

North West Aggregates Working Party

Annual Monitoring Report 2022

(2021 Data)

Published December 2023

Correct as of this date: 22/12/23

NWAWP Chair: Rachel Whaley, Planning Officer (Minerals and Waste Planning Policy)
Rachel.Whaley@WestmorlandandFurness.gov.uk

NWAWP Secretary: Ngaire Thomson, Principal Planning Consultant, Capita,
ngaire.thomson@capita.com

Contents

Acronyms.....	4
Glossary.....	5
Introduction	7
Executive Summary	7
Mineral Planning Authorities in NWAWP Area	10
Primary Aggregates	11
Location of quarries, wharves and rail depots.....	11
Location of offshore aggregate production areas.....	12
Primary Aggregates	13
Sales and Imports	13
Permitted Reserves	17
Landbank in NWAWP Area.....	20
Secondary and Recycled Aggregates.....	22
Survey Data	26
Development Plans and Mineral Policies in NWAWP Area	27
Aggregates sites and planning applications in NWAWP Area	29
Local Aggregate Assessments	39
Local and National Aggregate Need	40
Trends and Analysis	42
Major Construction Projects or Developments.....	43
Key Conclusions	49
Appendix 1 NWAWP Meetings	50

Acronyms

AWP	Aggregate Working Party
BAA	British Aggregates Association
BGS	British Geological Survey
BMAPA	British Marine Aggregate Producers Association
CDEW	Construction, Demolition and Excavation Waste
DLUHC	Department of Levelling Up Homes and Communities
LAA	Local Aggregate Assessment
MHCLG	Ministry of Housing, Communities and Local Government
MPA	Mineral Planning Authority
mpa	Mineral Products Association
NPPF	National Planning Policy Framework
NWAWP	North West Aggregate Working Party
SOCG	Statement of Common Ground
WDI	Waste Data Interrogator
UDP	Unitary Development Plan

Glossary

Active/Inactive -	Sites are described as active where material was produced at any time during 2021 and as inactive when the site was not in production during that period. Inactive sites include those that have been worked in the past and those that have yet to begin. The term 'inactive' replaces the term 'dormant' used in surveys prior to AM97 as the term 'dormant' acquired a more specific meaning under the terms of the Planning & Compensation Act 1991 and the Environment Act 1995.
Aggregate	Granular or particulate material which is suitable for use (on its own or with the addition of cement, lime or bituminous binder) in construction as concrete, mortar, roadstone, asphalt or drainage courses, or for use as constructional fill or railway ballast (also referred to as 'construction aggregates').
Secondary aggregates	Aggregate which originates as a waste of other quarrying and mining operations, or from industrial processes (e.g. colliery waste or minestone, blast furnace slag, power station ash, china clay waste, slate waste), but excluding chalk and clay/shale worked primarily for aggregate purposes
Landbanks	The stock of mineral reserves with valid planning permissions for their extraction but where their extraction has yet to take place. The length of the aggregate landbank is the sum in tonnes of all permitted reserves for which valid planning permissions are extant, divided by the annual rate of future demand based on the latest annual Local Aggregate Assessment. The landbank is usually calculated at a mineral planning authority level.
Local Aggregate Assessment (LAA)	An annual assessment of the demand for and supply of aggregates in a mineral planning authority's area.
LAA Annual Provision	The forecast future aggregate demand figure within a Mineral Planning Authority's LAA. This should be based on a rolling average of 10 year's sales data and other relevant local information (e.g. development growth aspirations in the MPA area).
Managed Aggregate Supply System (MASS)	This system works through national, sub-national and local partners working together to ensure a steady and adequate supply of aggregate mineral across the country

Marine Aggregates	Sand and gravel dredged offshore
National and Sub-National Guidelines	The national and regional guidelines for aggregates provision in England and Wales 2005 to 2020 provide an indication of the total amount of aggregate provision that the mineral planning authorities, collectively within each Aggregate Working Party, should aim to provide. The guidelines are no longer current and revised guidelines are due.
Permitted Reserve	The tonnage of mineral in a site (including stockpiles) for which full planning consent (planning permission with determined conditions attached) for extraction exists. Such sites may be operational or inactive. Inactive sites include those where extraction has been undertaken in the past and where permitted reserves still remain and those where planning permission has been granted but extraction has yet to begin. Dormant sites, as defined by the Planning & Compensation Act 1991 and the Environment Act 1995, cannot be worked until new schemes of conditions have been determined and therefore do not contain permitted reserves. See also landbank.
Primary aggregates	Aggregate produced from naturally-occurring mineral deposits and used for the first time.

Introduction

Executive Summary

The North West Aggregate Working Party (NWAWP) is one of nine similar working parties throughout England and Wales established in the 1970's. The coverage of the North West AWP is detailed in Figure 1.

This Annual Monitoring (AM) report provides sales and reserve data for the calendar year 1st January – 31st December 2021.

The Annual Monitoring Report (AMR) provides information on aggregates in the North West of England so that the NWAWP can contribute to the monitoring of the Managed Aggregate Supply System (MASS) and assess whether the North West of England is making a full contribution towards meeting both national and local aggregate needs.

The NWAWP AMR 2022 provides data for each of the following sub-regions in the North West:

- Cheshire East,
- Cheshire West and Chester
- Cumbria
- Greater Manchester, Merseyside and Halton and Warrington
- Lancashire

This report includes:

- Maps showing the geographical area covered by the NWAWP; the location of quarries, wharves and rail depots and; the location of offshore aggregate production licence areas
- Sales and reserves of primary aggregates in 2021, collected from the NWAWP Annual Monitoring Survey 2022
- The landbank in the NWAWP area at 31st December 2021
- Secondary and Recycled Aggregates figures in the NWAWP
- Information on minerals plans and policies in the NWAWP area
- Information on aggregates sites and planning applications
- Information on the latest Local Aggregate Assessments prepared by the mineral planning authorities

The key findings of this Annual Monitoring Report including 2021 data is as follows:

Land-won Sand and Gravel

- Total Land-won Sand and Gravel Sales of 2.02mt (2.13mt in 2020).
- Total Land-won Sand and Gravel Reserves of 18.69mt (21.11 mt in 2020)
- Landbank of 7.68 years (8.05 years in 2020)
- Overall, there has been a continued decline in sand and gravel reserves since 2015, where they were at a figure of 28.63mt.

Crushed Rock

- Total Crushed Rock Sales of 7.34mt (6.61mt in 2020)
- Total Crushed Rock Reserves of 227.87mt (247.52mt in 2020).
- Landbank of 33.12 years (35.51 years in 2020).
- Overall there has been a continuing decline in crushed rock reserves since 2015, when the figure was of 308.54mt.

Landings of Marine Dredged Sand and Gravel

- Total Marine-dredged Sand and Gravel sales 0.31mt (0.34mt in 2020).
- Total Imported marine-dredged sand and gravel removal 0.18mt.
- Total marine dredged landings in the North West 0.31mt.

Overall Primary Aggregates figures

- Total primary aggregates sales 9.43mt (9.08mt in 2020).
- Total primary aggregates reserves 246.56mt (269.0mt in 2020).

A summary of key figures for 2021 are provided in Table 1 below.

As of 31 December 2021, the reserves of sand and gravel in the North West overall are marginally above the minimum 7 year landbank (at a figure of 7.68 years) and for crushed rock above the minimum 10 year landbank (at a figure of 33.12 years). This is based on a North West combined LAA annual provision rate, in the absence of national and sub-national guidelines.

There is a concern however that there is a fall in replenishment rates, due to not enough planning applications for primary aggregate extraction coming forwards in the North West region.

As reported in the AM2019, the North West is heavily dependent upon imports, and aggregate consumption outstrips production.

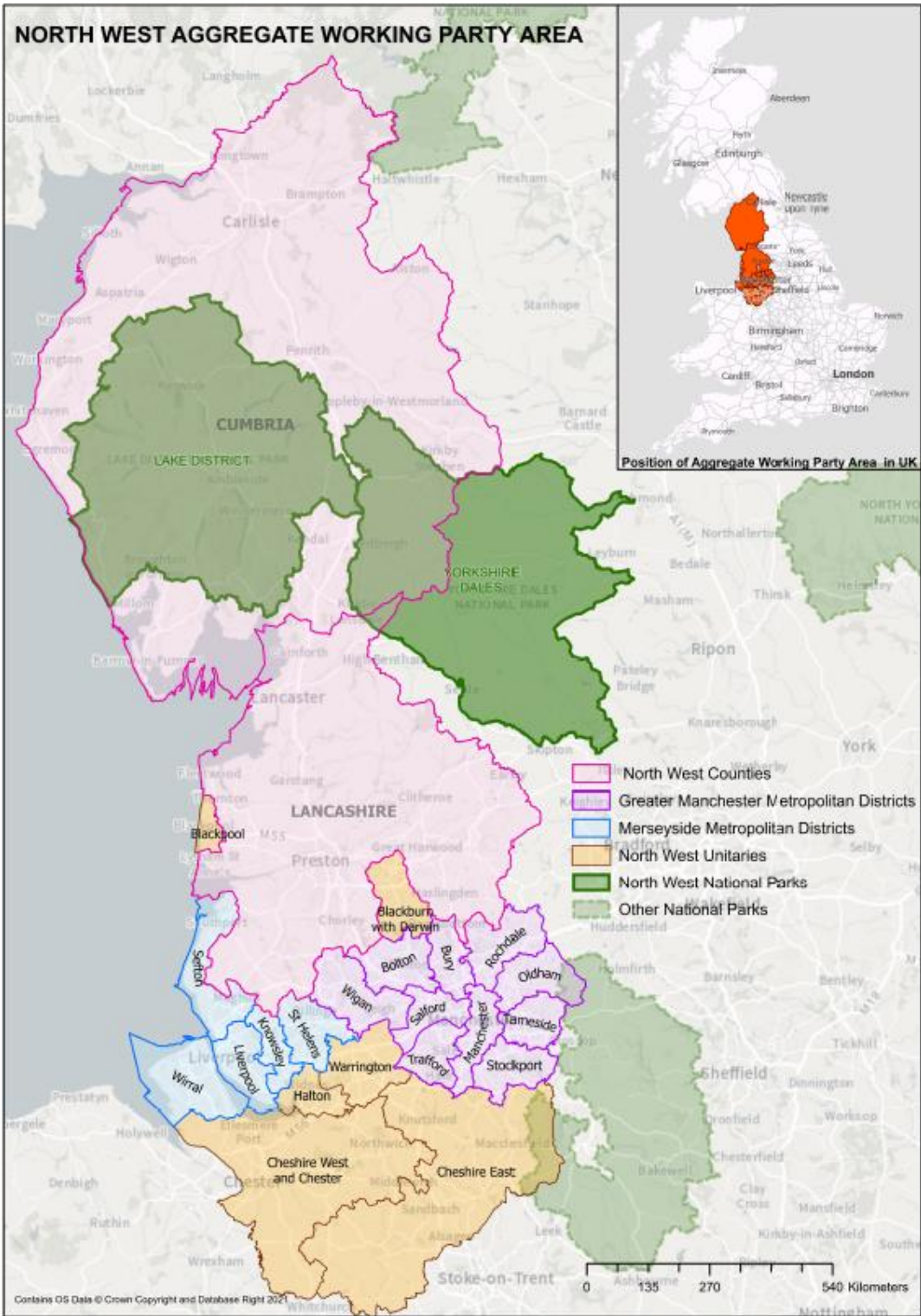
Table 1 Dashboard key data summary

Aggregate	Sales in 2021 ¹ (million tonnes)	Change in sales from previous year	10 year sales average (million tonnes)	3 year sales average (million tonnes)	Sales Trend	LAA annual provision (million tonnes)	Permitted reserves at 31 December 2021 (million tonnes)	Change in permitted reserves from previous year	Landbank of permitted reserves (years)	Change in Landbank from previous years
Sand and Gravel	2.02	↓	2.41	2.23	↓	2.4	18.69	↓	7.68	↓
Crushed Rock	7.34	↑	7.06	5.34	↓	9.89	227.87	↓	33.12	↓
Marine sand and gravel	0.31	↓	0.26	0.33	↓	N/A	N/A		N/A	N/A
Total Primary Aggregates	9.43	↑	9.33	9.46	↓	N/A	246.56	↓	N/A	N/A
Recycled and Secondary Aggregates	1.446 or 1.666 inc slate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

¹ Sales in 2020 were effected by the COVID-19 Pandemic

Mineral Planning Authorities in NWAWP Area

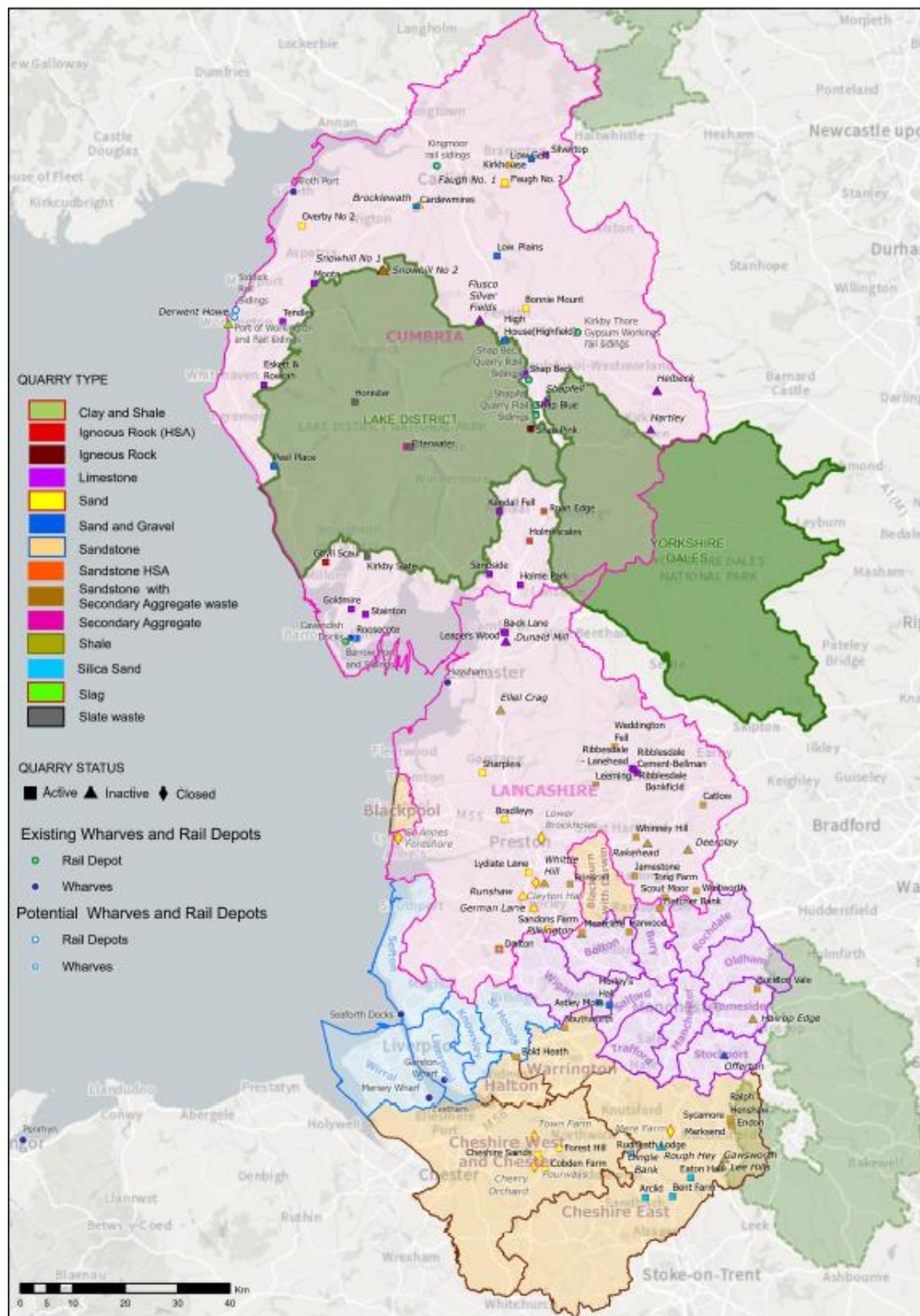
Figure 1 NWAWP Area Mineral Planning Authorities



Primary Aggregates

Location of quarries², wharves and rail depots

Figure 2 Location of quarries, wharves and rail depots in 2021



² Dingle Bank Quarry, Chelford ceased extraction at the end of 2020 and is in its restoration phase.

Location of offshore aggregate production areas

Figure 3 Location of offshore aggregate production areas in 2021



Primary Aggregates

Sales and Imports

The sales data shown in Table 2 below has been obtained from the previous NAWWP AMRs, the AM2019 and returns received from operators during the NAWWP survey 2022 (relating to 2021 data). It should be noted however that operator returns were poor in 2021, and, all Mineral Planning Authorities had to make sales estimates. The reason for the poor returns may be due to the restrictions imposed to control the COVID-19 pandemic.

The total Land-won Sand and Gravel Sales in 2021 were 2.02mt. This is a decrease from 2020 sales figures which were impacted by the COVID 19 pandemic but were still well below the 2019 figure of 2.55mt. Sand and gravel sales in 2021 were still below both the 10 year average and the 3 year average sales figures. All Mineral Planning Authorities except for Cumbria reported lower figures in sand and gravel sales in 2021 to 2019 indicating the industry had not recovered fully from the impacts of the pandemic.

In the case of Greater Manchester, Merseyside and Halton and Warrington, Astley Moss is the only operational sand and gravel site within the sub-region. Due to the commercial confidentiality where there is only one operational site, the sales figures for aggregate land-won sand and gravel and marine won sand and gravel have been combined for 2018, 2019 and 2020, and then a 3-year average has been applied. It is acknowledged that this approach is not ideal, and concerns have been raised through the Aggregate Working Party and Duty to Cooperate discussions. However, in lieu of any other sites producing sales figures for sand and gravel, there is seemingly no other suitable alternative approach.

The total crushed rock sales in 2021 were 7.34mt. This is an increase from 2020 sales figures which were 6.61mt. Crushed rock sales in 2021 were marginally above the 10 year average, and the 3 year average. Crushed rock sales in Cumbria and Lancashire increased in 2021 whilst in Greater Manchester, Merseyside and Halton and Warrington they decreased in 2021.

Greater Manchester, Merseyside and Halton and Warrington reported 0.18Mt of sand and 0.24Mt of crushed HSA was imported from Glensanda super quarry in Scotland. No imported aggregate data from outside of England and Wales was collected through the NAWWP 2021 survey, and therefore there is no data on imports outside of England and Wales for the region for the year 2020 for comparison. The most comprehensive available data on imports was collected via the national AM2019³, which was undertaken jointly between the Ministry of Housing Communities and Local Government (now known as the Department of Levelling Up Homes and Communities) and the British Geological Survey (BGS).

Table 5g of the AM2019 demonstrates that overall there were 0.5mt of sand and gravel imported into the North West, with the largest amount being imported from North Wales (at a figure of 0.43mt). In the case of crushed rock, 6.21mt was imported into the North West,

³ Aggregate Minerals Survey 2019 - <https://www.gov.uk/government/publications/aggregate-minerals-survey-for-england-and-wales-2019>

with the largest proportion being from the East Midlands at a figure of 3.34mt. In the case of aggregate being imported from outside of England and Wales, into the region 0.48mt of igneous rock was imported in 2019.

Table 2 Primary Aggregate Sales and Imports in NAWWP Area⁴

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10 year average	3 year average
Sand and Gravel												
Cheshire East	0.40	0.41	0.75	0.51	0.46	0.29	0.55	0.24	0.19*	0.187	0.398	0.203
Cheshire West and Chester	0.56	0.42	0.42	0.6	0.71	0.67	0.8	0.8	0.6	0.72	0.62	0.73
Cumbria	0.46	0.48	0.68	0.71	0.81	0.79	0.71	0.77	0.75*	0.850	0.7	0.8
Greater Manchester, Merseyside & Halton & Warrington	0.24	0.24	0.26	0.31	0.26	0.26	0.34	0.34*	0.34*	0.13*	0.27	0.27
Lancashire	0.36	0.36	0.48	0.56	0.50	0.51	0.5	0.4	0.25*	0.13	0.41	0.26
Total Sand and Gravel sales	2.02	1.91	2.59	2.69	2.74	2.52	2.85	2.55	2.13	2.02	2.41	2.23
Crushed Rock												
Cheshire East	0.001	0.001	0.001	0.002	0.001	0.001	0.001	-	0.001	0.001	0.001	0.001
Cheshire West and Chester	-	-	-	-	-	-	-	-	-	-	-	-
Cumbria	2.95	2.4	2.58	3.3	2.89	2.61	2.82	3.01	2.59	2.86	2.8	2.82
Greater Manchester, Merseyside & Halton & Warrington	0.81	0.42	0.69	0.79	1.52	1.31	0.97	1.17	0.74	0.273	0.87	0.73
Lancashire	2.44	2.15	2.80	3.50	3.81	3.20	3.59	3.15	3.28	3.97	3.19	3.47
Total Crushed Rock sales	6.20	4.97	6.07	7.59	8.22	7.12	7.38	7.33	6.61	7.34	6.86	7.01
Marine Sand and Gravel												
Cumbria	0.01	0.01	0.02	0.006	0.01	0.008	-	-	-	-	0.008	0.04
Greater Manchester,	0.21	0.30	0.1	0.11 ⁵	0.26	0.28	0.34	0.34	0.34	0.31	0.25	0.34

⁴ Figures in this report are based on those within each Mineral Planning Authorities LAA, and therefore may differ from the figures reported in previous NAWWP AMRs.

⁵ Figure has been adjusted in this Report to remove imported crushed rock.

*Based on estimates

North West Aggregate Working Party – AMR 2022

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10 year average	3 year average
Merseyside & Halton & Warrington												
Total Marine Sand and Gravel Sales	0.22	0.31	0.12	0.116	0.27	0.288	0.34	0.34	0.34	0.31	0.25	0.34
Total Aggregate Sales	8.44	7.19	8.78	10.39	11.23	9.93	10.62	10.22	9.081	9.43	9.33	9.46
Imports (from outside of England and Wales)									0.48	0.42		
Total Imports									0.48	0.42		

Permitted Reserves

The permitted reserves of sand and gravel and crushed rock in the NAWAP area at 31 December 2021 are set out in Table 3 below.

The permitted reserves of sand and gravel in the North West of England at 31 December 2021 were 18.69mt. This is a decrease in permitted reserves from 2020 from a figure of 21.11mt. The largest proportions of permitted reserves of sand and gravel are from quarries in Cheshire West and Chester (32%) and Cumbria (30%). As previously explained in the sales section of this report, a 3 year average has been applied to the Greater Manchester, Merseyside and Warrington and Halton sand and gravel reserve figures to maintain confidentiality.

The permitted reserves of crushed rock in the North West of England at 31 December 2021 were 232.30mt. This is a decrease in permitted reserves from 2019 at a figure of 247.80mt. Greater Manchester, Merseyside and Halton and Warrington, did not have any information relating to their permitted reserves. Both Cumbria and Lancashire had a decrease in crushed rock permitted reserves in comparison to 2019.

In the case of Cheshire East, the Mineral Planning Authority acknowledges there is a permitted sandstone reserve of 4.88 mt with quarries supplying small quantities of building/ornamental stone rather than crushed rock aggregate. The quarries most likely to supply crushed rock aggregate have been inactive for several years. Those active in 2019 and 2020 produced building/ornamental stone. The operators do not respond to the NAWAP Annual Survey so estimates have been used for several years and in 2019 and 2020 it was felt that it was no longer appropriate to continue to rely on this as a basis for crushed rock aggregate supply. Cheshire East now forecast need on the basis of 100% imported crushed rock aggregate as evidenced in the Cheshire sub-region figures in the National AM2019.

Due to the low number of responses from Greater Manchester, Merseyside & Halton & Warrington relating to reserves for crushed rock these figures have been marked as confidential and not included in the final figure.

Table 3 shows there has been a general decline in the total permitted reserves since 2015. This demonstrates that sales have been at a greater rate than new planning permissions for aggregates.

Table 3 Permitted Reserves in NAWAP Area⁶

Aggregate	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Sand & Gravel											
Cheshire East	5.6	5.59	5.17	0.65	0.4	0.24	3.7	2.52	2.52	2.6	2.63
Cheshire West and Chester	4.3	4.41	4.51	4.7	8	6.8	6.60	5.79	6.06	6	6
Cumbria (inc. Lake District)	11.1	10.59	9.89	9.2	8.77	7.77	7.38	7.26	6.63	6.03	5.63
Greater Manchester, Merseyside & Halton & Warrington	4.76	4.52	4.27	3.86	3.7	1.2	1.2	1.68	1.68	1.68	-
Lancashire (inc. Blackburn and Blackpool)	8.6	8.36	8.18	8.24	7.76	6.97	6.42	5.9	5.04	4.8	4.43
Total Sand & Gravel Permitted Reserves	34.36	33.47	32.02	26.65	28.63	22.98	25.30	23.15	21.93	21.11	18.69
Crushed rock											
Cheshire East	4.29	4.29	4.29	4.29	4.9	4.9	4.9	4.89	0.6	0	0
Cheshire West and Chester	0	0	0	0	0	0	0				
Cumbria (inc. Lake District)	142.4	136.7	121.03	137.06	144.63	130	127.35	120.89	115.51	116.35	114.28
Greater Manchester, Merseyside & Halton & Warrington	20.26	20.06	20.3	21.18	20.43	19.59	18.37	17.5	12.42	12.05	C
Lancashire	128.5	132.1	130.21	120.07	138.58	135.93	131.62	128.06	153.98	119.49	113.59

⁶ Figures in this report are based on those within each Mineral Planning Authorities LAA, and therefore may differ from the figures reported in previous NAWAP AMRs.

North West Aggregate Working Party – AMR 2022

Total Crushed Rock Permitted Reserves	295.45	293.15	275.83	282.6	308.54	290.42	282.24	271.34	282.51	247.89	227.87
Total Permitted Reserves	329.81	326.62	307.85	309.25	337.17	313.4	307.544	294.49	304.44	269.00	246.56

C = Confidential

Landbank in NWAWP Area

Aggregate landbanks are principally a monitoring tool to provide Minerals Planning Authorities with early warning of possible disruption to the provision of an adequate and steady supply of land-won aggregates in their particular area. They should be used principally as a trigger for a Mineral Planning Authority to review the current provision of aggregates in its area, and consider whether to conduct a review of allocation of sites in its local minerals plan. This is of particular importance in the case of aggregates because of the scale and long term nature of the industry, as well as the length of time it may take from identifying a site to the commencement of extraction.

As stated under paragraph 213 f) of the NPPF 2021, Mineral Planning Authorities should plan for a steady and adequate supply of aggregates by maintaining landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock.

The landbanks for permitted reserves for both sand and gravel and crushed rock in the North West of England at 31st December 2021 are shown in Table 4 below. In the absence of up-to-date national and sub-national guidelines, the landbanks have been calculated by using the LAA annual provision rate set out in the latest LAA for each Mineral Planning Authority.

The overall sand and gravel landbank for the North West of England is 7.68 years (and is therefore just above the minimum 7 year landbank required for sand and gravel). Although this figure is above the minimum requirement, it is only marginally so, and therefore additional planning permissions for the extraction of sand and gravel are required in the near future. To ensure the North West of England maintains a steady and adequate supply of sand and gravel.

As demonstrated in Table 4, Cheshire East and Greater Manchester, Merseyside and Halton and Warrington have a sand and gravel landbank below the minimum 7 year requirement. Cheshire West and Chester are marginally above the minimum landbank requirement for sand and gravel.

The overall crushed rock landbank for the North West of England is 33.12 years (and is therefore significantly above the minimum 10 year requirement). As shown by Table 4, the North West of England is significantly reliant particularly upon Cumbria and Lancashire to maintain an adequate and steady supply of crushed rock. Cheshire West and Chester does not have any crushed rock reserves. In the case of Cheshire East, there is a 4.88mt landbank of sandstone from permitted sites, however this is not likely to contribute to the supply of crushed rock aggregates⁷. Consequently, this AMR has recorded the crushed rock reserve in Cheshire East as nil.

There has been a clear decline in replenishment rates over the past 10 years, due to not enough planning applications for primary aggregate extraction coming forwards in the North West region. In the past 10 year there has been a fall in sand and gravel reserves by 44% and a fall in crushed rock reserves by 21%.

⁷ Table 2 – Cheshire East LAA 2021

Table 4 Landbank in NAWP Area – at 31st December 2021

Mineral Planning Authority	Annual rate of future demand based on sales in the latest annual Local Aggregate Assessment	LAA Rate is 10 years sales average	Annual Rate of future demand based on 10 years sales average	Reserves (as of 31 st December 2021)	Landbank in year (as at 31 st December 2021)
Sand & Gravel					
Cheshire East	0.187	No	0.4	2.63	6.58
Cheshire West and Chester	0.72	No	0.63	6	9.52
Cumbria	0.85	Yes	0.7	5.46	7.8
Greater Manchester, Merseyside and Halton and Warrington	0.1	No	0.27	0	0.00
Lancashire	0.13	Yes	0.41	4.43	10.08
Total Sand & Gravel	1.987	N/A	2.41	18.69	7.68 years
Crushed Rock					
Cheshire East	0.001	No	0.001	0	0
Cheshire West and Chester	N/A	N/A	N/A	N/A	N/A
Cumbria	2.80	Yes	2.80	114.29	40.82
Greater Manchester, Merseyside and Halton and Warrington	0.513	No	0.89	0	0
Lancashire	3.97		3.19	113.59	39.17
Total Crushed Rock	7.34	N/A	6.88	227.59	33.12 years

Secondary and Recycled Aggregates

Recycled aggregate is defined as an aggregate resulting from the processing of inorganic materials previously used in construction, such as crushed concrete / brick / stone and planings or scrapings from tarmac roads. Secondary aggregate is defined as aggregate obtained as a by-product of other quarrying and mining operations or as a by-product from industrial processes such as power station ash, glass (cullet) or railway ballast.

It is important to understand the data limitations associated with secondary and recycled aggregates. Most notably regarding the waste data interrogator (WDI), the data within the WDI is collected from the returns from permitted facilities and records only waste received, and waste exported from site. It is not intended as a tool for calculating secondary and recycled aggregates.

Secondary aggregates, where certain quality protocol specifications are met, is considered to be non-waste and is therefore not included within the waste tonnage returns. The data within the WDI does not account for mobile crushers or recycling and re-use that occurs on individual construction sites. The tonnage of recycled aggregates reported in the WDI is likely to only represent a proportion of the recycled aggregates in circulation. The figures in Table 5a below are only estimates and should be treated with caution. Tables 5b and 5c below estimate the secondary and recycled aggregates for each area using the two commonly utilised methodologies.

Information on the sales of secondary and recycled aggregates was also collected through the NWAWP surveys sent to operators of fixed construction and demolition recycling sites and secondary aggregate producers in the North West of England. The details of the survey are outlined in Table 5d below.

Table 5a CD&E Waste Arisings (Environment Agency, 2021⁸)

Mineral Planning Authority	Amount Produced (tonnes)	Amount Managed (tonnes)
Cheshire East	495,509	464,351
Cheshire West and Chester	386,674	371,236
Cumbria	818,993	798,367
Greater Manchester, Merseyside and Halton and Warrington	3,701,372	4,275,582
Lancashire	1,834,425	2,334,486

⁸ [2021 Waste Data Interrogator - data.gov.uk](https://data.gov.uk)

North West Aggregate Working Party – AMR 2022

Mineral Planning Authority	Amount Produced (tonnes)	Amount Managed (tonnes)
Total	7,236,973	8,244,022

There are several methods of calculating the amount of recycled and secondary aggregates. They all use the Waste Data Interrogator (WDI), however the difference is whether the different waste codes are included or excluded. This then alters the total amounts that are identified by the WDI. For instance glass is included in the MEAS methodology but not the Capita methodology, as the Capita methodology reasons that glass is not used as a recycled aggregate.

Table 5b: Recycled and Secondary Aggregates (MEAS methodology)

MINERALS PLANNING AUTHORITY	2018		2019		2020		2021	
	Produced	Handled	Produced	Handled	Produced	Handled	Produced	Handled
Merseyside & Halton	962,373.93	1,326,114.96	1,162,699.07	1,347,653.73	886,929.33	1,039,904.27	857,784.66	1,008,986.33
Warrington	397,112.88	523,480.22	314,324.14	346,484	442,761.65	472,177.32	441,775.71	467,967.04
Greater Manchester	2,569,517.42	3,232,810.21	2,593,290.09	2,694,719.26	2,442,849.32	2,500,092.10	3,078,501.87	3,163,828.24
GREATER MANCHESTER MERSEYSIDE & WARRINGTON	3,929,004.23	5,082,405.39	4,070,313.30	4,388,856.99	3,772,540.30	4,012,173.69	4,378,062.24	4,640,781.61
LANCASHIRE	1,169,978.00	1,736,082.05	1,794,714.55	2,140,851.00	1,648,536.12	1,849,528.00	2,173,766.18	2,389,491.06
Cheshire East (UA)	213,934.00	463,709.69	811,761.29	939,222.00	623,608.08	736,556.00	387,663.25	790,030.04
Cheshire West & Chester (UA)	93,128.00	258,350.56	324,200.30	326,029.00	425,363.37	625,971.00	374,260.91	591,177.14
CHESHIRE	307,062.00	722,060.25	1,135,961.59	1,265,251.00	1,048,971.45	1,362,527.00	761,924.16	1,381,207.00
CUMBRIA	697,940.00	1,094,532.44	895,217.35	1,044,025.00	661,424.41	837,372.00	732,441.58	848,044.00

Table 5c: Recycled and Secondary Aggregates (Capita Symonds methodology)

MINERALS PLANNING AUTHORITY	2018		2019		2020		2021	
	Produced	Handled	Produced	Handled	Produced	Handled	Produced	Handled
Merseyside & Halton	1,200,465. 21	1,326,114. 96	1,119,409. 62	1,347,653. 73	930,088.14	1,039,904. 27	913,955.79	1,008,986. 33
Warrington	485,912.70	523,480.22	336,354.00	346,484.00	461,006.06	472,177.32	447,715.00	467,967.04
Greater Manchester	3,006,418. 24	3,232,810. 21	2,512,053. 26	2,694,719. 26	2,332,150. 69	2,500,092. 10	2,967,051. 82	3,163,828. 24
GREATER MANCHESTER MERSEYSIDE & WARRINGTON	4,692,796. 15	5,082,405. 39	3,967,816. 88	4,388,856. 99	3,723,244. 89	4,012,173. 69	4,328,722. 61	4,640,781. 61
LANCASHIRE	1,671,836. 60	1,736,082. 05	1,925,337. 90	2,140,851. 00	1,756,363. 13	1,849,528. 00	2,332,104. 00	2,389,491. 06
Cheshire East (UA)	420,095.77	463,709.69	794,912.21	939,222.00	681,537.75	736,556.00	464,352.00	790,030.04
Cheshire West & Chester (UA)	221,495.12	258,350.56	321,600.00	326,029.00	615,347.56	625,971.00	541,835.31	591,177.14
CHESHIRE	641,590.89	722,060.25	1,282,361. 77	1,265,251. 00	1,296,885. 31	1,362,527. 00	1,453,902. 31	1,381,207. 00
CUMBRIA	1,057,822. 76	1,094,532. 44	1,006,157. 04	1,044,025. 00	766,888.24	837,372.00	797,495.00	848,044.00

Survey Data

Table 5d Results of NAWAP 2021 survey on sales of recycled and secondary aggregate

Mineral Planning Authority (MPA)	Total sales of secondary/recycled aggregate (tonnes)
Cheshire East and Cheshire West and Chester	145,124 (estimate) <i>the figures for these two MPAs have been combined to maintain confidentiality.</i>
Cumbria	0.3Mt est. excluding slate (est 0.52Mt with slate)
Greater Manchester, Merseyside and Halton and Warrington	320,219 and 0.298 (based on 1 return + known throughput at sites through WDI)
Lancashire	0
Totals	1.446 (Mt) or 1.666 (Mt) inc slate

Development Plans and Mineral Policies in NWAWP Area

Local Planning Authorities are required to prepare Local Plans which include policies to aid the determination of planning applications and to set out the development of a county/borough/district over a 15-year period. This includes policies for minerals development, which mineral planning authorities must prepare. Some authorities will include mineral planning policies within their overall Local Plans, whilst others will prepare specific Minerals and Waste Local Plans. Table 6 below details the status and progress of Local Plans in the NWAWP area.

Table 6 Minerals Plans Information

Mineral Planning Authority / Authorities	Plan Name/Mineral DPD	Preparation stage / Current Status	Status in previous annual monitoring report
Cheshire East	Local Plan Strategy (Strategic Policies) Part One and Site Allocations & Development Policies Document Part Two Draft Minerals and Waste Plan	Site Allocations and Development Management Policies adopted 2022 Site Allocations and Development Policies Document (cheshireeast.gov.uk) Draft Minerals & Waste Plan published for consultation Nov-Dec 2022 (Regulation 18)	Local Plan Strategy Adopted July 2017. The adopted Local Plan Strategy contains a mineral policy. Site Allocations & Development Policies Document – EIP hearings took place Oct-Nov 2021.
Cheshire West and Chester	Local Plan (Part One) Strategic Policies and Local Plan (Part Two) Land allocations and Detailed Policies	Local Plan (Part one) adopted January 2015 and Local Plan (Part Two) adopted July 2019.	Both parts of the Local Plans were adopted by the time of the publication of the NWAWP AMR 2019. Both Local Plans contain mineral policies.
Cumbria	Cumbria Minerals and Waste Plan 2015-2030	Adopted September 2017	Adopted prior to the publication of the NWAWP AMR 2019.
Lake District	Local Plan 2020 to 2035	Adopted May 2021	Submitted to the Inspector in August 2019.
Greater Manchester	Greater Manchester Joint Minerals Development Plan	Adopted March 2013	Adopted prior to the publication of the NWAWP AMR 2019.

North West Aggregate Working Party – AMR 2022

Liverpool	Liverpool Local Plan 2013-2033	Adopted January 2022	The Liverpool Local Plan 2013–2033 - Liverpool City Council
Halton	Delivery and Allocations Local Plan	Adopted March 2022 DALP Adopted.pdf (halton.gov.uk)	EiP Hearings took place in March 2021
Knowsley	Local Plan Core Strategy	Adopted 2016	Adopted 2016 – no report on a review taking place
Sefton	A Local Plan for Sefton	Adopted April 2017	Adopted 2017 – no report on a review taking place
St. Helens	St Helen's Local Plan 2020-2035	Adopted July 2022 St Helens Borough Local Plan adopted 12 July 2022 Microsoft Word - Local Plan Written Statement - FINAL adoption version 16.06.2022 (sthelens.gov.uk)	EiP Hearings took place May-June 2021
Wirral	Wirral Local Plan 2020-2035	Submitted for examination on 26 October 2022	Local Plan in Examination Local Plan Examination wirral.gov.uk Reg 18 consultation took place January-April 2020
Warrington	Warrington Local Plan 2021-2038	Submitted for examination 22 April 2022 Local Plan in Examination Local plan examination warrington.gov.uk	Reg 19 consultation on updated proposed submission document took place October-November 2021
Lancashire	Lancashire Minerals and Waste Local Plan	Further Regulation 19 consultation expected to take place end of 2023/early 2024 Intending submission to the Secretary of State for examination in summer 2024.	Regulation 19 consultation to take place Autumn/Winter 2019

Aggregates sites and planning applications in NWAWP Area

Table 7 below lists the quarries and wharves producing primary aggregate within the North-West of England. Figure 2 shows the geographical location of each of the quarries listed below.

Altogether there are 94 primary aggregate quarries in the North West of England recorded in 2020, (with 67 operational) and 3 wharves. Two wharves are located along the River Mersey and one is located at Seaforth Docks.

Table 7 **Aggregates sites in NWAWP area**

Mineral Planning Authority	Site Name	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status
Cheshire East	Arclid Quarry	Quarry	Bathgate Silica Sand Ltd.	SJ 783 613	Silica Sand	O – End date 2041
	Bent Farm Quarry	Quarry	Sibelco UK	SJ 831 619	Silica Sand	O – End date 2031
	Dingle Bank Quarry	Quarry	Sibelco UK	SJ 832 714	Silica Sand	NO – end date 2020 ceased being restored
	Eaton Hall Quarry	Quarry	Tarmac Limited	SJ 860 655	Silica Sand	O – end date 2042
	Endon Quarry	Quarry	Park Skip Hire	SJ 940 763	Sandstone	O – end date 2042
	Gawsworth Quarry	Quarry	O'Gara Developments	SJ 919 679	Sandstone	NO – end date 2042
	Lee Hills Quarry	Quarry	Lee Hills Quarry	SJ 928 691	Sandstone	NO – end date 2042
	Marksend Quarry	Quarry	Earls Stone Ltd	SJ 941 757	Sandstone	O – end date 2042
	Mere Farm Quarry	Quarry	Hanson Quarry Product Europe Limited	SJ 825 746	Sand	R – extraction ceased 2014

North West Aggregate Working Party – AMR 2022

	Ralph Henshaw	Quarry	Earls Stone Ltd	SJ 766 939	Sandstone	O – end date 2042
	Rough Hey Quarry	Quarry	O’Gara Developments	SJ 923 682	Sandstone	NO – end date 2042
	Rudheath Lodge ⁹	Quarry	Sibelco UK	SJ 751 698	Silica Sand	O – end date 2032
	Sycamore Quarry	Quarry	Earls Stone Ltd	SJ 939 766	Sandstone	O – end date 2042
Cheshire West and Chester	Cherry Orchard Sand Unit	Quarry	Cherry Orchard Sand Unit	SJ 568 680	Sand	R
	Cheshire Sands (Crown Farm Quarry including Delamere Quarry)	Quarry	Tarmac Limited	SJ 572 699	Sand	O – end date 2042
	Cobden Farm	Quarry	Tarmac Limited	SJ 587 673	Sand	O – end date 2021
	Forest Hill Quarry	Quarry	CEMEX UK Material Limited	SJ 612 714	Sand	O – end date 2021
	Fourways	Quarry	Tarmac Limited	SJ 577 690	Sand	R
	Town Farm Quarry	Quarry	P Casey Enviro Ltd.	SJ 565 735	Sand	R
	Rudheath Lodge ¹⁰	Quarry	Sibelco UK	SJ 751 698	Silica Sand	O – end date 2032
Cumbria	Bonnie Mount	Quarry	J. E. A and S. M Burne	NY 548 313	Sand	O – end date 2035
	Brockleworth Farm	Quarry	Norbrook Laboratories	NY 348 551	Sand	NO – end date 2021
	Cardewmires Quarry	Quarry	Thomas Armstrong Ltd	NY 343 505	Sand and gravel	O - end date 2025
	Derwent Howe Slag Bank	Quarry	Thomas Armstrong Ltd	NX 985 285	Slag	NO – end date 2016

⁹ Rudheath Lodge is split between the administrative boundaries of Cheshire East & Cheshire West with planning approvals in both MPAs. Extraction has been approved between 202-2032 with a further 2 years allowed for restoration.

¹⁰ Rudheath Lodge is split between the administrative boundaries of Cheshire East & Cheshire West with planning approvals in both MPAs.

North West Aggregate Working Party – AMR 2022

Elterwater Quarry (slate)	Quarry	Burlington Slate Ltd	NY 324 048	Secondary aggregate	O – end date 2042
Eskett and Rowrah Quarries	Quarry	Tendley Quarries Ltd.	NY 054 167	Limestone	O – end date 2034
Faugh No. 1 Sand Pit	Quarry	Hanson Quarry Products Europe Limited	NY 512 552	Sand	NO – end date 2024
Faugh No. 2 Sand Pit	Quarry	Eddie Wannop Limited	NY 512 552	Sand	O end date 2022
Flusco Quarry	Quarry	Lakeland Minerals Limited	NY 464 293	Limestone	NO – end date 2032
Ghyll Scaur Quarry	Quarry	Aggregate Industries UK	SD 171 828	Igneous Rock (HSA)	O – end date 2045
Goldmire Quarry	Quarry	Neil Price Construction Service Limited	SD 219 739	Limestone	O – end date 2042
Hartley Quarry	Quarry	CEMEX RMC (UK) Ltd	NY 787 083	Limestone	NO – end date 2042
Helbeck Quarry	Quarry	Breedon Group	NY 799 158	Limestone	NO – end date 2042
High House Quarry (Highfield)	Quarry	D A Harrision	NY 511 252	Sand and gravel	O – end date 2036
Holme Park Quarry	Quarry	Aggregate Industries UK	SD 536 788	Limestone	O – end date 2043
Holmescales Quarry	Quarry	Aggregate Industries UK	SD 556 869	Sandstone (HSA)	O – end date 2042
Kendal Fell Quarry	Quarry	Mr Pennington	SD 502 925	Limestone	O – end date 2042
Kirkhouse Quarry	Quarry	Lakeland Minerals Limited	NY 564 601	Sand and gravel	O – end date 2033
Low Gelt Quarry	Quarry	Hanson Quarry Products Europe Limited	NY 512 552	Sand	O – end date 20
Low Plains	Quarry	Tarmac Limited	NY 490 410	Sand and gravel	O – end date 2033
Moota Quarry	Quarry	CEMEX RMC (UK) Ltd	NY 148 361	Limestone	O – end date 2024

North West Aggregate Working Party – AMR 2022

	Overby No. 2 Sand Pit	Quarry	Thomas Armstrong Limited	NY 125 470	Sand	O – end date 2026
	Peel Place Quarry	Quarry	Tendley Quarries	SD 069 011	Sand and Gravel	O – end date 2025
	Roan Edge Quarry	Quarry	CEMEX RMC (UK) Ltd	SD 584 926	Sandstone (HSA)	O – end date 2038
	Roosecote Sand Pit	Quarry	Burlington Aggregates Ltd	SD 224 687	Sand and gravel	O – end date 2029
	Sandside Quarry	Quarry	Tarmac Limited	SD 482 807	Limestone	O – end date 2029
	Shapfell Limestone Quarry	Quarry	Tata Steel UK Limited	NY 587 138	Limestone	NO – time extension to 2036 for restoration only
	Silvertop Quarry	Quarry	W & M Thompson (Quarries) Ltd	NY 586 602	Limestone	O – end date 2042
	Snowhill Quarry No. 1	Quarry	Mr M Smallwood	SD 280 387	Limestone	NO – end date 2022
	Snowhill Quarry No. 2	Quarry	Mr M Smallwood	SD 280 387	Sandstone with waste sold as secondary aggregate	NO - end date 2020
	Stainton Quarry	Quarry	Tarmac	SD 247 729	Limestone	O – end date 2042
	Tendley Quarry	Quarry	Tendley Quarries	NY 088 288	Limestone	O – end date 2029
Lake District	Shap Beck Quarry	Quarry	Hanson Quarry Products Europe Limited	NY 550 181	Limestone	O – end date 2042
	Shap Blue Quarry and Works	Quarry	CEMEX (UK) Ltd	NY 564 106	Igneous rock	O – end date 2038
Greater Manchester - Salford City	Astley Moss	Quarry	Breedon Aggregates	SJ 371 500	Sand and Gravel	O – end date 31 st Dec 2022
Greater Manchester – Tameside Metropolitan Borough Council	Buckton Vale Quarry	Quarry	W Maher & Sons	SJ 530 885	Sandstone	O – end date 2042

North West Aggregate Working Party – AMR 2022

	Harrop Edge Quarry	Quarry	Chartrange (Quarry Products)	SJ 982 959	Sandstone	NO – end date 2042
Greater Manchester - Bury Metropolitan Borough Council	Fletcher Bank Quarry	Quarry	W Maher & Sons	SD 804 170	Sandstone	O – end date 2036
	Fletcher Bank Quarry	Quarry	PP O'Connor Ltd	SD 804 170	Sandstone	O – end date 2036
Greater Manchester - Bolton Council	Harwood Quarry	Quarry	Booth Ventures	SD 747 124	Sandstone	O – end date 2026
	Montcliffe Quarry	Quarry	Armstrongs Aggregates Ltd	SD 656 124	Sandstone	O – end date 2033
	Pilkington Quarry	Quarry	Armstrongs Aggregates Ltd	SD 622 121	Sandstone	NO – end date 2026
Greater Manchester – Stockport Metropolitan Borough	Offerton Quarry	Quarry	Offerton Sand and Gravel	SJ 928 893	Sand and Gravel	NO
Greater Manchester – Wigan Metropolitan Borough	Morley's Hall Quarry	Quarry	Casey	SJ 685 990	Sand and gravel	O – end date 2024
Merseyside - St. Helens	Bold Heath Quarry	Quarry	D Morgan Plc	SJ 530 885	Sandstone	O – end date 2025
Merseyside – Liverpool City Council	Garston Wharf	Wharf	Hanson Quarry Products Europe Limited and Tarmac	SJ 397 837	Sand	O – dredging license until 2024
Merseyside – Wirral Metropolitan Borough Council	Mersey Wharf	Wharf			Sand and gravel	NO – dredging license until 2029
Merseyside – Sefton Metropolitan Borough Council	Port of Liverpool (Seaforth Docks)	Docks	Aggregate Industries	SJ 323 961	Crushed rock (imports from Glensanda Quarry)	O – end date 2021
Warrington Borough Council	Southworth Quarry	Quarry	Gaskell Bros (WM&C) Ltd	SJ 619 940	Sandstone	O – end date 2025

North West Aggregate Working Party – AMR 2022

Lancashire County Council	Ribblesdale Cement - Bellman	Quarry	Hanson	SD 761 428	Limestone	O – end date 2027
	Back Lane	Quarry	Aggregate Industries	SD 510 695	Limestone	O – end date 2048
	Leapers Wood	Quarry	Tarmac	SD 515 694	Limestone	O – end date 2048
	Ribblesdale – Bankfield	Quarry	Tarmac	SD 755 435	Limestone	O – end date (pp granted until 2033 subject to signing of s106 agreeme nt)
	Ribblesdale – Lanehead	Quarry	Hanson	SD 752 437	Limestone	O – end date 2027
	Dunald Mill	Quarry	Tarmac	SD 511 679	Limestone	NO – end date 2022
	Clayton Hall	Quarry	Neales		Sand	C – end date 2028
	German Lane	Quarry	P Casey Enviro	SD 562 171	Sand	NO – end date 2042
	Lydiat Lane	Quarry	JA Jackson	SD 554 239	Sand	C – end date 2030
	St Annes Foreshore	Quarry	William Rainford	SD 313 300	Sand	C
	Bradleys	Quarry	JA Jackson	SD 512 340	Sand	O – end date 2029
	Runshaw	Quarry	Tarmac	SD 543 195	Sand	NO – end date 2027
	Sandons Farm	Quarry	Chorley Sand	SD 592 131	Sand	C– end date 2022
	Lower Brockholes	Quarry	Hargreaves	SD 578 304	Sand	C
	Sharples	Quarry	Hargreaves	SD 472 428	Sand	C– end date 2028

North West Aggregate Working Party – AMR 2022

	Catlow	Quarry	Greens		Sandstone	O – end date 2028
	Leeming	Quarry	Brown Bros	SD 683 406	Sandstone	O – end date 2042
	Ellel Crag	Quarry	JA Jackson		Sandstone	O – end date 2038
	Whinney Hill	Quarry	Forterra	SD 756 30	Sandstone	NO – end date 2042
	Whittle Hill	Quarry	Ruttles		Sandstone	NO – end date 2042
	Brinscall	Quarry	Armstrongs	SD 633 421	Sandstone	O – end date 2042
	Waddington Fell	Quarry	Armstrongs	SD 718 479	Sandstone	O – end date 2022
	Fletcher Bank	Quarry	Marshalls		Sandstone	O – end date 2042
	Scout Moor	Quarry	Marshalls	SD 814 190	Sandstone	O – end date 2029
	Jamestone	Quarry	W Maher and Sons	SD 758 233	Sandstone	O – end date 2042
	Whitworth	Quarry	Fairhurst Stone	SD 875 202	Sandstone	O – end date
	Rakehead	Quarry	Ibstock		Sandstone	NO – end date 2042
	Deerplay	Quarry	Waste Recycling Group		Sandstone	NO – end date 2035
	Tong Farm	Quarry	Fox Brothers	SD 880 225	Shale / sandstone	O – end date 2031
	Ravenhead Quarry		Booths		Sandstone	O – end date 2042
<p>Notes: C = confidential figure Status: O=operational; NO=Non Operational, D=Dormant, C=Closed, R=Restored/Redeveloped</p>						

Planning Applications

Table 8 below lists the planning applications for aggregate production within the North West of England, which were either decided or pending a decision late 2020 through to early and 2022. Several applications were submitted in 2019 and were approved in 2021 or early 2022 and have also been included in the table below as for completeness, it seems appropriate to include the outcome of the decision even though it is beyond the 31st December 2021 base date of this AMR.

Table 8 Planning Applications and Decisions in NWAWP Area

Mineral Planning Authority	Site Name and Location (Grid Reference)	Operator / Applicant	Tonnage(mt) (for aggregate use)	Type of Application	Date Submitted	Decision
Cheshire East	Bent Farm Quarry Western Extension ¹¹	Sibelco	1.1	Application ref. 19/2173W. Full permission for extension for the extraction of sand and progressive restoration	22 May 2019	Approved 13 Nov 2020
	Arclid Quarry ¹²	Bathgate Silica Sand	4.5	Application ref. 19/3951W. Full permission for a south western extension to silica sand workings with revision to the development programme and restoration scheme approved under permission 09/2291W.	23 August 2019	Approved 28 January 2021
Cheshire West and Chester	Forest Hill Quarry	Cemex	350,000 tonnes	Application ref. 19/02452. Full permission for northern extension for extraction of sand and restoration	27 June 2019	Approved January 2021
Cumbria	Silvertop Quarry	Thompsons of Prudhoe	0.6Mt of limestone	App ref. 1/20/9012. Approval for temporary period of 3 years to release 0.6Mt of limestone reserve	7/10/20	Approved 24.02.21

¹¹ Bent Farm Quarry is a silica sand quarry with a small proportion of aggregate sand estimated from the 1.1Mt.

¹² Arclid Quarry - permission for 4.5 Mt of silica sand (with very limited aggregate sand estimated from it).

North West Aggregate Working Party – AMR 2022

Mineral Planning Authority	Site Name and Location (Grid Reference)	Operator / Applicant	Tonnage(mt) (for aggregate use)	Type of Application	Date Submitted	Decision
	Esk Quarry	Eddie Wannop Ltd.		App ref 1/20/9004. Recycling of inert waste to produce non-waste aggregate products	30/4/20	Decision pending
	Kirkhouse Quarry			1/20/9006 and 1/20/9005 – extension to operating period for sand and gravel extraction to 2032	12.06.2020	Granted 20.01.22
	High Close Quarry	Thomas Armstrong Aggregates		ROMP	06.09.19	Withdrawn
	Lambhill Quarry	J & M Casson & Sons		Full	24.12.21	Granted - 03.03.22
	West Brownrigg Quarry	Messrs Lowthian		S73	10.02.21	Granted - 02.02.22
	Petts Quarry	Lonsdale Settled Estate		S73	08.12.20	Granted - 03.03.22
Lancashire	Tong Farm	Fox Brothers	1.0mt crushed rock	Extension		Approved 4/11/20
	Ellel Crag Quarry	J A Jackson	1790000t sandstone	Full	10/06/2019	Granted 15.12.21
	Catlow Quarry	Greens Natural Stone Products Ltd		Time extension	23/12/2020	Granted
	Lower Hall Farm, Salmesbury	Harleyford Aggregates	3Mt sand and gravel	Full	26/02/21	Pending
	St Annes Foreshore	Fylde Borough Council	150,000 tpa sand	Full application for resumption of sand winning activity	30/03/2022	Pending
	Land north of A674, Chorley	Ruttles	116,000 sand and gravel	Full	15/01/2021	Pending
	Waddington Fell Quarry	Armstrongs	Time extension for mineral working until December 2023	s73	4/08/2022	Granted 1/03/23

North West Aggregate Working Party – AMR 2022

Mineral Planning Authority	Site Name and Location (Grid Reference)	Operator / Applicant	Tonnage(mt) (for aggregate use)	Type of Application	Date Submitted	Decision
	Bankfield Quarry, Clitheroe	Tarmac	Time extension for mineral working until 2033	s73	13/12/2018	Approved 24/07/2019 subject to s106
	Bradleys Sandpit	JA Jackson	Time extension for mineral working until 2029	s73	25/10/21	Approved 5/05/2022
	Ravenhead Quarry, Skelmersdale	Booths	Extension to mineral working area – 130,000m ³ aggregate	s73	7/04/22	Approved 20/07/22
	Dunald Mill Quarry, Carnforth	Tarmac	Time extension for mineral extraction	s73	11/10/2021	Pending
Greater Manchester – Salford City Council	W Maher & Sons Ltd Inert Waste Recycling Facility Langley Road Pendlebury Swinton	W Maher & Sons Ltd		20/74747/FUL. Variation of conditions (time extension of operation to Feb 2025), (plans) (material storage) attached to 15/66565/FUL at W Maer & Sones Ltd Inert Waste Recycling Facility	31/01/2020	Approved 15/10/2020
Notes: C = confidential figure						

Local Aggregate Assessments

Mineral Planning Authorities are required to prepare a Local Aggregate Assessments (LAAs) every year as a contribution towards the Managed Aggregate Supply System (MASS). The purpose of LAAs is to assess the demand and supply of aggregates within the Mineral Planning Authority area.

Within the North-West, Greater Manchester, Merseyside and Halton and Warrington prepare a joint LAA.

Mineral Planning Authorities can decide to either base their LAA figure (the demand figure used to calculate the landbank of both sand and gravel and crushed rock) on a rolling average of 10 years sales data, 3 year average sales data, or an uplift to the 10 years or 3 years sales data which takes into account ‘other relevant local information.’

Table 9 below sets out the date of each MPAs latest LAA, the LAA figures included in those LAAs for both sand and gravel and crushed rock, and the calculation method.

Table 9 Local Aggregate Assessments in NWAWP Region

Mineral Planning Authority	LAA Date	LAA Figure		Calculation Method
		Sand and Gravel (mt)	Crushed Rock (mt)	
Cheshire East	2022	0.493	2.32	The Council has considered other local information to produce an annual average for future aggregate demand for the next 15-year period (2021-2035). The LAA figure identified for sand and gravel has resulted from applying an annual 2% growth rate to the 2020 baseline average 10-year sales figure for the next 15-year period. For crushed rock, the LAA figure is 2.16mt over 15 years. The baseline position represents an average of the amount of imported crushed rock to the Cheshire sub-region (CE & CWaC) reported in

				the last two annual Mineral Surveys of 2.1 Mt (2014) and 1.6 Mt (2019) plus a 2% annual uplift.
Cheshire West and Chester	2022	0.72	N/A	Annual apportionment figure used which originates from the adopted Cheshire West and Chester Local Plan (Part One) Strategic Policies.
Cumbria	2022 AMR (2021 data)	0.79	2.80 – all crushed rock Limestone – 1.99 Sandstone & igneous (exc. VHSA) – 0.34 High spec roadstone (HSA & VHSA) – 0.47	Sand and gravel provision based on 3yr average sales figure. Crushed rock based on 10yr average sales.
Greater Manchester, Merseyside and Halton and Warrington	Draft 2021 LAA (2019 and 2020 data).	0.27	0.80	Sand and Gravel and Crushed Rock LAA figure is based on 3 year average sales plus 2% uplift to take into account sub-regional growth.
Lancashire	2022	0.13	Limestone = 2.93 Gritstone = 1.04	Sand and Gravel LAA rate is based on 10 year average sales figure; Limestone LAA figure is based upon the 3 year average sales figure; Gritstone LAA figure is based upon 10 year average sales figure

Local and National Aggregate Need

The annual rates of provision for aggregates in the North West of England as outlined within each of the Mineral Planning Authorities LAAs are 2.4mt for sand and gravel per annum and 9.89mt for crushed rock per annum.

The combined LAA annual provision rate for the North West exceeds the 10 years sales average for both sand and gravel and crushed rock. In the case of sand and gravel, the

combined LAA annual provision rate exceeds the 10 year sales average by 0.1mt. In the case of crushed rock the combined LAA annual provision rate exceeds the 10 year sales average by 3.03mt.

The current national and sub-national guidelines for aggregates provision are now out of date and are currently under review by DLUHC. As the national and sub-national guidelines are out of date, the NAWWP do not consider them to be a robust baseline to assess whether the North West and its Mineral Planning Authorities are making an appropriate contribution to local and national aggregate need. The combined LAA annual provision rate is the most robust baseline available and has therefore been used instead.

Trends and Analysis

Primary aggregates sales

Sales of sand and gravel decreased in 2021 in comparison to 2020, sales of crushed rock also decreased.

Although the overall sales of sand and gravel have been steady since 2012 the effects of the pandemic continue to be felt in the sales of 2021. This should improve for the 2022 data as the country returned to normal. The 3 year average for sand and gravel is slightly below the 10 year average, demonstrating that there has been a definite impact on the minerals industry of the pandemic in sales in recent years.

In the case of crushed rock, sales have been steady since 2015. The 3 year average sales are marginally higher than the 10 year average for crushed rock sales, demonstrating that the impact of the pandemic on the crushed rock aspect mineral and extraction industry is easing. Cumbria and Lancashire both experienced an improvement in crushed rock sales on 2020.

Marine won sand and gravel sales have increased over the 10 year period even though the port of Barrow ceased landings in 2017. Marine won sand and gravel now only lands at the wharves situated along the River Mersey and Seaforth Dock. Caution must be applied though to the last 3 year figures for marine won and land won sand and gravel in the Greater Manchester, Merseyside and Halton and Warrington sub-region within this report, as these are not accurate figures due to the need to maintain confidentiality.

Primary aggregate reserves

In the North West of England reserves of sand and gravel decreased from 21.21mt in 2020 to 18.69mt in 2021. Over the 10 years there has been a decreasing trend in sand and gravel reserves, apart from in 2017 where reserves increased from the previous year by approximately 2.0mt.

As previously explained in this report, within the sub-region of Greater Manchester, Merseyside and Halton and Warrington, there is only one operational sand and gravel quarry (Astley Moss) which is why the figures in the report for the sub-region are confidential and should be treated with caution. Astley Moss will cease operation in 2022, which is of concern for the sub-region. Offerton sand and gravel quarry does still have a small amount of reserves, but this site was inactive in 2019 and 2020. The NWAWP are exploring the possibility of marine landings replacing historic land-won sand and gravel sales. As Table 8 in this report demonstrates, no new applications for sand and gravel extraction have been granted in the North West, Lancashire does have an application for sand and gravel extraction pending.

Permitted reserves of crushed rock in the North West decreased from 247.89mt in 2020 to 227.87mt in 2021. Over the last 10 years there has generally been a decreasing trend in crushed rock reserves, apart from 2015 when reserves increased by approximately 26.0mt. The increase in crushed rock reserves in 2015 was due to an increase in reserves

in both Cumbria and Lancashire. The North West region is reliant on crushed rock reserves from Cumbria, Lancashire and the Greater Manchester, Merseyside and Halton and Warrington sub region, as there are no crushed rock reserves in Cheshire West and Chester. The crushed rock reserve in Cheshire East is recorded as nil as the landbank of sandstone in the MPA area is not likely to contribute to the supply of crushed rock.

Secondary and recycled aggregates

The most up to date information of secondary and recycled aggregate is from the Waste Data Interrogator 2021. A survey of fixed construction and demolition recycling facilities and secondary aggregates producers was undertaken in the North West, however, the response rate was low, and therefore the figures in Table 5d should be treated with caution.

The data from the WDI showed depending on the methodology used that totals of between 7.2 and 8.05mt of secondary and recycled aggregate were produced in the North West and 9.3mt was managed.

It is important to understand the data limitations associated with secondary and recycled aggregates. Most notably regarding the waste data interrogator (WDI) the data within the WDI is collected from the returns from permitted facilities and records only waste received, and waste exported from site

Secondary aggregates, where certain quality protocol specifications are met, are considered to be non-waste and therefore are not included within the waste tonnage returns. The data within the WDI does not account for mobile crushers or recycling and re-use that occurs on individual construction sites. The tonnage of recycled aggregates reported in the WDI is likely to only represent a proportion of the recycled aggregates in circulation.

Major Construction Projects or Developments

Major construction projects have a significant effect on the aggregate supply within a region. The North West contains two major cities (Manchester and Liverpool), each of which have large development growth aspirations. HS2 Phase 2a (West Midlands - Crewe) and Phase 2b (Crewe – Manchester) is proposed to run through the NAWAP area. Its construction is expected to take place as follows: for Phase 2a between 2024 and 2031 and Phase 2b between 2025 and 2038 and it will have a major impact on aggregate demand. This is particularly the case in the Cheshire sub-region where a borrow pit is proposed for phase 2a within Cheshire East. In the case of HS2 Phase 2b¹³ 4 borrow pits are proposed to facilities the construction; 3 in Cheshire West and Chester and 1 in Cheshire East.

Table 10 below outlines the major construction projects or developments that are proposed within the North West of England.

¹³ HS2 Phase 2b – Environmental Statement consultation document – Volume 3: Appendix CT-008-00000 Borrow Pit Report

Until recently, the planned creation of a HS2 route up to the North West has impacted on expected aggregate requirements for the Cheshire authorities in particular. Following the announcement in October 2023 that HS2 will not extend beyond Birmingham this is no longer a factor. However, the subsequent announcement of the Network North proposals could result in additional or accelerated road building programs coming forward which will create additional demand for aggregates within the North West

Table 10 Major Construction Projects or Developments

Project/Development Name and Location	Time Scale (estimated start and end date)	Comments
Greater Manchester - Port Salford	2020-2037	Port Salford will be developed as an integrated tri-modal facility, with on-site canal berths, rail spur and container terminal as essential elements of the scheme. The overall facility will provide around 500,000 sqm of employment floorspace by
Greater Manchester - Salford Quays	2020-2037	land to accommodate around 192,000 sqm of office floorspace, around 12,500 new dwellings and minimal industry and warehousing (around 6,000 sqm) has been identified within the Quays.
Greater Manchester - North-East Growth Corridor	2020-2037	land to accommodate almost 1 million sqm of new employment floorspace and around 19,000 new dwellings
Greater Manchester - Wigan-Bolton Growth Corridor	2020-2037	New highway infrastructure will connect Junction 26 of the M6 and Junction 5 of the M61 including public transport provision. land to accommodate just over 1million sqm of new employment floorspace and approximately 13,000 new dwellings has been identified within the area.
Greater Manchester - Manchester Airport Enterprise Zone	2020-2037	New HS2 station; Completing the development of Airport City immediately around the airport, which will provide a total of around 500,000 sqm of office, logistics, hotel and advanced manufacturing space; Continuing to develop Medipark and Roundthorn Industrial Estate as a health and biotech cluster; Delivering approximately 60,000 sqm of office floorspace around the new HS2 station; Providing a

Project/Development Name and Location	Time Scale (estimated start and end date)	Comments
		minimum of 1,700 new homes to the west of the M56 at Timperley Wedge, up to 2037
Greater Manchester – New Carrington	2020-2037	4,300 dwellings; 350,00sqm of employment floorspace
HS2 Phase 2a (West Midlands - Crewe)	2024 – 2031	58km of new rail infrastructure including tunnels, bridges and viaducts. Up to 40ha borrow pit proposed north of Checkley Lane, to the south of Nantwich.
HS2 Phase 2b – Crewe-Manchester	2025-2038	New stations to be built at Manchester Piccadilly and Manchester Airport; 85km of new rail infrastructure including the construction of embankments and tunnels and the creation of borrow pits.
Warrington – Warrington Western Link		New highway infrastructure to provide a western by-pass of the town centre across the Manchester Ship Canal, linking the A56 to the south of town centre to the A57 to the north.
Warrington – Warrington Waterfront	2021-2038	New urban quarter of 1,335 dwellings (1,070 of which will be delivered within the plan period) and associated infrastructure/services/community facilities.
Warrington – South East Warrington Urban Extension	2021-2038	A sustainable urban extension of around 4,200 dwellings (2,400 of which will be delivered within the plan period) and associated infrastructure/services/community facilities.
Warrington – Fiddlers Ferry	2021-2038	A sustainable mixed use development comprising 101hectares of employment land and 1,760 dwellings (1,310 of which will be delivered within the plan period) and associated infrastructure/services/community facilities.
Warrington – Peel Hall	2021-2038	A new sustainable community of 1,200 dwellings and associated infrastructure/services/community facilities.

Project/Development Name and Location	Time Scale (estimated start and end date)	Comments
Warrington – South East Warrington Employment Area	2021-2038	A major new employment area of 137hectares of employment land at the junction of the M6 and M56.
A500 Dualling	2023 - 2025	A500 between Meremoor Moss roundabout and M6 junction 16 to dual carriageway standard.
Poynton Relief Road	2019 – 2022	3.5km long, two-way single carriageway road.
Middlewich Eastern Bypass	2023 – 2025	2.6 km long, two-way single carriageway road.
North West Crewe Package	2022 – 2024	2.8 km road scheme.
Royal Arcade, Crewe – Phase 1	2021 – 2023	Town Centre Regeneration - mixed-use development that will include a new bus station, multi-storey car park, cinema, restaurants, public realm, leisure and retail uses.
Liverpool Waters (including Isle of Man Ferry Terminal and New Everton Stadium)	2012-2042	Ongoing construction of several proposals coming forward as part of the Liverpool Waters outline permission including Ferry Terminal (due for completion 2022) and football stadium (starting 2021). Various additional proposals coming forward in phased approach.
Wirral Waters	2012-2034	Ongoing construction of several proposals coming forward as part of the Wirral Waters outline permission with numerous consents currently going through discharge of conditions.
St Helens – Parkside Colliery Regeneration.	Appeal Decision 11/11/21	Construction of up to 92,900 m2 of employment floorspace (Use Class B8 with ancillary B1(a)) and associated servicing and infrastructure including car parking; vehicle and pedestrian circulation space; alteration of existing access road including works to existing A49 junction; noise mitigation; earthworks to create development platforms and bunds; landscaping including buffers; works to existing spoil heap; creation of drainage features; substations and

Project/Development Name and Location	Time Scale (estimated start and end date)	Comments
		ecological works. Discharge of conditions ongoing.
Parkside Link Road and Business Park	Appeal Decision 11/11/21	Formation of a new link road between A49 (Winwick Road) and M6 Junction 22 including the re-alignment of Parkside Road and other associated works. Discharge of conditions ongoing and construction underway.
Knowsley – Halsnead Garden Village – Sustainable Urban Extension		Granted Garden Village status in 2017 with the scope for up to 1600 homes, substantial employment uses and an integrated country park. Being developed by various housebuilders with numerous applications ongoing, most now at discharge of conditions stage.
Knowsley – Land East of Halewood – Sustainable Urban Extension		Up to 1,100 dwellings with public open space including flood storage and mitigation measures. Being developed by various housebuilders with numerous applications ongoing, most now at discharge of conditions stage.
Sefton – Land East of Maghull	Appeal Decision 22 February 2021 and planning permission 21 October 2021	Hybrid application including new distributor road, flood relief, drainage and landscaping works to Whinny Brook and ancillary infrastructure and 1685 residential dwellings (C3), an older persons housing scheme with access also reserved (C2, C3), a mixed-use Local Centre (Uses A1-A5, C3, D1, D2);
Halton –East Runcorn Strategic Daresbury site and Sandymoor		Strategic Daresbury Site includes 26ha for expansion of B1 science, hi tech research and development, 40ha for office and knowledge-based facilities, up to 1400 dwellings and mixed use local centre. Sandymoor – completion of Sandymoor residential area with 1400 additional units, new local centre and primary school.

Project/Development Name and Location	Time Scale (estimated start and end date)	Comments
		Both include various phases with applications at different stages.
Cumbria – Carlisle Southern Link Road	Commencing 2022	To enable the strategic growth to the south of Carlisle.
Cumbria – A66 dualling	Expected to commence 2024/2025	Currently at pre-planning stage with consultation on preferred routes taking place during 2021. DCO submission expected 2023.
Cumbria – St Cuthbert's Garden Village	Expected to commence within the next 5 years – delivery of full scheme beyond 2030	<p>Significant urban extension to the south of Carlisle, proposed to accommodate 10,000 new homes along with new schools and community facilities.</p> <p>Draft St.Cuthbert's Local Plan went to consultation in November 2020. Construction of the first sites is expected to commence within the next 5 years, delivery of the full scheme would extend beyond 2030.</p>
Lancashire - Cuerden strategic site	ongoing	<p>The delivery of new employment floor space</p> <p>The provision of up to 116 additional homes</p> <p>Significant investment in infrastructure, including highways and, pedestrian/cycle routes</p>
Lancashire - Preston Western Distributor	ongoing - 2023	The Preston Western Distributor road scheme allows people to travel more easily around parts of the Preston and Fylde area.
Lancashire - Fylde/Heyhouses M55 Link	ongoing - 2024	The M55 to Heyhouses Link Road will create a much better connection between Lytham St Annes and the M55 motorway, relieving congestion on smaller local roads and supporting the commercial viability of local housing and business development sites.
Lancashire – Highways England A585 Improvement	Ongoing – completion in 2024	Bypass of Little Singleton

Key Conclusions

At 31 December 2021, the reserves of sand and gravel in the North West overall are just above the minimum 7 year landbank (at a figure of 7.68 years) and in the case of crushed rock above the minimum 10 year landbank (at a figure of 33.12 years). This is based on a combined LAA annual provision rate, in the absence of national and sub-national guidelines. However, these figures should be treated with caution due the notable drop in extraction levels that occurred as a result of the impacts of the pandemic.

There is a concern however that there is a fall in replenishment rates, due to not enough planning applications for primary aggregate extraction coming forward in the North West region.

As reported in the AM2019, the North West is heavily dependent upon imports, and aggregate consumption outstrips production.

Particularly in the case of sand and gravel, it is recognised that there will be supply issues in the near future if planning applications for sand and gravel extraction do not come forward or are not approved. The NWAWP is considering the role that marine dredged sand and gravel could play in meeting sand and gravel demand. Although the landbank for crushed rock is significantly higher than the minimum 10 year landbank, it is recognised that there is still a need to ensure that there are appropriate levels of crushed rock permitted reserves in order to meet both local and national needs.

Appendix 1 NWAWP Meetings

Table 11 NWAWP Region AWP Meetings

Meeting Date	Link to minutes of the meeting	Summary of Key Points
23rd March 2021		<p>The following matters were discussed:</p> <ul style="list-style-type: none"> - Update on the AM2019 survey - MPAs progress with the NW Aggregate Minerals Surveys - Arrangements for LAAs covering 2019 and 2020 - Greater Manchester, Merseyside& Halton and Warrington LAA 2019 (2018 data) circulated for ratification - Local Government Reorganisation- impact on MPAs - Updates from MPAs, industry and MHCLG -
29th June 2021		<p>The following matters were discussed:</p> <ul style="list-style-type: none"> - AM2019 was well received and contained excellent summary information - Updates from MPAs, industry and MHCLG - Concerns around 2042 end date on permissions, particularly within the Peak District National Park. - The economic importance of Carboniferous Limestone needs to be raised with DLUHC - The need for a Chair to be appointed for the NW AWP – currently no nominations coming forward.
24th November 2021		<p>The following matters were discussed:</p> <ul style="list-style-type: none"> - First draft of the NW AWP Annual Report (2020 data) - Arrangements for ratifying individual LAAs by email outside of meetings once comments have been received and incorporated - Concerns about poor response rate for operator survey returns and the need for DLUHC to make this mandatory - MPA, industry and DLUHC updates - Concerns raised about the shortage of specialist minerals planners and the need to encourage more training in this sector
10 March 2022		<p>The following matters were discussed.</p> <ul style="list-style-type: none"> - Positions on current Marine Resources and Reserves

		<ul style="list-style-type: none"> - Perceived gaps in mineral supply - Product availability offshore - Supply chain issues - The 2021 NWAP AMR - Phase 2b of the HS2 Environment Statement
30 June 2022		<p>The following matters were discussed</p> <ul style="list-style-type: none"> - NAWAP survey operator returns - Local Aggregate Assessments - Updates from Planning Authorities - Industry Update - DLUHC Update - Appointment of a NAWAP Chairperson
30 November 2022		<p>The following matters were discussed</p> <ul style="list-style-type: none"> - Follow up on marine aggregate issues (from 30 March 2022 meeting) - Inviting additional persons to the meeting - The possibility that operator surveys be made mandatory - Members Local Aggregate Assessments – how they should be agreed and ratified. - Update on Plan preparation from the Planning Authorities - AMR Report - HS2 discussions - Industry Update - DLUHC Update - Terms of Reference for AWP