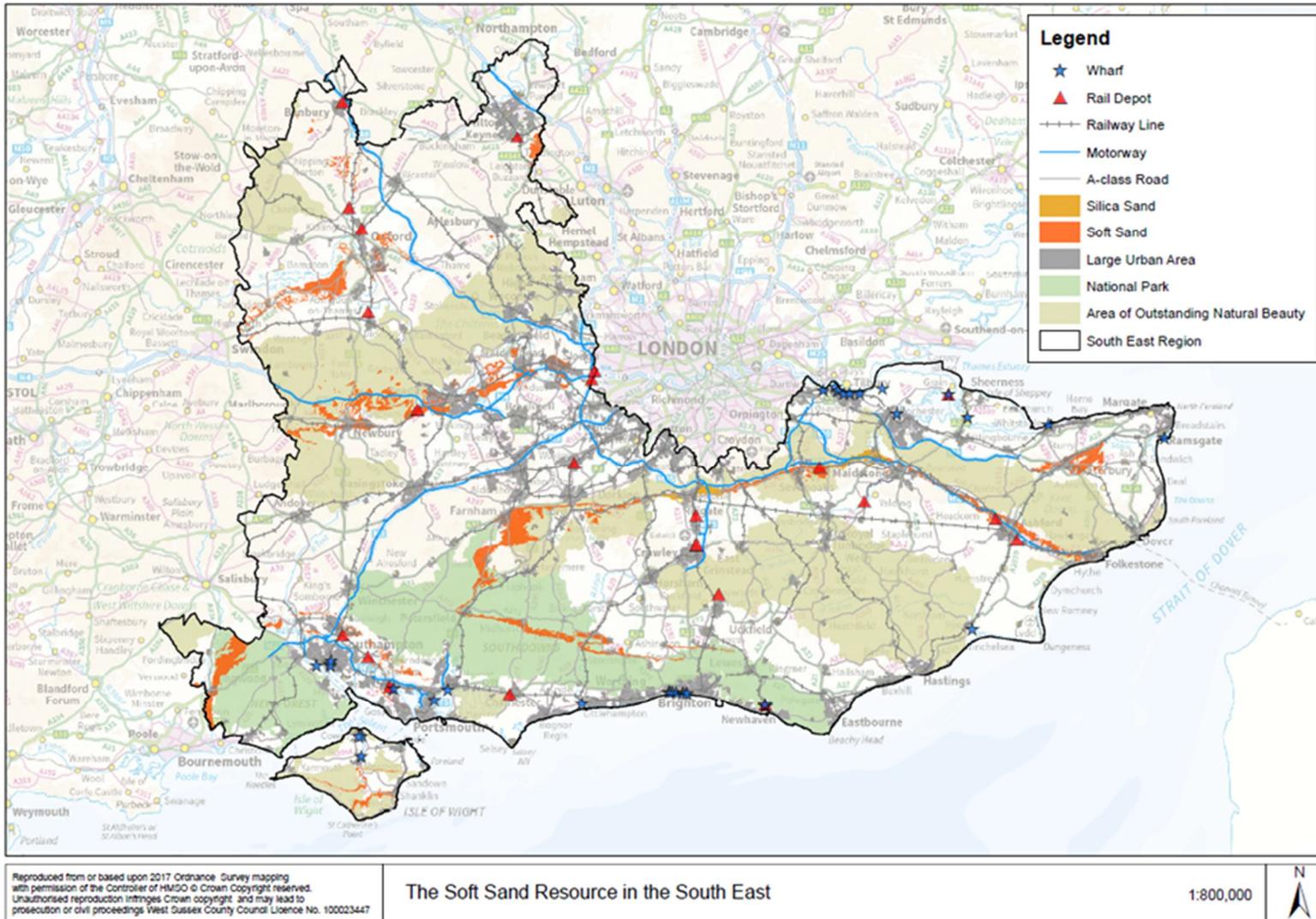
⁵ Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.

Figure 2: The Folkestone Formation and other soft sand resources in South East England.



Source: South Downs National Park - Soft Sand Study (Capita Symonds, August 2012)

Figure 3: The soft sand resource in the South East



Source: Draft Statement of Common Ground – West Sussex County Council (2017) <http://www2.westsussex.gov.uk/mlp/osd027.pdf>

Present and future supply

3.18 This section sets out the data regarding soft sand supply outlining sales, trends and known reserves.

Present

3.19 Table 1 shows that the overall trend in total land-won sand and gravel sales in the south east of England was of a year on year general decline from 2008 to 2013, but then gradually increasing again. In 2017 sales of 6.18 million tonnes were the highest since 2008, although still 15% below the 2008 level, and 3% higher than the 10-year average and the 3-year average.

Table 1: Sales of land-won sand and gravel 2008-2017 (Thousand tonnes (Tt))

Year	Sales (Tt)	% Total Sales
2008	7,299	31
2009	6,007	37
2010	6,091	31
2011	5,824	28
2012	5,514	28
2013	5,399	25
2014	5,889	25
2015	5,857	24
2016	5,900	24
2017	6,181	24
10-year average	5,996	27
3-year average	5,979	24

Source: South East Aggregates Monitoring Report 2017 (October 2018)

3.20 Table 2 shows that sales of land-won soft sand in 2017 were 22% below the 2008 level and have increased from a low in 2009 and are now above the 10-year and 3-year averages.

Table 2: Sales of land-won soft sand 2008-2017 (Thousand tonnes (Tt))

Year	Sales (Tt)	% change on previous year	Reserves at end of year (Tt)
2008	2,268	19	30,664
2009	1,387	-39	21,296
2010	1,676	21	34,389
2011	1,524	-9	32,822
2012	1,539	5	32,666
2013	1,560	-2	28,401
2014	1,506	-1	23,126
2015	1,632	6	23,110
2016	1,829	12	23,652
2017	1,759	-4	25,759
% change 2008 - 2017		-22	
10-year average	1,668		27,589
3-year average	1,740		24,174

Source: South East Aggregates Monitoring Report 2017 (October 2018)

3.21 In 2017, land-won sand gravel and marine dredged aggregate sales were the equal largest component within the overall sales pattern. This contrasts with previous years when marine dredged aggregates sales have been more dominant. During 2017, there were 39 wharves in the South East, seven of which were inactive.

3.22 A total of 50,710 tonnes of marine 'soft' sand was sold at wharves in 2017 with the majority (46,695 tonnes) sold at West Sussex wharves and the rest from the Isle of Wight and Hampshire. This represents 3% of total soft sand sales from quarries and wharves in the South East in 2017.

3.23 Sharp sand and gravel is more generally landed at wharves in the South East and is currently not known to be substituting for land-won soft sand to any significant extent.

Future

3.24 Table 3 shows the distribution of permitted reserves in 2017. Kent/Medway and Surrey have the highest level of reserves which account for 64% of overall provision. West Sussex, Buckingham and Oxfordshire account for a further 30%. The highest sales were recorded in Kent/Medway but the only permissions during 2017 were granted in Oxfordshire.

Table 3: South East Soft Sand Reserves and Sales (Thousand tonnes), 2017 (c = confidential)

Area	Reserves at start of 2017	Sales during 2017	Permissions during 2017	Reserves at end of 2017
Berkshire Unitary Authorities	c	c	0	40
Bucks/Milton Keynes	c	c	0	c
East Sussex*	350	0	0	350
Hampshire	c	232	0	570
Isle of Wight	196	12	0	182
Kent/Medway	9,182	519	0	8,848
Oxfordshire	1,341	251	2,015	3,105
Surrey	7,788	394	0	7,679
West Sussex	3,355	c	0	2,745
Total	23,652	1,759	2,015	25,759

Source: South East Aggregates Monitoring Report 2017 (October 2018)

*All reserves in East Sussex are located within the South Downs National Park

3.25 Based on, where appropriate, the LAA rate and/or 10-year average sales which for the South East assumes a collective South East Rate of 1,453⁶ Thousand tonnes, reserves of soft sand in the South East increased to 17.7 years during 2017 (from 14 years in 2016). However, based on the total South East 2017 sales figures, the reserve figure for soft sand in the South East reduces to 14.6 years. This indicates that sales in 2017 were higher than the assumed collective rate of sales in LAAs.

3.26 It is expected that the Reserves will be bolstered over time from planning permissions being granted for soft sand allocations and windfall sites within the South East. Soft sand allocations in South East mineral local plans are set out in Appendix C. Allocations for soft sand are only provided for in Hampshire, Kent and Surrey albeit these could provide around a further 11 million tonnes. Based on the 2017 sales figures, this would potentially provide an additional 6 years of supply.

Alternative supply

3.27 This section outlines the options for alternative soft sand supply.

Marine-won soft sand

3.28 Some marine sand deposits have mechanical, chemical and physical properties, identical to high quality land-based sands, therefore the end uses

⁶ South-East England Aggregates Monitoring 2017 - Table 13

are no different. The main differences between the majority of land-based sand and marine sands are the chloride and shell content⁷.

3.29 In England, marine sands are either directly or through blending, used in the production of:

- Mortar for bricklaying and blockmaking
- Screeds
- External renders
- Internal rendering
- Masonry blocks
- Paving blocks

3.30 Marine won sand with properties akin to land-won soft sand is currently sourced from the Bristol Channel as there are extensive deposits of mobile sand across the upper Severn Estuary. The resource has been exploited as the terrestrial alternatives in South Wales are constrained and the depositional environment favours finer sand resources to be available. The resource is as a partial substitute of land-won soft sand and is blended in dry-silo mortar production⁸.

3.31 Research⁹ carried out by the Crown Estate shows the extent of the potential sand and gravel resource in the English Channel and Thames Estuary. The report shows that there are likely to be areas of fine sand within the area, but that the 'economic potential of individual sites can only be proved by a detailed evaluation programme'.

3.32 According to British Marine Aggregate Producers Association (BMAPA), marine deposits off the coast of the Netherlands are dominated by fine to medium sand¹⁰. The UK exports some coarse sand and gravel to the Netherlands and it is possible that this fine to medium sand could be imported into the UK.

3.33 Important considerations include:

- Customer product acceptance (ability to meet colour and grading expectations);
- logistics of onshore handling and/or processing;
- retention of fine sands during dredging operations;
- constraints on wharf and fleet capacity.

⁷ https://www.bmapa.org/documents/marine_building.pdf

⁸ Some marine soft sand is not always a direct substitute for land-won soft sand and requires blending to make a partial substitution for soft sand in mortar production or concrete manufacture. Blending of this nature is not known to currently take place in the South East.

⁹ The Mineral Resources of the English Channel and Thames Estuary (BGS) (2013)

¹⁰ The strategic importance of the marine aggregate industry to the UK (BGS) (2007) - https://www.bmapa.org/documents/BMAPA_download.pdf

Outer regional supply opportunities

3.34 The South East Region is abutted by several other Mineral Planning Authority areas: Dorset, Wiltshire and Gloucestershire (South West), Warwickshire (West Midlands), Northamptonshire (East Midlands), Bedfordshire and Hertfordshire (East) and London.

3.35 A review of the most recent Local Aggregate Assessments (LAA) (or BGS information, where required) for these areas and their ability to supply soft sand is provided below:

- Dorset: Poole formation sands mentioned in LAA. BGS report¹¹ mentions that these can be used as a soft sand mainly as a silica sand.
- Wiltshire: Three quarries with soft sand planning permission. LAA describes theoretically containing extensive deposits of soft sand. Data is however confidential.
- Gloucestershire: Small amount of soft sand described, no other information.
- Warwickshire: No mention of soft sand. BGS 2009 report¹² mentions soft sand in some bedrock formations. However, at the time of writing these were not worked.
- Northamptonshire: There are some deposits of soft sand in the county but the most recent working of a solely soft sand site (at a site to the south-west of Northampton in the Milton Keynes belt) ceased in 2005. There is a soft sand allocation in the Northamptonshire Minerals and Waste Local Plan.
- Bedfordshire: The area contains Woburn sands formation which has soft sand in the form of silica sand¹³. However, the LAA does not report soft separately from sharp sand and gravel.
- Hertfordshire: Mainly imports soft sand.
- London: Mainly imports soft sand.

Transportation

3.36 The Aggregate Monitoring survey in 2014 recorded the imports and exports of primary aggregates. Whilst the movement of sand and gravel is recorded, soft separate sand data is not available. Figure 5 shows the South East imports and exports of sand and gravel which suggests that in 2014, the most influential area was London as this involved the highest tonnage levels. It is likely that these figures will have changed since 2014, but more up to date data is not available.

¹¹ BGS Report: <http://nora.nerc.ac.uk/id/eprint/10759/1/CR01138N.pdf>

¹² BGS Report: <http://nora.nerc.ac.uk/id/eprint/7858/1/OR08065.pdf>

¹³ http://www.centralbedfordshire.gov.uk/images/beds-silica-sands-2_tcm3-25758.pdf

3.37 Major projects can require intensive levels of aggregate and therefore can also influence movements. It is for this reason that major projects are considered as future demand factors in Local Aggregate Assessments. The South East has a number of National Significant Infrastructure Projects which will have an impact on demand including the proposed Heathrow Expansion, High Speed Rail (HS) 2 and Crossrail. However, the impact will be mainly on demand for concreting sand rather than soft sand.

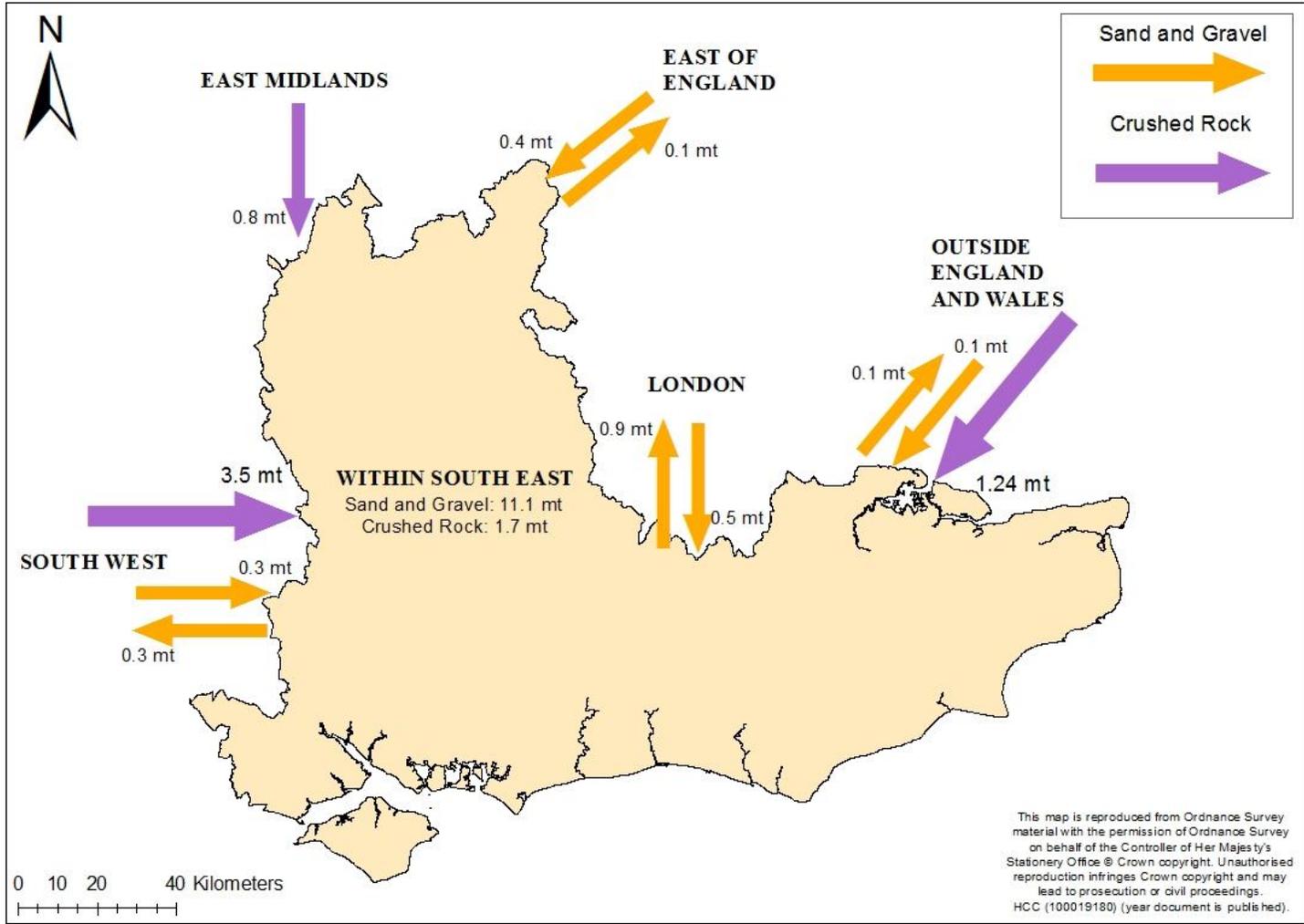
3.38 Monitoring undertaken by the Mineral Products Association indicates that the average road delivery distance for aggregates has varied between 26 and 35 miles in recent years¹⁴. The radius of economic transportation of sand and gravel is often stated to be generally less than 30 miles. However, soft sand in the South East can travel over greater distances, depending on circumstances.

3.39 Reasons for wider distribution may include:

- For national operators, the aggregates are transported to the nearest mortar or asphalt plant, which can often be up to 45 miles (or further) where the end product is made, before onward travel to the end user.
- For the smaller operators, the sand is often used more locally.

¹⁴ Sustainable Development Report (MPA, 2018) - https://mineralproducts.org/documents/MPA_SD_Report_2018.pdf

Figure 5: South East England: Imports and exports of primary aggregates, 2014 (Million tonnes)



Source: South East England Aggregates Monitoring 2017 (SEAWP, October 2018): <https://www.hants.gov.uk/landplanningandenvironment/seeawp/seeawpdocuments>

4 Conclusion

- 4.1 This Position Statement sets out technical information with respect to soft sand supply in the South East. The Statement is supported by the South East Mineral Planning Authorities and will be used as a basis for any relevant Statements of Common Ground.
- 4.2 The Statement highlights that the spatial distribution of soft sand is varied and that some of the areas where extraction has historically taken place, or currently takes place, are constrained by landscape and environmental designations.
- 4.3 The Statement indicates that additional sites need to be allocated in minerals plans and permitted by Mineral Planning Authorities to ensure that a steady and adequate supply of soft sand can be maintained in the South East. Due to geology, soft sand resource is focused in a few counties – particularly Surrey, Kent and West Sussex – and the need for future supply will likely need to balance conflict with significant landscape, environmental and recreational constraints
- 4.4 Lastly, the Statement recognises that there are alternatives to land-won supply within the South East, in particular supply from land-won soft sand from surrounding regions and the partial substitution of alternative materials such as marine sands in some applications. However, it is recognised, these alternatives are currently limited and will also have constraints such as the availability of suitable dredgers and dedicated wharf space which would impact the long-term supply of soft sand. Any reliance on them would need to be in line with national policy and justified through evidence and agreements with other authorities (if reliance is on areas outside of the South East).

Appendix A: Relevant National Planning Policy Framework Soft Sand Supply Paragraphs

Paragraph 203 outlines the requirement for minerals:

“It is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation.”

Paragraph 204 provides the framework for mineral policies:

“Planning policies should:

- a) provide for the extraction of mineral resources of local and national importance, but not identify new sites or extensions to existing sites for peat extraction;
- b) so far as practicable, take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials, before considering extraction of primary materials, whilst aiming to source minerals supplies indigenously;
- c) safeguard mineral resources by defining Mineral Safeguarding Areas; and adopt appropriate policies so that known locations of specific minerals resources of local and national importance are not sterilised by non-mineral development where this should be avoided (whilst not creating a presumption that the resources defined will be worked);
- d) set out policies to encourage the prior extraction of minerals, where practical and environmentally feasible, if it is necessary for non-mineral development to take place;
- e) safeguard existing, planned and potential sites for: the bulk transport, handling and processing of minerals; the manufacture of concrete and concrete products; and the handling, processing and distribution of substitute, recycled and secondary aggregate material;
- f) set out criteria or requirements to ensure that permitted and proposed operations do not have unacceptable adverse impacts on the natural and historic environment or human health, taking into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality;
- g) when developing noise limits, recognise that some noisy short-term activities, which may otherwise be regarded as unacceptable, are unavoidable to facilitate minerals extraction; and
- h) ensure that worked land is reclaimed at the earliest opportunity, taking account of aviation safety, and that high quality restoration and aftercare of mineral sites takes place.”

Paragraph 205 outlines the framework for determining applications:

“When determining planning applications, great weight should be given to the benefits of mineral extraction, including to the economy¹⁵.

In considering proposals for mineral extraction, minerals planning authorities should:

- a) as far as is practical, provide for the maintenance of landbanks of non-energy minerals from outside National Parks, the Broads, Areas of Outstanding Natural Beauty and World Heritage Sites, scheduled monuments and conservation areas;
- b) ensure that there are no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety, and take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality;
- c) ensure that any unavoidable noise, dust and particle emissions and any blasting vibrations are controlled, mitigated or removed at source¹⁶, and establish appropriate noise limits for extraction in proximity to noise sensitive properties;
- d) not grant planning permission for peat extraction from new or extended sites;
- e) provide for restoration and aftercare at the earliest opportunity, to be carried out to high environmental standards, through the application of appropriate conditions. Bonds or other financial guarantees to underpin planning conditions should only be sought in exceptional circumstances;
- f) consider how to meet any demand for small-scale extraction of building stone at, or close to, relic quarries needed for the repair of heritage assets, taking account of the need to protect designated sites; and
- g) recognise the small-scale nature and impact of building and roofing stone quarries, and the need for a flexible approach to the duration of planning permissions reflecting the intermittent or low rate of working at many sites.”

Paragraph 206 outlines the requirement to protect mineral resources:

“Local planning authorities should not normally permit other development proposals in Mineral Safeguarding Areas if it might constrain potential future use for mineral working.”

Paragraph 207 provides the framework for mineral supply:

“Minerals planning authorities should plan for a steady and adequate supply of aggregates by:

¹⁵ Except in relation to the extraction of coal, where the policy at paragraph 211 of this Framework applies

¹⁶ National planning guidance on minerals sets out how these policies should be implemented.

- a) preparing an annual Local Aggregate Assessment, either individually or jointly, to forecast future demand, based on a rolling average of 10 years' sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources);
- b) participating in the operation of an Aggregate Working Party and taking the advice of that party into account when preparing their Local Aggregate Assessment;
- c) making provision for the land-won and other elements of their Local Aggregate Assessment in their mineral plans, taking account of the advice of the Aggregate Working Parties and the National Aggregate Co-ordinating Group as appropriate. Such provision should take the form of specific sites, preferred areas and/or areas of search and locational criteria as appropriate;
- d) taking account of any published National and Sub National Guidelines on future provision which should be used as a guideline when planning for the future demand for and supply of aggregates;
- e) using landbanks of aggregate minerals reserves principally as an indicator of the security of aggregate minerals supply, and to indicate the additional provision that needs to be made for new aggregate extraction and alternative supplies in mineral plans;
- f) maintaining landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock, whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised¹⁷;
- g) ensuring that large landbanks bound up in very few sites do not stifle competition; and
- h) calculating and maintaining separate landbanks for any aggregate materials of a specific type or quality which have a distinct and separate market.

¹⁷ Longer periods may be appropriate to take account of the need to supply a range of types of aggregates, locations of permitted reserves relative to markets, and productive capacity of permitted sites.

Appendix B: Adopted Soft Sand Policies in the South East (where applicable)

Adopted Plan	Soft Sand Supply Policy	Safeguarding Policy
<i>Buckinghamshire</i>		
<p>Emerging Plan (Due for adoption in 2019): Buckinghamshire Minerals & Waste Local Plan 2016-2036</p>	<p>None</p>	<p>Policy 1: Safeguarding Mineral Resources</p> <p>Minerals are a finite natural resource; in order to secure their long-term conservation Mineral Safeguarding Areas (MSAs) have been defined within Buckinghamshire to prevent mineral resources of local and national importance from being needlessly sterilised by non-minerals development. Mineral resources of local and national importance identified within Buckinghamshire include: sand and gravel deposits of the Thames Valley (situated in the southern half of the county), the Great Ouse Valley east of Buckingham, the sand and gravel deposits in the north of the county, clay-with-flints around Bellingdon and white limestone in the far north of the county.</p> <p>Proposals for development within MSAs, other than that which constitutes exempt development, must demonstrate that:</p> <ul style="list-style-type: none"> - prior extraction of the mineral resource is practicable and environmentally feasible; or - the mineral concerned is not of any value or potential value; or - the proposed development is of a temporary nature and can be completed with the site restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed; or - there is an overriding need for the development.

		<p>A Mineral Assessment will be required to accompany the planning application for the proposed non-minerals development, detailing:</p> <ul style="list-style-type: none"> - the size, nature and need for the (non-minerals) development, - the effect of the proposed development on the mineral resource beneath or adjacent to the site, - site-specific geological survey data (in addition to the MSAs and BGS mapping data) to establish the existence or otherwise of a mineral resource (detailing resource type, quality, estimated quantity and overburden to reserve ratio), - whether it is feasible and viable to extract the mineral resource ahead of the proposed development to prevent sterilisation and the potential for use (of the mineral resource) in the proposed development, and - where prior extraction can be undertaken how this will be carried out as part of the overall development scheme, with reference to the proposed phasing of operations and construction of the non-mineral development. <p>In the event that the non-mineral development is delayed or not implemented the site must be restored to a stable landform and appropriate after-use.</p>
<i>Central & Eastern Berkshire (Bracknell, Reading, Windsor & Maidenhead and Wokingham)</i>		
<p>Replacement Minerals Local Plan for Berkshire (2001)</p> <p>Emerging Plan (Draft Plan): Central and Eastern Berkshire – Joint Minerals & Waste Plan</p>	<p>[See Slough Borough Council]</p> <p>None.</p>	<p>[See Slough Borough Council]</p> <p>Policy M2: Safeguarding sand and gravel resources “Sharp sand and gravel and soft sand resources of economic importance, and around active mineral workings, are safeguarded against unnecessary sterilisation by non-minerals development.</p>

		<p>Safeguarded mineral resources are defined by the Minerals and Waste Safeguarding Area illustrated on the Policies Map and a list of safeguarded sites will be maintained.</p> <p>Non-minerals development in the Minerals and Waste Safeguarding Area may be permitted if it can be demonstrated that the option of prior extraction has been fully considered as part of an application, and:</p> <ul style="list-style-type: none"> i. Prior extraction is maximised taking into account site constraints and phasing of development; or ii. It can be demonstrated that the sterilisation of mineral resources will not occur; or iii. It would be inappropriate to extract mineral resources in that location, with regard to other policies in the Local Development Plan.”
<i>East Sussex and Brighton & Hove</i>		
<p>East Sussex, South Downs and Brighton & Hove Waste and Minerals Plan (2013)</p>	<p>Policy WMP2: Minerals and waste development affecting the South Downs National Park</p> <p>“a) Minerals and waste development in the South Downs National Park should demonstrate that it contributes to the sustainable development of the area.</p> <p>b) Major minerals and waste development in the South Downs National Park should not take place except in exceptional circumstances, where it can be demonstrated to be in the public interest(23) . In this respect, consideration will be given to:</p> <ul style="list-style-type: none"> i. the need for the development, including in terms of any national considerations; and ii. the impact of permitting or refusing the development upon the local economy; and 	<p>Policy WMP: 14 Safeguarding Mineral Resources</p> <p>“The Authorities will safeguard areas for land-won resource to ensure viable resources are not sterilised. The Authorities will identify Mineral Safeguarding Areas and Mineral Consultation Areas in the Waste and Minerals Sites Plan, and expect to be consulted on any proposal for major development that would have a significant impact on current or future operations. In addition, other non-strategic mineral resources that might need protection will be identified through the Plan review process and in the Waste and Minerals Sites Plan. This will allow a viability assessment to be made around additional resource need over the plan period.”</p>

	<p>iii. the cost of and scope for developing outside the designated area or meeting the need in another way; and</p> <p>iv. any detrimental effect on the environment, landscape and/or recreational opportunities and the extent to which it could be satisfactorily mitigated.</p> <p>Development will only be in the public interest if the outcomes of i-iv above gives sufficient reason/s to override the potential damage to the natural beauty, cultural heritage, wildlife or quiet enjoyment of the National Park.</p> <p>c) Extensions to existing soft sand quarries or new quarry proposals in the National Park need to conform with (b) above and additionally demonstrate that the need could not be practically achieved by extraction in adjoining Counties.</p> <p>d) Small-scale waste management facilities for local needs should not be precluded from the National Park and should meet the requirements of Policy WMP 7a.</p> <p>e) Proposals for the backfilling of redundant quarries within the National Park need to conform with (b) above and additionally demonstrate net long term benefits to the National Park and that they meet Policy WMP 8b criteria (a) to (e).</p>	
East Sussex, South Downs and Brighton & Hove Waste and Minerals Sites Plan (2017)		Policy SP 8 Mineral Safeguarding Areas for land-won minerals resources within the Plan Area; The following land-won minerals resources are identified as Mineral Safeguarding Areasincluding Stanton's Farm, Novington
<i>Hampshire (New Forest, Portsmouth, South Downs & Southampton)</i>		
Hampshire Minerals & Waste Plan (adopted 2013)	Policy 17: Aggregate supply – capacity and source “An adequate and steady supply of aggregates until 2030 will be provided for Hampshire and surrounding	Policy 15: Safeguarding – mineral resources “Hampshire’s sand and gravel (sharp sand and gravel and soft sand), silica sand and brick-making clay

	<p>areas from local sand and gravel sites at a rate of 1.56mpta, of which 0.28mpta will be soft sand. That supply will also be augmented by safeguarding and developing infrastructure capacity so that alternative sources of aggregate could be provided at the following rates:</p> <ul style="list-style-type: none"> • 1.0mpta of recycled and secondary aggregates; • 2.0mpta of marine-won aggregates; and • 1.0mpta of limestone delivered by rail.” 	<p>resources are safeguarded against needless sterilisation by non-minerals development, unless ‘prior extraction’ takes place. Safeguarded mineral resources are defined by a Minerals Safeguarding Area illustrated on the Policies Map. Development without the prior extraction of mineral resources in the Minerals Safeguarding Area may be permitted if:</p> <ol style="list-style-type: none"> a. It can be demonstrated that the sterilisation of minerals resources will not occur; or b. It would be inappropriate to extract mineral resources at that location, with regards to the other policies in the Plan; or the development would not pose a serious hindrance to mineral development in the vicinity; or c. The merits of the development outweigh the safeguarding of the mineral. <p>The soft sand / potential silica resources at Whitehill & Bordon (Inset Map 5), further illustrated on the Policies Map are included within the MSA and are specifically identified for safeguarding under this policy.</p>
<i>Isle of Wight</i>		
Island Plan Isle of Wight Core Strategy (including Waste and Minerals) and Development Management Development Plan Document (March 2012)	None.	None.
<i>Kent</i>		
Kent Minerals and waste Local Plan 2013-30 adopted July 2016	Adopted Policy CSM 2: Supply of Land-won Minerals in Kent identifies a need to maintain landbanks over the Plan period of at least 7 years equivalent to at least 15.6mt, 10.6mt from existing sites and 5.0mt	Policy CSM 5: Land-won Mineral Safeguarding safeguards all soft sand deposits in the Folkestone Formation in Kent, as shown on the adopted proposals maps. Exemptions from this presumption to safeguard

Early partial review and minerals sites plan – submitted to SoS in May 2019.	identified as allocations in the Kent Mineral Sites Plan. The need has been re-calculated to be 2.50mt over 2019-30 (plus 7 years at the end of the Plan period) for the Mineral Sites Plan period.	are capable of being invoked with consideration of the exemption criteria in adopted Policy DM 7: Safeguarding Mineral Resources. Policy is subject to review on the wording of exemption criterion (7) to clarify the status of allocations in local plans for non-mineral development, this is part of an early Partial Review of the Kent Minerals and waste Local Plan 2013-30; a Regulation 19 Public Consultation on this review ended on the 8 th March 2019
<i>Medway</i>		
Medway Local Plan (2003)	None.	None.
<i>Milton Keynes</i>		
Milton Keynes Minerals Local Plan (July 2017) (Plan period 2013-2032)	None.	None.
<i>Oxfordshire</i>		
Oxfordshire Minerals & Waste Local Plan – Part 1: Core Strategy (2017)	<p>Policy M2: Provision for working aggregate minerals</p> <p>Provision will be made through policies M3 and M4 to enable the supply of:</p> <ul style="list-style-type: none"> • sharp sand and gravel - 1.015 mtpa giving a total provision requirement of 18.270 million tonnes • soft sand - 0.189 mtpa giving a total provision requirement of 3.402 million tonnes • crushed rock - 0.584 mtpa giving a total provision requirement of 10.512 million tonnes <p>from land-won sources within Oxfordshire for the period 2014 – 2031 inclusive.</p> <p>Permission will be granted for aggregate mineral working under policy M5 to enable separate landbanks of reserves with planning permission to be maintained for the extraction of minerals of:</p>	<p>Policy M8: Safeguarding mineral resources</p> <p>Mineral resources in the Mineral Safeguarding Areas shown on the Policies Map are safeguarded for possible future use. Development that would prevent or otherwise hinder the possible future working of the mineral will not be permitted unless it can be shown that:</p> <ul style="list-style-type: none"> • The site has been allocated for development in an adopted local plan or neighbourhood plan; or • The need for the development outweighs the economic and sustainability considerations relating to the mineral resource; or • The mineral will be extracted prior to the development taking place.

	<ul style="list-style-type: none"> • at least 7 years for sharp sand and gravel; • at least 7 years for soft sand; • at least 10 years for crushed rock; <p>in accordance with the annual requirement rates in the most recent Local Aggregate Assessment, taking into account the need to maintain sufficient productive capacity to enable these rates to be realised.</p>	<p>Mineral Consultation Areas, based on the Mineral Safeguarding Areas, are shown on the Policies Map. Within these areas the District Councils will consult the County Council on planning applications for non-mineral development.</p>
<i>Slough</i>		
<p>Replacement Minerals Local Plan for Berkshire (2001)</p>	<p>No saved policy</p>	<p>Saved policies:</p> <p>Policy 2 The local planning authorities will oppose development proposal which would cause the sterilisation of mineral deposits in the proposed development site, or which would prejudice the future working of minerals in adjacent sites, except where it is demonstrated that</p> <ul style="list-style-type: none"> (i) The mineral deposit is of no commercial interest, and is unlikely to be so in the future; or (ii) Having regard to all relevant planning considerations, there is an overriding case in favour of allowing the proposed development to proceed without the prior extraction of mineral; or (iii) Extraction of the mineral would be subject to such strong environmental or other objection that it would be highly unlikely that it would ever be permitted in any circumstances. <p>Policy 2A In appropriate cases, the local planning authorities will encourage the extraction of mineral prior to other more permanent forms of development taking place. Planning permission will be granted on applications for prior extraction of minerals, provided that</p>

		<p>(i) Mineral extraction and restoration to an appropriate standard can be completed within a timetable that would not reasonably prejudice the timetable for the subsequent development; and</p> <p>(ii) Mineral extraction and restoration operations, or their associated traffic, would not cause unacceptable impacts on the environment or living conditions</p>
<i>Surrey</i>		
Surrey Minerals Plan (2011) Primary Aggregates Development Plan Document (2011)	None.	<p>Policy MC6 – Safeguarding mineral resources and development.</p> <p>Minerals safeguarding areas have been defined for resources of concreting aggregate, soft sand, silica sand, brick clay and fuller’s earth. The mineral planning authority will seek to prevent sterilisation of these resources by other development. Local planning authorities will be expected to consult the mineral planning authority on any proposals for development that would</p> <p>i) prejudice the effective operation of sites that are currently in minerals use or permitted for such use, or</p> <p>ii) sterilise mineral resources on preferred areas for future minerals extraction, or</p> <p>iii) sterilise mineral resources within mineral safeguarding areas as shown on their proposals maps. Infrastructure and sites used, or proposed to be used, for minerals development - rail aggregate depots and sites for production of recycled and secondary aggregate - will be safeguarded. Local planning authorities will be expected to consult the mineral planning authority on proposals for non-mineral development in the consultation area around such sites.</p>

<i>West Berkshire</i>		
Replacement Minerals Local Plan for Berkshire (2001)	[See Slough Borough Council]	[See Slough Borough Council]
<i>West Sussex & South Downs</i>		
West Sussex Joint Minerals Local Plan (2018)	<p>Policy M2: Soft Sand</p> <p>Proposals for land-won soft sand extraction, including extensions of time and physical extensions to existing sites, will be permitted providing that the proposal is needed to meet the shortfall of soft sand of 2.36 million tonnes (or as calculated in the most recent Local Aggregates Assessment) over the Plan period and maintain at least a seven year landbank.</p> <p>The Authorities will commence a single issue soft sand review of this Plan within 6 months of the adoption of this Plan. The Plan Review will be submitted for examination within two years from the commencement of the review and address the shortfall of soft sand at that time (as calculated in the most recent Local Aggregates Assessment). In the event that the reviewed Plan is not submitted within two years then the Plan, in terms of soft sand, will be deemed to be out-of-date.</p>	<p>Policy M9: Safeguarding Minerals</p> <p>(a) Existing minerals extraction sites⁴⁴ will be safeguarded against non-mineral development that prejudices their ability to supply minerals in the manner associated with the permitted activities.</p> <p>(b) Soft sand (including potential silica sand), sharp sand and gravel, brick-making clay, building stone resources and chalk reserves are safeguarded against sterilisation.</p> <p>Proposals for non-mineral development within the Minerals Safeguarded Areas (as shown on maps in Appendix E) will not be permitted unless:</p> <p>(i) Mineral sterilisation will not occur; or</p> <p>(ii) it is appropriate and practicable to extract the mineral prior to the development taking place, having regards to the other policies in this Plan; or</p> <p>the overriding need for the development outweighs the safeguarding of the mineral and it has been demonstrated that prior extraction is not practicable or environmentally feasible.</p>

Appendix C: Soft Sand Allocations in adopted or submitted Minerals Plans in the South East (where applicable)

Adopted Plan	Plan Status	Allocation (and status)
<i>Buckinghamshire</i>		
Buckinghamshire Minerals & Waste Local Plan 2016-2036	Due for adoption July 2019.	No specific soft sand allocations although it is recognised that some sand and gravel allocations contain soft sand.
<i>Central & Eastern Berkshire (Bracknell, Reading, Windsor & Maidenhead and Wokingham)</i>		
Replacement Minerals Local Plan for Berkshire (2001)	Adopted (with saved policies)	None.
Central and Eastern Berkshire – Joint Minerals & Waste Plan	Draft Plan (2018)	None.
<i>East Sussex and Brighton & Hove</i>		
East Sussex, South Downs and Brighton & Hove Waste and Minerals Plan (Sites Plan - 2017)	<ul style="list-style-type: none"> • Adopted 2017 • Currently being reviewed. 	None.
<i>Hampshire (New Forest, Portsmouth, South Downs & Southampton)</i>		
Hampshire Minerals & Waste Plan	<ul style="list-style-type: none"> • Adopted 2013 • Reviewed 2018 	<ul style="list-style-type: none"> • Forest Lodge Home Farm, Hythe (soft sand / sharp sand and gravel) – 0.57 million tonnes [permitted 2017] • Purple Haze, Ringwood Forest (soft sand / sharp sand and gravel) – 4 million tonnes
<i>Isle of Wight</i>		
Island Plan Isle of Wight Core Strategy (including Waste and Minerals) and Development Management Development Plan Document	Adopted 2012	None.
<i>Kent</i>		
Kent Mineral Sites Plan 2013-30 at	Submitted to SoS May 2019.	Chapel Farm, Lenham 3.2 million tonnes of potential reserves

<i>Medway</i>		
Medway Local Plan	Adopted 2003	None
<i>Milton Keynes</i>		
Milton Keynes Minerals Local Plan	Adopted July 2017	None
<i>Oxfordshire</i>		
Oxfordshire Minerals & Waste Local Plan – Part 1: Core Strategy	Adopted 2017	<p>[Allocations will be set out in the Part 2: Sites Allocations Document]</p> <p>Policy M3: Principal locations for working aggregate minerals</p> <p>The principal locations for aggregate minerals extraction will be within the following strategic resource areas, as shown on the Policies Map:</p> <p>Sharp sand and gravel in northern Oxfordshire (Cherwell District and West Oxfordshire District):</p> <ul style="list-style-type: none"> • The Thames, Lower Windrush and Lower Evenlode Valleys area from Standlake to Yarnton; in southern Oxfordshire (South Oxfordshire District and Vale of White Horse District): • The Thames and Lower Thame Valleys area from Oxford to Cholsey; • The Thames Valley area from Caversham to Shiplake. <p>Soft sand</p> <ul style="list-style-type: none"> • The Corallian Ridge area from Oxford to Faringdon; • The Duns Tew area. Crushed rock • The area north west of Bicester; • The Burford area south of the A40; • The area east and south east of Faringdon. <p>Specific sites (new quarry sites and/or extensions to existing quarries) for working aggregate minerals within these strategic</p>

		<p>resource areas will be allocated in the Minerals & Waste Local Plan: Part 2 – Site Allocations Document, in accordance with policy M4.</p> <p>Specific sites for extensions to existing aggregate quarries (excluding ironstone) outside the strategic resource areas may also be allocated in the Minerals & Waste Local Plan: Part 2 – Site Allocations Document provided they are in accordance with policy M4.</p> <p>Sites allocated for sharp sand and gravel working (including both new quarry sites and extensions to existing quarries, including any extensions outside the strategic resource areas), to meet the requirement in policy M2 will be located such that approximately 25% of the additional tonnage requirement is in northern Oxfordshire and approximately 75% of the additional tonnage requirement is in southern Oxfordshire, to achieve an approximately equal split of production capacity for sharp sand and gravel between northern and southern Oxfordshire by 2031.</p>
<i>Slough</i>		
Replacement Minerals Local Plan for Berkshire (2001)	Adopted (with saved policies)	None.
<i>Surrey</i>		
Surrey Minerals Plan (2011)	Adopted 2011	<p>Preferred Area P – Mercers Farm, Nutfield Marsh – Granted permission in 2013</p> <p>Preferred Area R – Runfold South extension - Granted permission in 2007</p> <p>Preferred Area O – Common Field, Betchworth - Granted permission in 2008</p>

<i>West Berkshire</i>		
Replacement Minerals Local Plan for Berkshire (2001)	Adopted (with saved policies)	None.
<i>West Sussex & South Downs</i>		
West Sussex Joint Minerals Local Plan (2018)	Adopted with a policy on Soft Sand (M2) requiring a Single Issue Soft Sand Review.	No allocations in adopted Plan. The Soft Sand Review will address the need for soft sand.