



Cumbria and the Lake District National Park

Joint Annual Local Aggregates Assessment 2022 (incorporating figures for 2021)

EXECUTIVE SUMMARY

- 1.1 This Local Aggregates Assessment (LAA) is prepared jointly by Cumbria County Council (CCC) and the Lake District National Park Authority (LDNPA) and was ratified by the North West Aggregates Working Party on 15th February 2023. It forms part of the evidence base for monitoring and review of their local plans. The Cumbria Minerals and Waste Local Plan (CMWLP) 2015 -2030 was adopted by CCC in September 2017. The LDNPA has reviewed its local plan (which includes minerals policies) and the Lake District Local Plan (2020-2035) was adopted in May 2021.
 - 1.2 This LAA reports on the data from 2021. The sales, reserves and landbank provision figures for all aggregates in Cumbria (excluding sites within the Yorkshire Dales National Park boundary) are summarised in the table at the end of this chapter. Across all primary aggregates there has been an increase in sales compared to 2020. This is to be expected given the impact of restrictions on the economy during that year as a result of the Covid-19 pandemic.
 - 1.3 The increase in crushed rock sales is largely due to the increase in Limestone sales (2.1Mt compared to 1.89 Mt in 2020). The increase in sand and gravel sales is also significant (0.85Mt compared to 0.75Mt in 2020). Noticeable fluctuations in sales figures will influence the 10-year and 3-year average sales figures used as a starting point for considering LAA provision rates. The pattern of sales, reserve and landbank calculations over the past 3 years are shown in summary tables by aggregate type at the end of this chapter.
- Sand and Gravel**
- 1.4 Current permitted reserves of land-won sand and gravel for aggregate use (5.63Mt) are not sufficient to maintain the required landbank of at least 7 years throughout the Plan periods (2030 and 2035). **The LAA provision will continue to be based on 3-year average sales figures (currently 0.79Mt) giving a landbank of 7.12 years which would run out in early 2029.** In order to ensure permitted reserves remain above the “at least” 7 years landbank required by the NPPF, new reserves need to come on stream no later than 2022.

- 1.5 This means that, based on 3-year average sales, a 7-year landbank cannot currently be demonstrated beyond 2022. To maintain the landbank based on the lower 10-year average sales (0.7Mt) will require new reserves by the start of 2023.
- 1.6 An additional 7.01Mt of sand and gravel reserve is required to maintain a landbank of at least 7 years throughout the CMWLP period (to 2030) based on 3-year average sales figures.
- 1.7 Last year's LAA noted that a high proportion of the sales and reserve figures for sand and gravel quarries had been estimates due to a consistently low rate of survey returns. This year, 9 out of the 12 operators did return a survey and , of the 3 who did not, 2 have recently submitted planning applications which provided clarification of the reserve and anticipated extraction rates. As the majority of sand and gravel operators did confirm their sales figures this year this trend of increased sales is considered to be reliable evidence on which to base LAA provision rates.

Crushed Rock

- 1.8 Current permitted reserves of all crushed rock for aggregate use (114.28Mt) are more than sufficient to maintain the required landbank of at least 10 years throughout the Plan periods. **The LAA provision will continue to be based on 10-year average sales (2.80Mt) giving a land bank of 40.8 years.** In order to ensure permitted reserves for all crushed rock remain above the minimum 10 years required by the NPPF, new reserves will need to come on stream no later than 2052.
- 1.9 **The LAA provision for sandstone and igneous (excluding high specification aggregates) will be now be based on 10-year average sales (0.34Mt) giving a land bank of 58.6 years.** This reflects the fluctuating sales figures over recent years and is higher than the current 3 year average sales figure of 0.28Mt. In order to ensure permitted reserves for sandstone and igneous remain above the minimum 10 years required by the NPPF, new reserves will need to come on stream no later than 2070.
- 1.10 **The LAA provision for limestone alone (also excluding high specification aggregates) will continue to be based on 10-year average sales (1.99Mt) giving a land bank of 39.6 years.** This is comparable to the last LAA 10-year average sales figure of 2.0Mt. This will be kept under review. Increased sales and firmer timescales on some of the major infrastructure projects planned for the county would be factors in deciding whether departure from the 10-year average sales figure could be justified in future LAAs. Based on current 10-year average sales, in order to ensure permitted reserves for limestone remain above the minimum 10 years required by the NPPF, new reserves will need to come on stream no later than 2051.

High specification aggregates

- 1.11 Current permitted reserves of high specification (HSA) and very high specification aggregates (VHSA) for use as roadstone is 15.62Mt. This is sufficient to maintain the required minimum 10 year landbank throughout the Plan periods. **The LAA provision will continue to be based on 10-year average sales (0.47Mt) giving a landbank of 33.2 years.** This provision rate is consistent with 0.48Mt in 2020 but below the higher levels of 0.57 Mt in 2017, 0.54Mt in 2018 and 0.52Mt in the 2019 LAA (all based on 10-year average sales) and is below the current 3 year average sales of 0.49Mt Given the

scarcity of this resource it is important to manage release of the available reserve to ensure it is done in respect of actual demand rather than perceived demand.

- 1.12 This provision rate gives a landbank of 33.2 years which should last until 2055. To maintain a landbank of at least 10 years for these high specification aggregates throughout the CMWLP period new reserves would need to come on stream by no later than 2045. If the higher provision rate of 0.49Mt (based on 3-year average sales) was applied there would still be sufficient reserve to maintain the required landbank throughout the CMWLP period with new reserves needed by 2043.
- 1.13 Ghyll Scaur is the only operating quarry in England to produce the VHSA roadstone. This is a nationally important reserve and therefore demand is likely to increase as a result of planned growth in housing and infrastructure across the UK, not just within Cumbria. Any reduced production from quarries producing this aggregate in the Yorkshire Dales National Park will also place increased demand on the HSA and VHSA roadstone quarries within Cumbria. If 2021 sales are exceeded there may not be sufficient reserve remaining at the end of the Plan period in 2030 to provide a minimum 10-year landbank for VHSA alone. Sales, reserves and future demand for VHSA will continue to be monitored closely in future LAAs, including having regard to any further studies that may be carried out on the supply and demand for these high specification aggregates nationally

Alternative aggregates

- 1.14 It is estimated that around 0.3Mt of recycled aggregate was available for use in 2021 from recycling of inert waste, including around 0.07Mt of railway track ballast. In addition to the supply of recycled aggregate, there is a supply of secondary aggregate from slate waste from at least 2 of the slate quarries in Cumbria. There are no figures available to quantify this amount but, whilst these quarries remain active, slate waste continues to be a recognised source of secondary aggregate in Cumbria at this time.
- 1.15 Future supply of recycled aggregates will likely be linked to the amount of development and redevelopment taking place.

Managing supply and demand

- 1.16 Cumbria has traditionally supplied far more aggregate than is needed for its own use and this trend continues.
- 1.17 Many of the planned infrastructure requirements within Cumbria (see *Appendix 1 – Other Local Information*) are not expected to reach construction stage until 5- 10 years' time. Significant developments currently anticipated to commence within the next 5 years or so are the Carlisle Southern Link Road and the A66 dualling, and the A595 Grizebeck Improvement Scheme, as well as some initial phases of the St. Cuthbert's Garden Village (subject to the granting of planning permission). Construction of the CSLR and the A66 dualling programme (including sections outside of Cumbria) is likely to impact on demand for aggregates, in particular the HSA and VHSA roadstones. Other road building/improvement programmes currently planned or underway across the UK will also impact on this demand.

- 1.18 Planned infrastructure requirements outside of Cumbria have also been taken into account when preparing this LAA. Some major non-highways projects are currently expected to commence within the next 5 years. This will need to be kept under review as the cumulative impact of projects coming online within the current Plan period could have an impact on the landbank position.
- 1.19 There are a number of highways schemes, mainly in the North East region, that are scheduled for construction within the next 5 years so there is a strong likelihood that demand will increase for imports of HSA and VHSA roadstone from Cumbria as a result.
- 1.20 As a nationally important reserve, the supply of HSA and VHSA roadstone will be affected by major infrastructure requirements from across the UK and not just within Cumbria. Additional monitoring of this reserve is required, particularly as Cumbria contains the only operating quarry in England to produce the VHSA roadstone at Ghyll Scaur. Demand is likely to increase with various national infrastructure projects coming forward such as investment in new roads, airport expansion projects and new nuclear plant facilities. It is likely these projects could reach construction stage in 5 – 10 years' time so supply will be affected within the Plan periods and landbanks will need to be monitored accordingly.
- 1.21 Site Allocations have been made in the CMWLP that should provide sufficient reserve to maintain the minimum landbank required for sand and gravel, however there is no guarantee that applications will be forthcoming at all of these sites. Currently (November 2022) there is a Screening Opinion submitted for a lateral extension at Peel Place Quarry which is located within part of the Area of Search M15 on land adjacent Peel Place. This proposal is for extraction of 0.69Mt of sand and gravel over a period of 15-17 years. In addition, a planning application has been submitted for a small extension at Cardewmires Quarry (estimated 0.1Mt extraction over 12 months). This proposal is not within the Site Allocation Area of Search M8 on land adjacent Cardewmires.
- 1.22 There is potential for marine-dredged sand and gravel to make a greater contribution towards the supply although landing figures are unpredictable and zero landings have been recorded since 2017. The Crown Estate has confirmed there is sufficient vessel capacity and licenced material in the region to re-establish supply if market conditions provide sufficient economic demand. The use of secondary and recycled aggregates should also continue to be encouraged as an alternative.
- 1.23 Site Allocations have been made in the CMWLP for safeguarding additional resource of HSA but no provision is made for VHSA. There is an area with potential for VHSA close to Ghyll Scaur however this lies within the Lake District National Park.
- 1.24 There are no concerns at this stage regarding supply and demand of crushed rock generally. Where any planning permissions for crushed rock extraction are due to expire within the Cumbria Minerals and Waste Local Plan period (2015 -2030), the relevant planning policies within the Plan would support both extension of time and lateral extension in principle to ensure continued access to the remaining resource where there is a need for that aggregate. 10 of the crushed rock quarries have permissions due to expire in February 2042 (imposed by the Town and Country Planning (Minerals) Act 1981), 3 of these are limestone quarries and 1 is for HSA sandstone.

1.25 As required by the NPPF, in addition to the specific Site Allocations mentioned in this LAA, both the CMWLP and the LDNPA Local Plan have designated Minerals Safeguarding Areas to ensure that known minerals resources - including existing, planned and potential infrastructure and plant - are not sterilised by other non-minerals developments. Railheads and wharves are also safeguarded under separate Local Plan policy.

Table 1A: Executive summary table for 2022 LAA (based on 2021 data)

Aggregate sales, reserve & landbank 2021	Reserves Mt	Sales Mt 2021	Trend ¹	10 yr avg sales	3 yr avg sales	LAA provision ²	Landbank (years) ³	Landbank end date	Reserve & Landbank years remaining at end of 2030	Additional tonnage required to maintain landbank ⁴
Crushed Rock										
Limestone	78.72	2.1	↑	1.99	2.05	1.99	39.6	2061	40.91 Mt (+30.56 years)	-
Igneous + sandstone exc. V/HSA	19.95	0.3	↑	0.34	0.28	0.34	58.67	2080	13.49Mt (+49.67years)	-
V/HSA igneous + sandstone	15.62	0.46	↑	0.47	0.49	0.47	33.2	2051	6.69 Mt (+24.22years)	-
TOTAL igneous + sandstone.	35.56	0.76	↑	0.81	0.77	0.81	43.9	2065	20.17Mt (+34.9years)	-
TOTAL ALL crushed rock	114.28	2.86	↑	2.80	2.82	2.80	40.81	2062	61.08 Mt (+31.81 years)	-
Sand and Gravel										
Land-won sand and Gravel	5.63	0.85	↑	0.7	0.79	0.79	7.12	2029		
Marine- ⁵ dredged	0.0	0.0	↔	-	-	-	-	-		-
TOTAL sand and gravel	5.63	0.85	↑	0.7	0.79	0.79	7.12 ⁶	2029	-7.01 Mt (deficit) -1.87 yrs (deficit)	7.01Mt
Secondary/Recycled aggregates										
Recycled Aggregate	-	0.292	↓	-						
Secondary aggregate ⁷	-	-	-	-						
TOTAL Recycled/secondary	-	0.292 (0.3 Mt)	↓	-	-	-	- ⁸	-		-

¹ Compared to previous year's sales (2020)

² 10 -year average sales is the starting point but the LAA should also take into account recent trends (3-year average sales) and Other Relevant Local Information when establishing what sales figures to use when calculating landbank provision

³ Calculated from LAA provision figure *this table is based on the figures set in the 2022 LAA from 2021 data*

⁴ Only required where there is a deficit. Calculated to maintain landbank requirement until end of Plan period (2030) i.e. to last until 2037 or 2040 .This is based on the LAA provision figure.

⁵ Refers to recorded landings at Barrow, not to a permitted reserve

⁶ Based on 3-year average sales

⁷ There is currently no figure available to quantify the amount of slate waste but it is recognised as a source of secondary aggregate in Cumbria whilst the slate quarries remain active

⁸ Landbank not required for secondary aggregates

Table 1B: 3-year summary of sales and reserves for Sand and Gravel

Summary of Sales and Reserves data SAND AND GRAVEL	2021	2020	2019
Year end sales figures (million tonnes)	0.85	0.75	0.77
10-year average sales (million tonnes)	0.7	0.66	0.64
3-year average sales (million tonnes)	0.79	0.74	0.76
Permitted reserves of sand & gravel (million tonnes)	5.63	6.03	6.63
Landbank based on 10-year average sales (years)	8.04	9.14	10.36
Landbank based on 3-year average sales (years)	7.12	8.15	8.73
LAA provision	0.79	0.74	0.76
Landbank end date – based on LAA provision	Early 2029	Early 2029	Late 2028
Reserve and Landbank remaining at end of Plan period (2030) – based on LAA provision	-7.01Mt (deficit) -1.87 years	-6.55 Mt (deficit) - 1.85 yrs	-7.05 Mt (deficit) -2.27 yrs
Additional tonnage required to maintain landbank – based on LAA provision	7.01Mt	6.55 Mt	7.05 Mt

Table 1C: 3-year summary of sales and reserves for Crushed Rock

Summary of Sales and Reserves data ALL CRUSHED ROCK	2021	2020	2019
Year end sales figures (million tonnes)	2.86	2.59	3.01
10-year average sales (million tonnes)	2.80	2.80	2.9
3-year average sales (million tonnes)	2.82	2.80	2.81
Permitted reserves (million tonnes)	114.28	116.35	115.51
Landbank based on 10-year average sales (years)	40.81	41.55	39.83
Landbank based on 3-year average sales (years)	40.52	41.55	41.11
LAA provision	2.80	2.80	2.9
Landbank end date – based on LAA provision	Late 2062	Mid 2062	Late 2059
Reserve and Landbank remaining at end of Plan period (2030) – based on LAA provision	61.08 Mt (surplus) +31.81 yrs	60.35 Mt (surplus) + 31.55 yrs	54.6 Mt (surplus) + 28 yrs
Additional tonnage required to maintain landbank – based on LAA provision	-	-	-

Table 1D: 3-year summary of sales and reserves for Limestone

Summary of Sales and Reserves data LIMESTONE	2021	2020	2019
Year end sales figures (million tonnes)	2.1	1.89	2.16
10-year average sales (million tonnes)	1.99	1.95	2.02
3-year average sales (million tonnes)	2.05	1.97	1.97
Permitted reserves (million tonnes)	78.72	80.12	77.08
Landbank based on 10-year average sales (years)	39.6	41.08	38.16
Landbank based on 3-year average sales (years)	38.4	40.67	39.13
LAA provision	1.99	1.95	2.02
Landbank end date – based on LAA provision	Mid 2061	Early 2062	Early 2058
Reserve and Landbank remaining at end of Plan period (2030) – based on LAA provision	40.91Mt (surplus) +30.56	41.12 Mt (surplus) +31.09 yrs	34.66 Mt (surplus) +27.16 yrs
Additional tonnage required to maintain landbank – based on LAA provision	-	-	-

Table 1E: 3-year summary of sales and reserves for High specification roadstone

Summary of Sales and Reserves data HIGH SPECIFICATION ROADSTONE (HSA & VHSA)	2021	2020	2019
Year end sales figures (million tonnes)	0.46	0.45	0.57
10-year average sales (million tonnes)	0.47	0.48	0.50
3-year average sales (million tonnes)	0.49	0.51	0.51
Permitted reserves (million tonnes)	15.62	16.15	15.50
Landbank based on 10-year average sales (years)	33.2	33.64	31.00
Landbank based on 3-year average sales (years)	31.87	31.66	30.39
LAA provision	0.47	0.48	0.50
Landbank end date – based on LAA provision	Early 2055	Mid 2054	Start 2051
Reserve and Landbank remaining at end of Plan period (2030) – based on LAA provision	6.69 Mt (surplus) +24.22 yrs	6.55 Mt (surplus) + 23.64 yrs	5.0 Mt (surplus) +20 yrs
Additional tonnage required to maintain landbank – based on LAA provision	-	-	-