

Central & Eastern Berkshire Authorities

Joint Minerals & Waste Plan

Local Aggregate Assessment

December 2023



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Prepared by Hampshire Services

Hampshire County Council

www.hants.gov.uk/sharedexpertise



Table of Contents

Tables and Figures	0
Executive Summary	4
Introduction	4
Land-won Aggregate.....	4
Sand and Gravel.....	4
Crushed Rock	4
Marine Sand & Gravel.....	5
Recycled & Secondary Aggregate.....	5
Future Aggregate Supply	5
Conclusions	6
1. Introduction	7
2. Land Won Aggregate	8
Geology of Central and Eastern Berkshire	8
Permitted Sites Producing Sand and Gravel in Central and Eastern Berkshire	9
Sand and Gravel Production and Sales	11
3. Crushed Rock	14
4. Marine-won sand and gravel	16
5. Recycled/Secondary Aggregates	17
6. Future Aggregate Demand.....	20
Construction project demands.....	20
Sand and Gravel.....	22
Recycled and secondary aggregate	22
Landbank.....	22
Future provision of sand and gravel	23
Capacity.....	24
7. Conclusions and review of the LAA.....	26

Tables and Figures

Table 1: Permitted active quarries in Central and Eastern Berkshire, 2022	11
Table 2: Land-won sand and gravel sales in Central and Eastern Berkshire, 2013-2022 (Thousand tonnes, Tt)	11
Table 3: Total consumption of Primary Aggregate in Berkshire, 2009, 2014, and 2019	13
Table 4: Crushed rock sales from rail depots and wharves in Berkshire (Berks) and Hampshire (Hants), 2013-2022 (Thousand tonnes, Tt)	15

Table 5: Recycled aggregate capacity, 2022.....	17
Table 6: Recycled and Secondary aggregate sales in Central and Eastern Berkshire, 2012-2021 (Thousand tonnes, Tt)	19
Table 7: Central and Eastern Berkshire sand and gravel reserves and landbank 2022.....	23
Table 8: Total sales and estimated production capacity, 2022	24
Figure 1: Sand and gravel resources in Central and Eastern Berkshire.	8
Figure 2: Location of active quarries in Central and Eastern Berkshire, 2021	9
Figure 3: Sales of land-won Sand and Gravel in Central and Eastern Berkshire	12
Figure 4: Sales of land-won sand and gravel in South-East England and Central and Eastern Berkshire.....	12
Figure 5: Location map of active recycled aggregate sites in Central and Eastern Berkshire, 2021.....	18

Local Aggregate Assessment (LAA) 2023² Dashboard (Thousand tonnes unless otherwise specified)

Aggregate	Sales 2022	Average annual sales ³		Average annual sales trend ⁴		Reserves @ 31/12/22	Reserves trend ⁴		Aggregate Provision Rate (APR) ⁵	Landbank (years)	Planned allocations outstanding ⁶	Capacity ⁷ @ 31/12/22 (ktpa)	Notes ⁸
		10-year	3-year	10-year	3-year		10-year	3-year					
Soft (building) sand (SS)													There are no active soft sand sites in the plan area.
Sharp sand and gravel (SSG)	506	591	549	↓	↓	5,569	↓	↓	591	9.42	6,109		
Sand and gravel (S&G) ⁹	506	591	549	↓	↓	5,569	↓	↓	591	9.42	6,109		10 year average sales most appropriate when compared to forecasted figures (based on a range of forecasts from MPA, Construction Products, Bank of England and ONS)
Crushed rock (CR)													
Marine dredged aggregates (MDA)													
MDA landings													
Imported S&G @ wharves													
Imported CR @ wharves													
Imported S&G @rail depots													
Imported CR @ rail depots													

Local Aggregate Assessment (LAA) 2023 ² Dashboard													
Aggregate	Sales 2022	Average annual sales ³		Average annual sales trend ⁴		Reserves @ 31/12/22	Reserves trend ⁴		Aggregate Provision Rate (APR) ⁵	Landbank (years)	Planned allocations outstanding ⁶	Capacity ⁷ @ 31/12/22 (ktpa)	Notes ⁸
		10-year	3-year	10-year	3-year		10-year	3-year					
Secondary aggregate													
Recycled aggregate	77	107	94	↓	↓				100				10 year average sales most appropriate when compared to forecasted figures (based on a range of forecasts from MPA, Construction Products, Bank of England and ONS)

Foot notes:

1: All units expressed in 'thousand tonnes' unless otherwise specified

2: The LAA date is that for the current AM data collection year and the corresponding Annual Report.

3: Average annual sales should include current year's sales

4: The trends should be derived from the Excel 'trend line' for the relevant time series data - see AM collation tables

5: APR - Aggregate Provision Rate also known as LAA Rate - based on MPA's judgement/default 10-year average sales and justified in the Commentary **NB APRs should be also applied to aggregates handled by the wharves, rail depots and S/RA sites - custom has been to use 10-year average sales, unless compelling evidence to use an alternative.**

6: Allocations as estimated total tonnage in adopted mineral plan and not yet permitted

7: Capacity as estimated by MPA through current AM survey or alternative database and estimated for total aggregate for wharves/rails depots - see definition in AM survey form

8: Reserved for technical clarifications, remarks and judgements in Commentary

9: S&G is the combination of SS and SSG

Executive Summary

Introduction

This is the Local Aggregate Assessment (LAA) for Central and Eastern Berkshire and covers the administrative areas of the plan-making partners (Bracknell Forest Council, Reading Borough Council, the Royal Borough of Windsor & Maidenhead and Wokingham Borough Council). The purpose of the LAA is to detail the current and predicted situation in Central and Eastern Berkshire with respect to all aspects of aggregate supply.

Land-won Aggregate

Sand and Gravel

In terms of aggregates, Central and Eastern Berkshire's geology provides both sharp sand and gravel and soft sand. Aggregates used within Central and Eastern Berkshire are sourced from land-won resources, recycled aggregate and imports.

Within Central and Eastern Berkshire, there were four active quarries in 2022. There have been no operational quarries within Slough Borough (which adjoins Central and Eastern Berkshire) for 14 years.

Soft sand resources in the area are generally poor quality and are no longer principally extracted within Central and Eastern Berkshire. This places a reliance on imports to address the lack of local supply.

Sales of sand and gravel decreased 14% in 2022 by 89,000 tonnes. The overall trajectory of 10-year sales is decreasing and the pattern of sales is broadly similar to the South East.

Crushed Rock

Central and Eastern Berkshire is dependent on imports of crushed rock predominately from Somerset who have confirmed no issues with ongoing supply.

Supply is imported via rail depots in West Berkshire. There is currently no evidence that suggests a need to increase capacity at rail depots for imports.

Marine Sand & Gravel

Marine-won sand and gravel is a small but growing proportion of the total aggregate consumed in Berkshire. Marine imports are predominately from London Wharves and Hampshire. Currently there is no evidence of a need to increase capacity at the rail depots.

Recycled & Secondary Aggregate

Sales of recycled aggregate in Central and Eastern Berkshire decreased in 2022. Capacity survey information was limited but indicates that recycled aggregate sites capacity has fallen.

Future Aggregate Supply

There are a number of major infrastructure projects as well as local housing and transport projects which indicate growth and therefore, an increase in aggregate demand.

Reserves of sand and gravel in Central & Eastern Berkshire with planning permission for extraction (permitted reserves) at 31st December 2022 were 5,569,404 tonnes (discounting Star Works as this is inactive).

The total landbank for all land-won aggregate based on 10-year average is 9.42 years. Based on three-year average sales, the landbank is 10.1 years, although the landbank is not necessarily an accurate reflection of supply. The 2022 APR Rate has been reduced from 0.628Mt to 0.59Mt.

The Central & Eastern Berkshire Authorities recently adopted a Joint Minerals & Waste Plan which provides a framework for minerals and waste developments up to 2036.

The Plan includes allocations for sharp sand and gravel, an aggregate wharf and a recycled aggregate site. However, the proposals do not meet the required demands for Central and Eastern Berkshire and therefore, the sites are supported by criteria-based policies and an 'Area of Search' for sand and gravel.

It is estimated that the demand for soft sand over the Plan period will be in the region of 1.0 million tonnes (65,000 tonnes per year). Sources will need to be secured from elsewhere.

Conclusions

Central and Eastern Berkshire's current local aggregate provision will impact on the wider South East region as a whole if new development is not enabled to meet the forecasted demand up to 2036. Central and Eastern Berkshire is reliant on supplies from other mineral planning authority areas and as such this will need to be given consideration in other relevant Mineral Local Plans through the duty to cooperate and strategic cross-boundary liaison.

1. Introduction

- 1.1 The purpose of this Local Aggregate Assessment (LAA) is to detail the current and predicted situation in Central and Eastern Berkshire with respect to all aspects of aggregate supply.
- 1.2 The National Planning Policy Framework (NPPF)¹ sets out the requirement for local authorities to produce an annual LAA, stating that '*Minerals planning authorities should plan for a steady and adequate supply of aggregates by 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)*'.
- 1.3 Bracknell Forest Council, Reading Borough Council, the Royal Borough of Windsor and Maidenhead and Wokingham Borough Council (collectively referred to as the 'Central & Eastern Berkshire Authorities') have worked in partnership to produce the Central and Eastern Berkshire - Joint Minerals & Waste Plan. The Plan sets out what provision of minerals is required, where these may be located; when they are to be provided and how they will be delivered during the Plan period to 2036.
- 1.4 This is the Local Aggregate Assessment (LAA) for Central and Eastern Berkshire and covers the administrative areas of the plan making partners. The purpose of the LAA is to detail the current and predicted situation in Central and Eastern Berkshire with respect to all aspects of aggregate supply, in particular with regard to land-won aggregate provision up to 2036.
- 1.5 It is important to note that the data used in the preparation of this LAA predominantly comes from the annual monitoring of aggregates sales by the Central & Eastern Berkshire Authorities on behalf of the South East England Aggregate Working Party (SEEAWP). The Aggregate Monitoring (AM) survey is used to collect annual sales data from active mineral extraction sites, aggregate wharves, aggregate rail depots and recycled aggregate processing sites.

¹ National Planning Policy Framework, paragraph 213(a):
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf

2. Land Won Aggregate

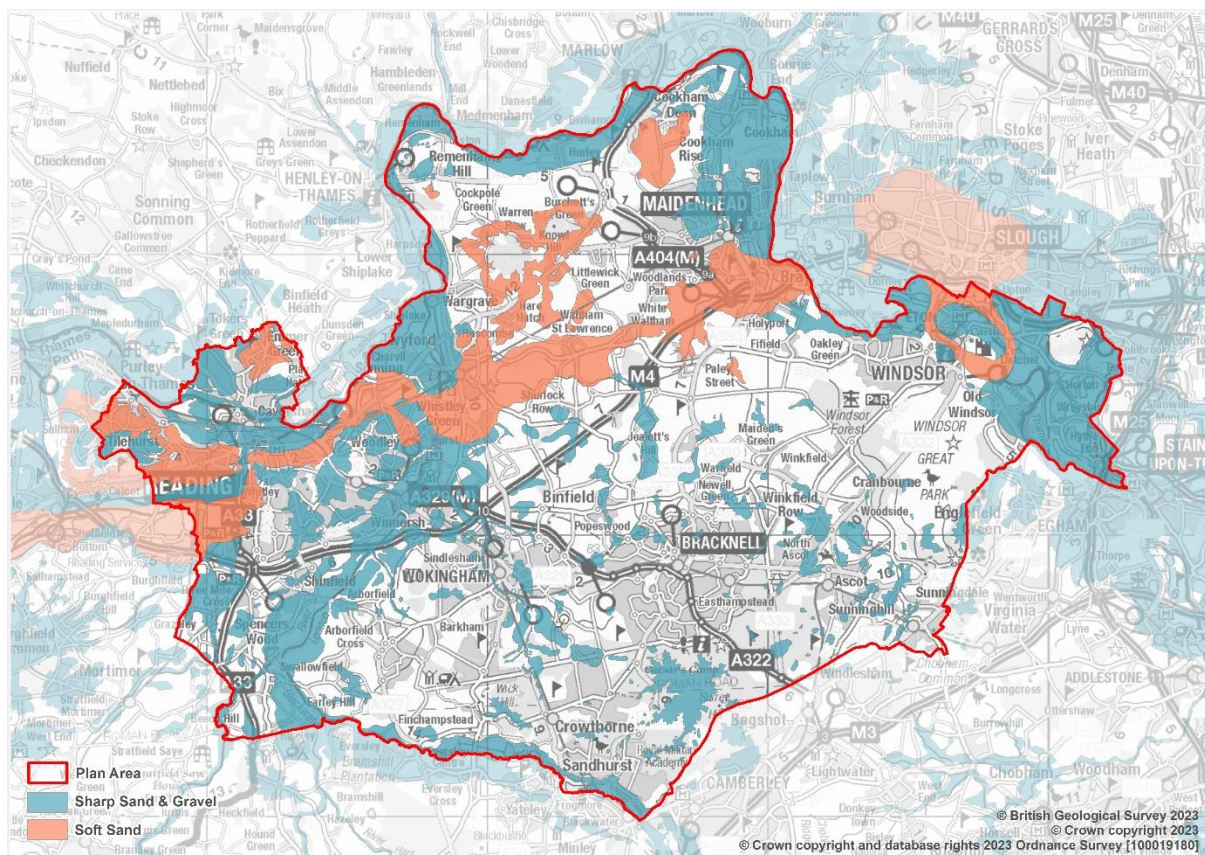
Geology of Central and Eastern Berkshire

2.1 The geology of Central and Eastern Berkshire is underlain by three main types of minerals: sand and gravel, chalk and clay. There are no deposits of crushed rock.

2.2 In terms of aggregates, Central and Eastern Berkshire's geology (see Figure 1) provides the following:

- Sharp sand and gravel; and
- Soft sand.

Figure 1: Sand and gravel resources in Central and Eastern Berkshire.



2.3 Central and Eastern Berkshire has the capability of supplying aggregates from a number of sources including:

- land-won extraction;
- recycled and secondary aggregate; and
- imported aggregate (via rail depots)².

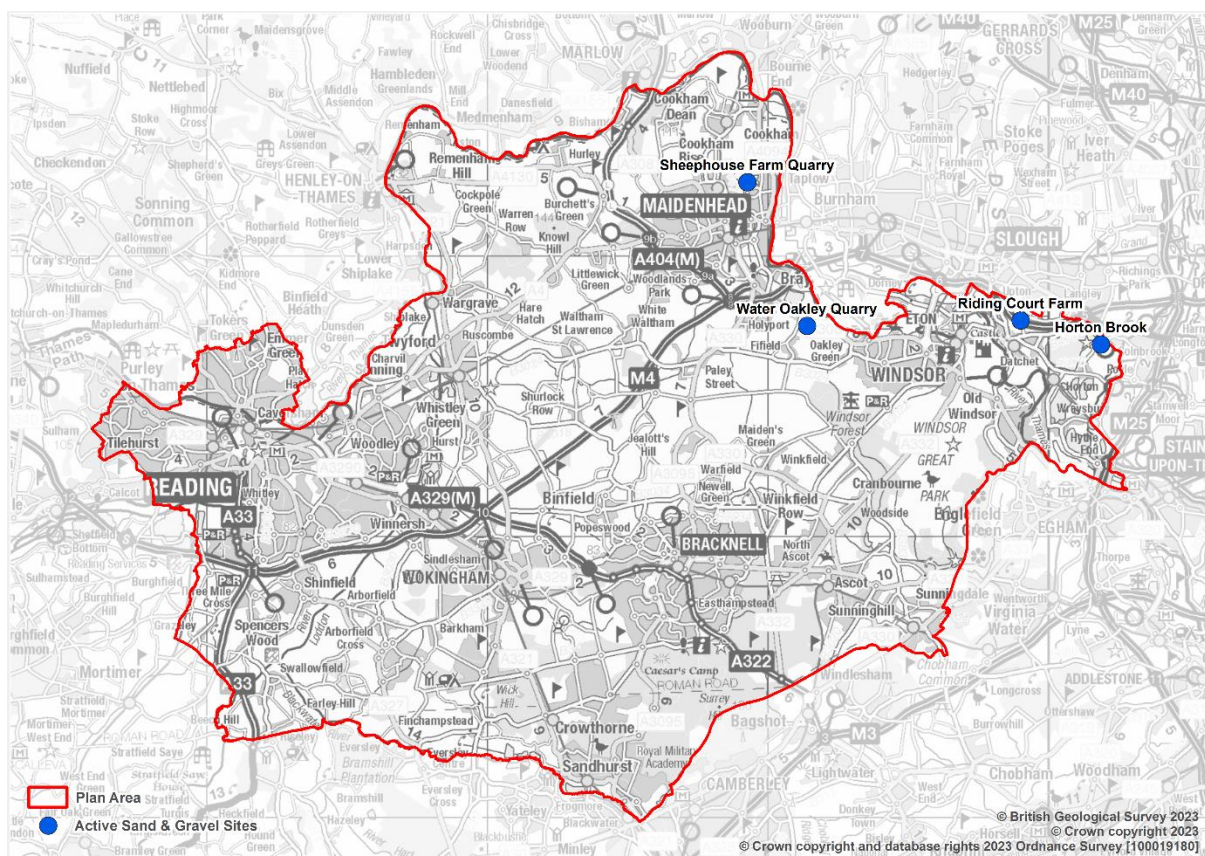
² Estimate of imports by road can be found in the AM 2019 [National Collation](#).

2.4 Further information regarding the detailed geology can be found in the *Minerals: Background Study (2020)*³ which was produced in support of the Joint Minerals and Waste Plan.

Permitted Sites Producing Sand and Gravel in Central and Eastern Berkshire

2.5 Figure 2 shows the location of the active quarries in Central and Eastern Berkshire in 2022 which were predominately located in the north and east within the Royal Borough of Windsor and Maidenhead. The last quarry in the south of the area closed in 2017, meaning that the supply of sand and gravel is currently produced entirely in the north east of the Plan area.

Figure 2: Location of active quarries in Central and Eastern Berkshire, 2022



³ Minerals Background Study (2020): <https://documents.hants.gov.uk/environment/Regulation19-ProposedSubmissionConsultation-JCEBMineralsBackgroundStudy-ProposedSubmission.pdf>

- 2.6 The number of extraction sites has started to make a recovery in recent years. In 2017 two sites closed; Eversley Quarry and Kingsmead Quarry. In addition, Star Works, Knowl Hill has permitted reserves but is an inactive site.
- 2.7 However, an application was granted for an extension at Horton Brook Quarry, Horton⁴ in 2018 due to greater reserves being identified and Poyle Quarry, Horton was granted permission in January 2019⁵. This has not been included in Figure 1 as the site is not yet operational. In addition, permission was granted for the extraction of 1.7Mt of sand and gravel at Water Oakley, which is now operational.
- 2.8 Extraction sites have not been operational within the administrative area of Slough Borough Council for over 10 years. However, a number of sites operate on the boundary of the area.
- 2.9 Soft sand resources in the area are generally poor quality with pockets of material of economic interest in a small number of areas. This is highlighted in Table 1 by the identification of only two quarries that have been producers of soft sand; Star Works in the North which retains permitted reserves and Kingsmead Quarry which had some incidental extraction in the West. However, with the closure of Kingsmead Quarry and Star Works being inactive, there are no sites currently producing soft sand. This places a reliance on imports to address the lack of local supply. A Soft Sand Study⁶ produced to support the Joint Plan highlights that soft sand is supplied by various mineral planning authority areas in the wider Thames Valley area.
- 2.10 In contrast, sharp sand and gravel is more widely distributed throughout Central and Eastern Berkshire.
- 2.11 Table 1 provides details of the aggregate extracted at each permitted site.

⁴ Horton Brook Quarry Application <http://publicaccess.rbwm.gov.uk/online-applications/applicationDetails.do?keyVal=P0UNO2NIKKC00&activeTab=summary>

⁵ Poyle Quarry Application: <http://publicaccess.rbwm.gov.uk/online-applications/applicationDetails.do?keyVal=OYZQ75NI0QY00&activeTab=summary>

⁶ Soft Sand Study (2020), formed part of Reg 19 Consultation in Examination library: <https://www.hants.gov.uk/berksconsult>

Table 1: Permitted active quarries in Central and Eastern Berkshire, 2022

Site	Operator	Aggregate	Status in 2021
Horton Brook Quarry	Aggregate Industries / Jayflex Aggregates Ltd	Sharp Sand & Gravel	Active
Riding Court Farm	CEMEX	Sharp Sand & Gravel	Active
Sheephouse Farm	Summerleaze Ltd	Sharp Sand & Gravel	Active
Water Oakley Quarry	Summerleaze Ltd	Sharp Sand & Gravel	Active

2.12 Sheephouse Farm, Horton Brook, Poyle and Star Works are located within the Green Belt.

Sand and Gravel Production and Sales

2.13 The sales of land-won sand and gravel in Central and Eastern Berkshire are shown in Table 2. Whilst the overall trajectory of sales of the last ten years has been decreasing, sales have fluctuated over the 10-year period, with sales peaking in 2014.

2.14 More recently, sales of sand and gravel had shown a small but steady increase from 2016 to 2021. However, sales decreased in 2022 by 89,000 tonnes (15%).

Table 2: Land-won sand and gravel sales in Central and Eastern Berkshire, 2013-2022 (Thousand tonnes, Tt)

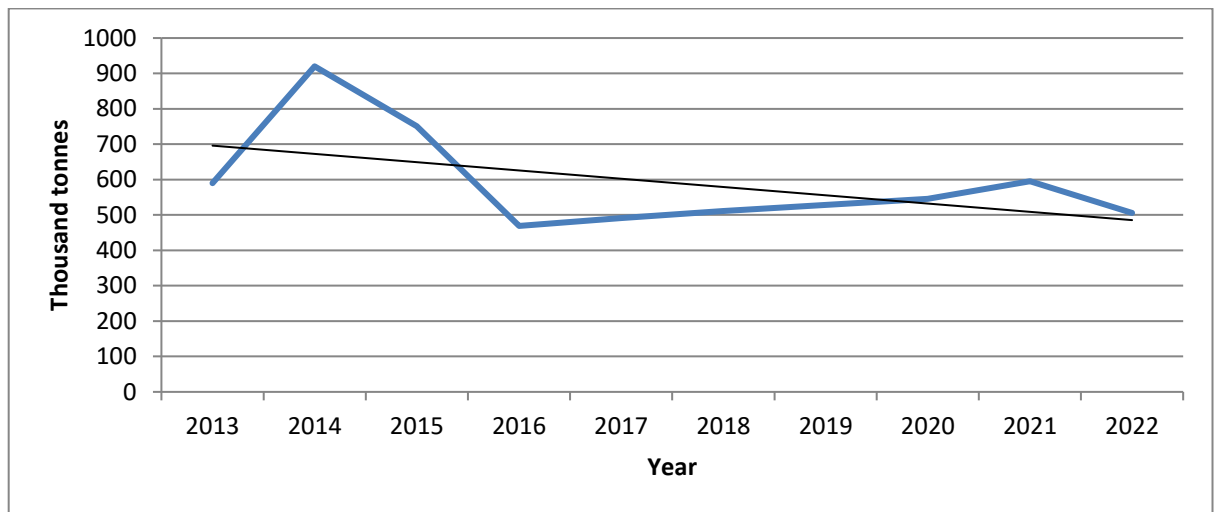
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Last 3 yr average	Last 10 yr average
Total Sales	590	920	751	469	491	511	528	546	595	506	549	591

Footnotes

Soft sand (SS) sales are contained with the total soft sand/sharp sand and gravel figure. SS sales are so small they cannot be individually revealed

Source: Aggregate Monitoring Surveys, 2013-2022

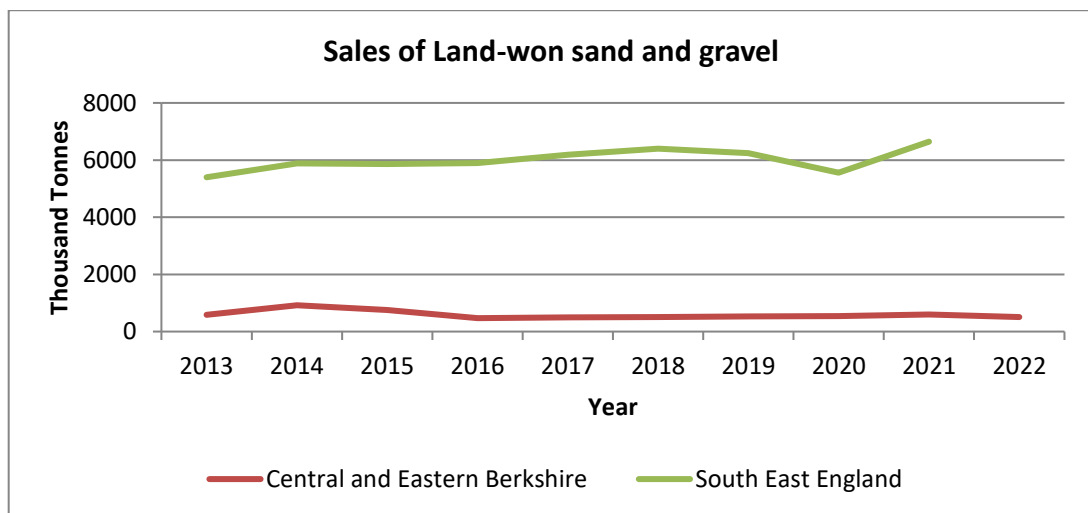
Figure 3: Sales of land-won Sand and Gravel in Central and Eastern Berkshire



Source: Aggregate Monitoring Surveys, 2013-2022

2.15 When compared to the sales for South-East England (see Figure 4), the trends in Central and Eastern Berkshire appear to be broadly similar and follow the pattern between 2012 and 2021. South-East figures⁷ for sand and gravel sales decreased in 2020 but rebounded in 2021. Sales in Central and Eastern Berkshire followed this trend, but not to the same extent as can be seen when plotted below. This figure will be updated with the latest 2022 South-East figures when available.

Figure 4: Sales of land-won sand and gravel in South-East England and Central and Eastern Berkshire



Source: South-East England Aggregates Monitoring Report 2021

*South East sales figures are estimated for 2019.

⁷ South- East England Aggregates Working Party Annual Report 2021 (January 2022)

2.16 Mineral planning authority boundaries do not influence the flow of minerals. The market dictates that sand and gravel will be obtained from the cheapest location for that material. Where the demand in Central and Eastern Berkshire can be satisfied most efficiently and cost effectively from locations in other areas, then it will.

2.17 Table 3 shows the consumption of aggregate both imported from external areas and supplied from sources within Berkshire.

Table 3: Total consumption of Primary Aggregate in Berkshire, 2009, 2014, and 2019

Berkshire	Land Won Sand and Gravel			Total sand and gravel			Crushed Rock			Total Primary Aggregates		
	2009	2014	2019	2009	2014	2019	2009	2014	2019	2009	2014	2019
Imports	298	353	511	396	864	753	861	1,161	886	1257	2,025	1,639
Consumption	807	601	741	905	1342	953	875	1,161	886	1780	2,503	1,839
Consumption %	45%	31%	40%	51%	71%	52%	49%	61%	48%	100%	100%	100%
Imports/Consumption %	37%	59%	69%	44%	64%	79%	98%	100%	100%	71%	81%	89%

Source: Collation of the results of the 2009, 2014, and 2019 Aggregate Minerals survey for England & Wales (Department for Communities and Local Government).

*Consumption is determined by total sold internally plus total imported.

**The difference in import and consumption amounts are due to known historic inaccuracies in the 2009 National Collation data and is not considered significant. There is no reported evidence of further flows of crushed rock from Berkshire to other areas.

2.18 In 2019, Berkshire was producing 587 Thousand tonnes (Tt) with sales split by 345 Tt sold internally within Berkshire. A further 125 Tt was sold in the South East region, the principal destinations being Surrey and Buckinghamshire (including Milton Keynes) and 117 Tt sold to locations elsewhere (predominantly West London).

2.19 There is no marine-won sand and gravel produced within Berkshire as it is land locked nor is there any crushed rock due to geological constraints. In 2019, Berkshire was also importing 511 Tt of land-won sand and gravel.

2.20 Although it is not possible to determine exactly what level of these imports reach Central and Eastern Berkshire, the movements need to be taken into consideration when forecasting future demand.

2.21 Table 3 shows an overall decrease in supply of primary aggregates from sources within Berkshire during this period but also an increasing reliance on Primary Aggregate imports.

3. Crushed Rock

- 3.1 Central and Eastern Berkshire does not have any natural hard rock resources and therefore relies on imports of crushed rock such as limestone and granite to meet demand for this type of aggregate.
- 3.2 Information from the BGS shows that Somerset is the dominant source of crushed rock for Berkshire. Somerset had some 380 million tonnes of approved reserves of crushed rock (equivalent to 28.4 years landbank at the most recent sub regional apportionment rate)⁸. While not all the quarries in Somerset whose reserves are included in the landbank have rail connections, those that do form a significant proportion of the total. Provided Somerset maintains its productive capacity it is estimated that there are sufficient reserves available to supply ongoing market demand. There are currently no known issues with continuation of supply.
- 3.3 The importation and consumption of crushed rock within Berkshire is captured within the aggregate monitoring data. Data is only available for the wider Berkshire area which shows that all the crushed rock that is imported into Berkshire is then consumed within Berkshire (see Table 3). Therefore, there is no reported evidence of further flows of crushed rock from Berkshire to other areas.
- 3.4 There are currently no operational rail depots to receive crushed rock imports within Central and Eastern Berkshire. As such, it is assumed that the area is served predominately by the rail depots in the wider Berkshire area, most notably at Theale in West Berkshire District but supported by Colnbrook in Slough Borough. All crushed rock is then transported by road within the Plan area.
- 3.5 Whilst capacity does exist at these rail depots, Central and Eastern Berkshire is fully reliant on the continued operation of these depots and any threat to this provision would have a significant impact.
- 3.6 The crushed rock sales (from rail imports) in Berkshire and Hampshire recorded over the last 10 years are detailed in Table 4.

⁸ Somerset Local Aggregate Assessment (Fourth Edition):

<https://www.somerset.gov.uk/planning-buildings-and-land/evidence-base-and-monitoring/monitoring/>

Table 4: Crushed rock sales from rail depots and wharves in Berkshire (Berks) and Hampshire (Hants), 2013-2022 (Thousand tonnes, Tt)

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10 yr average	3 yr average
Berks & Hants	1090	1208	1565	1517	1733	2042	1768	1935	1942	1412	1621	1763

Footnotes

Source: AM Surveys

In 2021, 87% of the aggregates sold from wharves and rail depots were crushed rock

- 3.7 Sales of crushed rock were increasing between 2013 and 2018, with a sharp decrease in sales in 2019. Sales were recovering over two years from 2020 to 2021. However sales decreased by 27% in 2022.
- 3.8 There have been no supply issues identified with Somerset County Council that would affect the future supply of crushed rock to the South East Region which includes Berkshire. Should future demand increase, the issue lies with the capacity of the rail depots to manage a higher level of imports, rather than with future supply.
- 3.9 The safeguarding of the rail depots at Theale, West Berkshire will be important for Central and Eastern Berkshire to ensure a supply of crushed rock, unless a suitable rail depot is located within the Plan area.

4. Marine-won sand and gravel

- 4.1 Central and Eastern Berkshire has no wharves for the landing of marine-won sand and gravel. However, the Aggregate Monitoring (AM) 2014 National Collation data (see Table 4) highlighted that Berkshire's level of imported marine-won sand and gravel represented 5.5% of the total primary aggregate consumed in 2009 and this rose to approximately 8% in 2014⁹ and 10.4% in 2019¹⁰.
- 4.2 Imports into Berkshire in 2009 were 98 Tt which equated to nearly 8% of the total primary aggregates. This rose to 9% in 2014 with 152 Tt of imported marine aggregate. This rose again to 10.4% to 213 Tt in 2019. As such, marine-won sand and gravel forms a small but growing proportion of the overall supply of aggregate to Berkshire. Although, it is not possible to determine exactly what level of this supply reaches Central and Eastern Berkshire, it needs to be taken into consideration when considering future demand.
- 4.3 The AM 2019 National collation data provides details on the sources of the imported marine sand and gravel and highlights that the main source is from Greater London which suggests that this is marine dredged material that has been landed at London wharves, probably by rail. The second greatest source is Medway. It is likely that this material will have travelled into Berkshire by rail, but it is also possible that the mineral was transported via road.
- 4.4 Any additional provision would preferably be by rail. As with the importation of crushed rock, there is no current evidence to suggest a need for increased capacity at the rail depots surrounding and servicing Central and Eastern Berkshire, although existing capacity should be safeguarded.

⁹ Collation of the results of the 2014 Aggregate Minerals Survey for England and Wales - www.gov.uk/government/uploads/system/uploads/attachment_data/file/563423/Aggregate_Minerals_Survey_England_Wales_2014.pdf

¹⁰ <https://www.gov.uk/government/publications/aggregate-minerals-survey-for-england-and-wales-2019>

5. Recycled/Secondary Aggregates

- 5.1 Data pertaining to sales of recycled or secondary aggregates is collected annually as part of the AM surveys carried out by mineral planning authorities. Figure 5 shows the location of all active recycled aggregate sites in operation in Central and Eastern Berkshire during 2022 that were surveyed. It should be noted that whilst all sites were surveyed, not all responded. As such, the results should be treated with caution and used to only indicate a general trend of what is happening.
- 5.2 Three sites were surveyed as producers of recycled and secondary aggregates in Central and Eastern Berkshire and only one responded. Where capacity information has not been made available Environment Permit information has been used (see Table 5).
- 5.3 Permission was granted this year for a recycled aggregates site at Horton Brook, which was an allocated site in the Joint Minerals and Waste Plan. The site is not included in Table 5, which shows active sites in 2022 but will be included as part of next year's LAA.

Table 5: Recycled aggregate capacity, 2022

Facility Name	Unitary Authority	Recorded⁽¹⁾ Capacity (tonnes) 2022	Estimated⁽²⁾ Permanent Capacity (tonnes) 2022
Datchet/Riding Court Farm	Windsor & Maidenhead	75,000	0
Horwoods, Kimber Lane	Windsor & Maidenhead	4,800*	4,800*
Fowles Crushed Concrete Ltd	Windsor & Maidenhead	125,000*	125,000
Fleetwood Grab Services	Reading	75,000*	5,000
Total		264,800	134,800

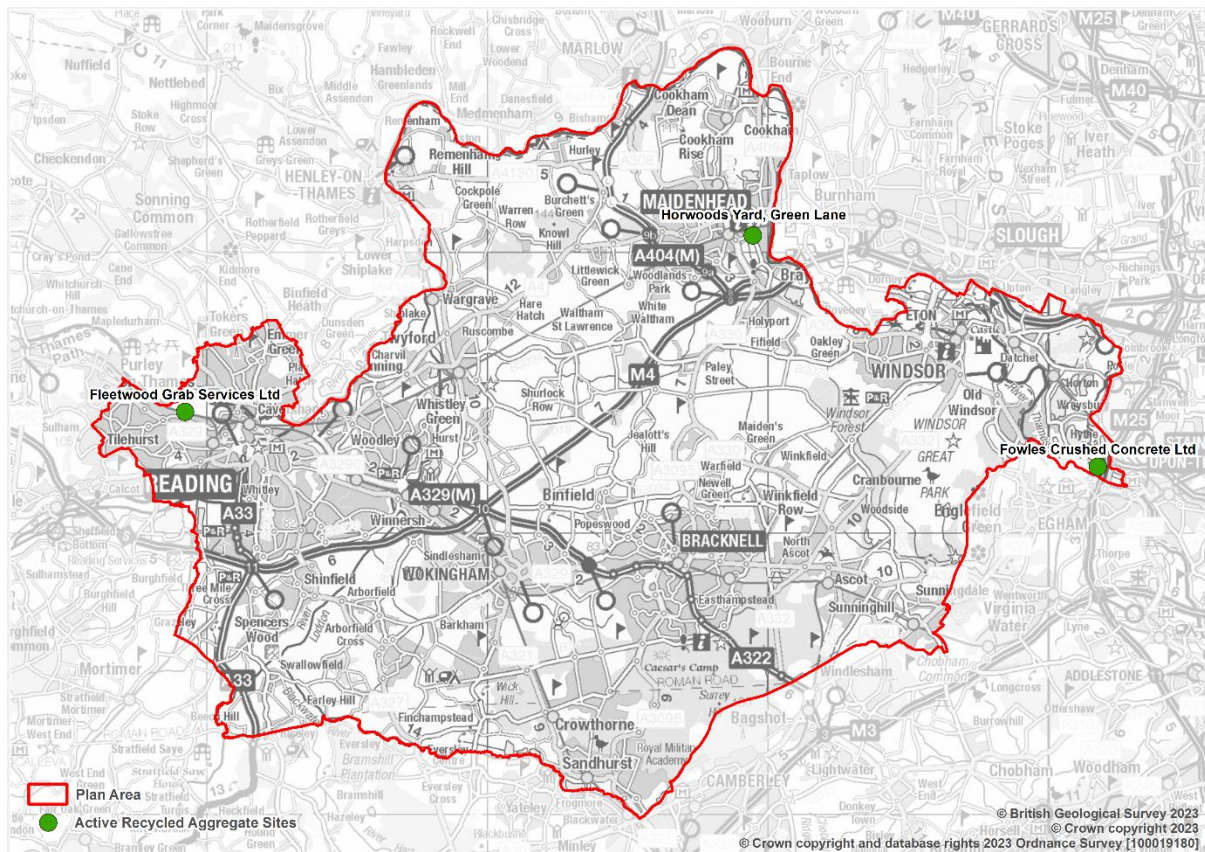
Source: (1) AM2022 returns, EA Permit (*) or Planning Permission where no return information available. (2) Permanent capacity only and likely operational capacity.

- 5.4 The operational capacity at Fleetwood and Fowles is likely to be similar to Horwoods as capacities provided in EA Permits are given as ranges or are for all activities on a site. Should this be the case, the reality of permanent aggregate recycling capacity is likely to be approximately 135,000 tonnes.

5.5 Permission was granted for aggregate recycling at Riding Court Farm/Datchet Quarry¹¹ in 2018 which is time limited to the life of the Quarry but is currently yet to commence operations.

5.6 Figure 5 shows the location of active recycled sites in Central and Eastern Berkshire.

Figure 5: Location map of active recycled aggregate sites in Central and Eastern Berkshire, 2022



5.7 The sales figures of the recycled and secondary aggregate in Berkshire for the most recent 10-year period, 2013-2022 are shown in Table 6.

¹¹ Riding Court Farm/Datchet Quarry Application: <http://publicaccess.rbwm.gov.uk/online-applications/applicationDetails.do?keyVal=P5ZAR3NIJW700&activeTab=summary>

Table 6: Recycled and Secondary aggregate sales in Central and Eastern Berkshire, 2012-2021 (Thousand tonnes, Tt)

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10 yr average	3 yr average
Berkshire	404	587	602	498	450	459	433	342	362	380	454	361
Central & Eastern Berkshire		85	103	128	131	138	92	89	117	77		94

Footnotes

Source: Aggregate Monitoring Surveys, 2012-2021

- 5.8 Sales for Central and Eastern Berkshire dropped significantly in 2019 breaking the previous trend of increasing sales. These figures have continued to fall in 2020 to 89Tt, following the closure of Hindhay Quarry’s and Bray’s recycling facilities. Sales fell further still in 2022 to 77Tt.
- 5.9 Sales data for the Central and Eastern Berkshire area is only available for a nine-year period. The Central and Eastern Berkshire sales represent an average of 21% of the Berkshire Total. If this average was applied to the Berkshire 10-year sales, this would suggest a 10-year trend of 94 Tt per year for Central and Eastern Berkshire.

6. Future Aggregate Demand

- 6.1 The Central & Eastern Berkshire Authorities have worked together to produce the recently adopted Joint Minerals & Waste Plan which supersedes the *Replacement Minerals Local Plan for Berkshire* adopted in 1995 and subsequently adopted alterations in 1997 and 2001¹².

Construction project demands

- 6.2 Infrastructure projects are likely to place an additional demand on the future supply of aggregates in Central and Eastern Berkshire. These relate to both housing, supporting facilities and transport projects. Using the 'Indicative Housing need figures for Local Planning Authorities' briefing¹³, the requirement for Central and Eastern Berkshire over the plan period is in the region of 47,000 new homes (based on the August 2020 methodology).
- 6.3 Other National Infrastructure projects within 30-50 miles of Central and Eastern Berkshire include the potential of an additional runway at Heathrow¹⁴, the Datchet to Teddington flood defences and improvements to the M25 and M3. A distance of 30-50 miles is the estimated distance over which the majority of sand and gravel produced is transported.
- 6.4 All these projects are of significant scale and require the future demand to be accounted for in future aggregate supplies, over and above the annual infrastructure delivery programme. The Infrastructure Delivery Plans for each authority contains more information on the level of future development planned for the area, which cumulatively will place additional pressure on aggregate supplies.
- 6.5 The indication is of sustained infrastructure delivery in the future within the Central and Eastern Berkshire area, leading to an increase in future aggregate demand.
- 6.6 To meet future aggregate demand, including the infrastructure projects discussed above, Central and Eastern Berkshire needs to maintain a sufficient aggregate landbank and a greater emphasis should be placed on encouraging recycled and secondary aggregate sites to supply future demand.

¹² Replacement Minerals Local Plan for Berkshire (2001) - www.bracknell-forest.gov.uk/replacement-minerals-local-plan-for-berkshire-2001.pdf

¹³ Research Briefing (2021) - [Calculating housing need in the planning system \(England\) - House of Commons Library \(parliament.uk\)](https://commonslibrary.parliament.uk/research-briefings/cr2021-0011/)

¹⁴ On 27 February 2020, the Court of Appeal ruled the decision to allow the expansion was unlawful because it did not take climate commitments into account. The future of the proposal remains unclear.

- 6.7 Central and Eastern Berkshire is reliant on imports of aggregates, therefore looking at sales of aggregate in isolation does not represent current demand.
- 6.8 In addition to the 10 years rolling sales data, other relevant information relating to future need has also been assessed. These include forecasts and data from national bodies relating to demand, growth and future need. A range of relevant growth forecast factors have been applied to the sales data returned this year to gauge whether the 10 year average sales data is an appropriate provision rate, or whether there is likely to be an increase or decrease in this demand. It is accepted that 10 year sales data does encompass trends, but can be slow to adjust to rapid trends.
- 6.9 The approach whereby growth factors are applied to sales data returned that year has been used consistently for the past 5 years in the LAA's produced by the Central and Eastern Berkshire authorities.
- 6.10 A range of growth factor forecasts were used to assess future demand levels. These include:
- MPA growth factor- including 2023 forecast of -3%, Future Lower range +2% and higher range +3%¹⁵
 - Construction growth factor – including -4.7% in 2023 followed by +0.6% in 2024¹⁶
 - Population growth factor - +3.2%¹⁷
 - Bank of England GDP growth factor – flat 2023, +0.9% in 2024 and +0.7% in 2025¹⁸
- 6.11 The data reported in this LAA has shown a decline in sales, which the Mineral Products Association has attributed to the result of unprecedented cost pressures, unusual weather conditions and a looming economic recession¹⁹. The growth factors listed in paragraph 6.10 are much lower and more variable than those used in previous LAAs. It is a very difficult time to forecast future demand, particularly over a longer time frame such as the plan period. However, using the best information available at this time helps to make a more robust estimate on the appropriate APR to set for each aggregate.

¹⁵ MPA forecast -

mineralproducts.org/MPA/media/root/Documents/2023/Regional_overview_of_construction_and_mineral_products_markets_in_GB_Spring_2023.pdf

¹⁶ Construction Growth Factor - [Construction Industry Forecasts - Spring 2023 \(constructionproducts.org.uk\)](https://constructionproducts.org.uk)

¹⁷ Berkshire Population Growth [National population projections - Office for National Statistics](https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections)

¹⁸ Bank of England Growth Factor - [Monetary Policy Report - February 2023 | Bank of England](https://www.bankofengland.co.uk/monetary-policy-reports)

¹⁹ MPA - Regional Overview of construction and mineral products markets in Great Britain (2023) - mineralproducts.org/MPA/media/root/Documents/2023/Regional_overview_of_construction_and_mineral_products_markets_in_GB_Spring_2023.pdf

6.12 The following sections therefore look at forecasting to the end of the plan period, 2036.

Sand and Gravel

6.13 The growth factors listed in paragraph 6.10 were applied in turn to the 2022 reported sales figure for sand and gravel and forecast to the year 2036. Reviewing the output of those growth factors, the annual provision rate (APR) is set at **0.59Mt**.

6.14 This is based on the 10-year average sales figure. This is a slight reduction on the 2021 rate, reflecting the ongoing period of lower sales, but considered to better reflect the future level of demand. The annual LAA will allow for this rate to be kept under review and revised as necessary.

Recycled and secondary aggregate

6.15 The growth factors listed in paragraph 6.10 were applied in turn to the 2022 reported sales figure for recycled and secondary aggregate and forecast to the year 2036. Reviewing the output of those growth factors, the annual provision rate (APR) is set at **0.1Mt**.

6.16 This again is based on the 10-year average sales figure, which was more in line with the forecast figures. This is lower than the 2021 rate, reflecting a sustained period of lower sales.

6.17 The APR figures set out in this section have been derived using the relevant data and information. The forecast figures and the use of 10-year sales data has informed the decision on the rates. All rates will be kept under review and revised as appropriate in the next LAA.

Landbank

6.18 The NPPF²⁰ requires Mineral Planning Authorities to make provision for the maintenance of a landbank of at least seven years for sand and gravel. The seven-year landbank stipulated is the absolute minimum level of provision required and Mineral Planning Authorities should seek to maintain a landbank above this level.

¹⁸National Planning Policy Framework (Feb 2021)
[National Planning Policy Framework \(publishing.service.gov.uk\)](https://www.gov.uk/publishing.service.gov.uk)

6.19 Reserves of sand and gravel in Central & Eastern Berkshire with planning permission for extraction (permitted reserves) on 31 December 2022 were 6,108,820 tonnes (discounting Star Works as this is inactive).

6.20 Table 7 shows that a landbank based on 2022 sales figures is 11.0 years. The total landbank for all land-won aggregate based on 10-year average is 9.4 years which is above the 7 years required by the NPPF. Based on 3-year average sales the landbank is 10.1 years.

6.21 Application of the 2022 APR Rate results in a landbank of 9.4 years.

Table 7: Central and Eastern Berkshire sand and gravel reserves and landbank 2022

	Permitted Reserve (Tt)	Landbank based upon 10yr average sales between 2013-2022 (years)	Landbank based upon 3yr average sale between 2020-2022 (years)	Landbank based upon 2022 sales (years)	Landbank based on 2022 APR Rate
Total Sand & Gravel	5,569	9.4	10.1	11.0	9.4

Source: Aggregate Monitoring survey data.

Future provision of sand and gravel

6.22 The adopted Joint Plan period is up to 2036 and outlines a requirement of 5,447,000 tonnes of sand and gravel during the life of the Plan.

6.23 Poyle Quarry (the last remaining allocation from the adopted Plan in the area) was granted planning permission in January 2019²¹. An application for Water Oakley, Holyport was permitted July 2020²².

6.24 The adopted Plan contains Development Management policies and allocations. The allocations include two sharp sand and gravel extension sites, an aggregate wharf and one aggregate recycling site. No soft sand sites were identified for inclusion in the Plan. The proposed allocations are not sufficient to meet the identified needs of Central and Eastern Berkshire and therefore, the allocations are supported by criteria-based policies and in the case of sand and

²¹ Poyle Quarry Application: <http://publicaccess.rbwm.gov.uk/online-applications/applicationDetails.do?keyVal=OYZQ75NI0QY00&activeTab=summary>

²² Water Oakley Application: <http://publicaccess.rbwm.gov.uk/online-applications/applicationDetails.do?keyVal=PHF8GVNI0CV00&activeTab=summary>

gravel, an 'Area of Search' to enable further development proposals to come forward.

6.25 There is no available soft sand sales data to determine what the future demand of soft sand during the Plan period will be. A study was undertaken during 2019 to identify where soft sand is supplied from. It concluded that soft sand is supplied to Central & Eastern Berkshire from a range of neighbouring authorities and is not reliant on any one source.

6.26 As the Plan area is reliant in imports, sources of this supply will need to be secured from elsewhere. However, neighbouring authorities such as West Berkshire, Hampshire and Surrey have constrained soft sand resources due to Areas of Outstanding Natural Beauty and the South Downs National Park. Therefore, future supply may need to be considered from alternative sources such as marine or brought into the Plan area from greater distances. However, it is recognised that greater distances are less sustainable due to the transport impacts.

Capacity

6.27 Site capacity is included as part of the Aggregate Monitoring 2022 survey. By understanding current capability of sites, through capacity, it is hoped that this information can be used to assist planning for future demand. The results of this are shown in Table 8.

Table 8: Total sales and estimated production capacity, 2022

	Sales (Mt)	Capacity* (Mt)	% Sales / Production	Capacity 3 yr average (Mt)
Land-won Aggregate	0.506	1.19	43%	1.23
Recycled Aggregate	0.08	0.175	46%	0.19

Footnotes

Source: Aggregate Monitoring Survey, 2022. Please note collecting capacity data from operators in this manner is still in early stages and therefore the results should be treated with caution

6.28 Capacity for land-won aggregate has remained at a consistent level over six years. There was a slight decrease in 2022, from 1.25Mt to 1.19Mt (-5%).

6.29 Capacity for recycled aggregate decreased by 0.02Mt in 2022 but has remained broadly level for the past 3 years. Overall capacity for recycled and

secondary aggregates has decreased since data started being collected 7 years ago.

- 6.30 It is possible to compare sales with capacity to understand void production capacity. Table 8 indicates that for land-won aggregate, there is the potential for sales to be on average over 50% higher than currently recorded. However, land-won sales are dictated by the needs of industry. But it does suggest that there is sufficient capacity to accommodate uplift in demand as a result of future development.
- 6.31 The returns data suggests that recycled and secondary aggregate sites are also currently operating under capacity. There has been a significant reduction in capacity since 2018 but overall, the indication is that there is still operational capacity to accommodate a significant uplift.
- 6.32 It is worth noting that not all operators returned information on capacity, and therefore the capacity data provided is not 100% accurate. There was a particular lack in return data provided for recycled and secondary aggregate sites. Data on recycled aggregate is notoriously difficult to determine due to the temporary nature of sites and the potential for unauthorised operations.

7. Conclusions and review of the LAA

- 7.1 This LAA has shown that Central and Eastern Berkshire's current local aggregate provision will impact on the wider South East region as a whole if new minerals development is not enabled to meet the forecast demand up to 2036.
- 7.2 Following a review of the current economic climate and future forecasts, the 2022 APR Rate is set at 0.593 mtpa for sharp sand and gravel. This rate will be kept under review.
- 7.3 Due to the lack of suitable resources, Central and Eastern Berkshire is reliant on supplies from other mineral planning authority areas which will need to be considered in other Mineral Local Plans through strategic cross-boundary liaison. This could be supported by Statements of Common Ground, which take into account the current sources of minerals whilst recognising the constraints on resources in some neighbouring areas and the potential impact this may have on future supply.
- 7.4 The need for any additional infrastructure, such as the further requirement for land-won extraction, is identified in the recently adopted Joint Minerals and Waste Plan and will be monitored through LAAs. Where it was not possible to identify sufficient sites to meet the identified needs of Central and Eastern Berkshire, the Joint Plan contains enabling policies to allow further opportunities to arise during the life of the Plan. The sand and gravel policy is supported by an 'Area of Search' to demonstrate the distribution of resources of sand and gravel across the Plan area to encourage suitable proposals to come forward for consideration.

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