

HAMPSHIRE COUNTY COUNCIL, NEW FOREST NATIONAL PARK AUTHORITY, PORTSMOUTH CITY
COUNCIL, SOUTH DOWNS NATIONAL PARK AUTHORITY & SOUTHAMPTON CITY COUNCIL

Hampshire Minerals & Waste Plan: Partial Update

Aggregate Recycling Topic Paper

October 2023



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Non-technical Summary

This Topic Paper focuses on the issues related to the planning and provision of aggregate recycling sites in Hampshire.

Encouraging the greater use of recycled and secondary aggregates can:

- reduce the demand for primary aggregates such as sand and gravel but also the amount of waste requiring disposal.
- when used locally, recycled aggregates can also reduce the impact of transport and carbon emissions.

Therefore, recycled aggregate is a more sustainable supply of aggregate and should be given important consideration in the overall supply of aggregate to meet Hampshire's needs.

Recycled aggregates are materials that are derived from construction, demolition and excavation waste that has been reprocessed to provide a product suitable for use as a substitute for primary aggregate. Meanwhile, secondary aggregates are materials that are usually by-products of industrial processes which can then be re-used as a construction aggregate.

The National Planning Policy Framework (NPPF) sets out the requirement for a steady and adequate supply of aggregates. The Hampshire Minerals & Waste Plan (adopted 2013)¹ sets out a number of policies which implement the requirements set out in the NPPF at a local level.

In 2022, there were 26 active sites which held valid planning permission for the production of recycled and secondary aggregates in Hampshire.

The sales figures of the recycled and secondary aggregate in Hampshire had been increasing up to a peak in 2014, where sales started to decline. With the exception of 2020, sales have remained steady since 2017.

In 2022, it is shown that there was additional capacity of 70% for managing recycled and secondary aggregate.

As capacity has been maintained but sales have declined, this suggests that there could be a change in the market in relation to recycled and secondary aggregates.

Discussions with operators have highlighted that there could be further reduction in capacity as demand for housing increases and there is competition for sites with good transport connections. Issues have also been raised regarding the availability of good quality inert material for recycling. It is

¹ Hampshire Minerals & Waste Plan (adopted 2013) -

<https://documents.hants.gov.uk/mineralsandwaste/HampshireMineralsWastePlanADOPTED.pdf>

considered that this is impacted further by demolition sites where the use of crushers on-site means that material never enters the market.

The Waste Data Interrogator (WDI) includes sites that handle construction, demolition, and excavation (CDE) waste. Recycling or recovery rate of CDE wastes vary and depend on the type of material processed and the capability of the facility. Estimates suggest that between 1.3 to 2Mt of recycled aggregate were produced on average in Hampshire during 2020 to 2022.

Conclusion

Conclusions on the data obtained include:

- sales data suggests that on average over the last 10-years, **0.83Mt** of recycled and secondary aggregate has been produced.
- sales peaked at **1.11Mt** in 2014 and have been declining since.
- the WDI suggests that in Hampshire between **1.3Mt** and **2.0Mt** of recycled and secondary aggregate is being produced.
- Aggregate Monitoring survey suggests that capacity is estimated to be **2.8Mt**.
- the specific operator survey suggests that capacity estimate figures may be inflated and would suggest that capacity is closer to **2.1Mt**.
- the Mineral Products Association outlines that only a third of demand is met by recycled and secondary aggregate suggesting that at least **1.72Mt** capacity should be maintained.

Recommendations

The Topic Paper includes the following recommendations:

- the Hampshire Authorities should continue to monitor sales and capacity.
- consideration could be given to applying a condition to planning permissions to require annual sales/capacity data.
- the Hampshire Authorities should continue to work with regional bodies.
- the Plan could seek to encourage the use of recycled and secondary aggregates not only in minerals and waste developments but within wider construction projects within Hampshire.
- an aspiration to maintain at least **1.8Mt** of permanent recycled and secondary aggregate capacity could be included within the Plan. This also allows for the variation of approaches that could be applied for determining capacity.

1. Introduction

- 1.1 Hampshire County Council, Portsmouth City Council, Southampton City Council, the New Forest National Park Authority and the South Downs National Park Authority (collectively referred to as the 'Hampshire Authorities') are working together to prepare a partial update to the Hampshire Minerals & Waste Plan (adopted 2013).
- 1.2 To support the partial update, a number of Topic Papers have been prepared to provide more detailed information on key issues affecting the delivery of the Plan.
- 1.3 This Topic Paper focuses on the issues related to the planning and provision of aggregate recycling sites in Hampshire.
- 1.4 Encouraging the greater use of recycled and secondary aggregates can reduce the demand for primary aggregates such as sand and gravel but also the amount of waste requiring disposal. When used locally, recycled aggregates can also reduce the impact of transport and carbon emissions. Therefore, recycled aggregate is a more sustainable supply of aggregate and should be given important consideration in the overall supply of aggregate to meet Hampshire's needs.

Recycled and Secondary Aggregates

- 1.5 Recycled aggregates are materials that are derived from construction, demolition and excavation waste that has been reprocessed to provide a product suitable for use as a substitute for primary aggregate. It includes materials such as soils and subsoil, concrete, brick or asphalt for re-use (rather than disposing of it). Meanwhile, secondary aggregates are materials that are usually by-products of industrial processes which can then be re-used as a construction aggregate. An example is Incinerator Bottom Ash, a by-product from Hampshire's Energy Recovery Facilities (ERFs) can be used as an aggregate in road construction.
- 1.6 Examples of what materials are considered to be recycled and secondary aggregate are detailed in Table 1.

Table 1: Examples of recycled and secondary aggregate materials

Recycled or Secondary	Example Materials
What is recycled aggregate? (Manufactured)	• Recycled concrete aggregate • Recycled asphalt • Recycled asphalt planings • Spent railway ballast
What is secondary aggregate (Natural)	• China clay sand* • Slate aggregate* • Colliery spoil*
What is secondary aggregate (Manufactured)	• Incinerator Bottom Ash • Spent oil shale • Recycled glass • Recycled plastics • Recycled rubber
<i>*denotes those not produced in Hampshire</i>	

2. Policy Context

National Policy

2.1 The National Planning Policy Framework (NPPF) sets out the requirement for a steady and adequate supply of aggregates².

2.2 The NPPF states that planning policies should:

‘so far as practicable, take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials, before considering extraction of primary materials, whilst aiming to source minerals supplies indigenously’³

2.3 Furthermore, the NPPF seeks to protect facilities that enable the production of recycled and secondary aggregates:

‘safeguard existing, planned and potential sites for: the bulk transport, handling and processing of minerals; the manufacture of concrete and concrete products; and the handling, processing and distribution of substitute, recycled and secondary aggregate material’⁴

2.4 The NPPF requires Mineral Planning Authorities to prepare an annual Local Aggregate Assessment to plan for supply by forecasting demand. This should be 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)⁵.

Relevant national policy updates

3.21 The government’s 25 Year Environment Plan (January 2018) includes the goal of zero avoidable waste by 2050 and to transition towards a circular economy. Specifically, this involves doubling resource efficiency and minimising environmental impacts at products’ end of life by; looking at the whole life-cycle to promote their recycling/reuse wherever possible.

3.22 The Resources and waste strategy for England (2018) sets out how the ambitions of the 25 Year Environment Plan can be realised in the sphere of

² National Planning Policy Framework (Para. 213) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1182995/NPPF_Sept_23.pdf

³ National Planning Policy Framework (Para. 210(b))

⁴ National Planning Policy Framework (Para. 210(e))

⁵ National Planning Policy Framework (Para. 213(a))

waste and resource management. A variety of mechanisms are proposed including changes to waste collections, encouragements for implementing the waste hierarchy, introducing food waste targets and improving data collection. Some of these could have wide ranging implications on how waste is collected and managed.

Local Policy

- 2.5 The Hampshire Minerals & Waste Plan (adopted 2013)⁶ sets out a number of policies which implement the requirements set out in the NPPF at a local level. The relevant policies are set out in full in Appendix 1.
- 2.6 Policy 16 (Safeguarding – minerals infrastructure) seeks to protect the infrastructure that supports the supply of minerals in Hampshire against development which would ‘prejudice or jeopardise its use by creating incompatible land uses nearby’.
- 2.7 Policy 17 (Aggregate supply – capacity and source) states that an adequate and steady supply of aggregates will be provided until 2030. This supply will be augmented by safeguarding and development infrastructure capacity to provide alternative sources including recycled and secondary aggregate at a rate of 1.0 million tonnes per annum.
- 2.8 Policy 18 (Recycled and secondary aggregates) outlines support for production by ‘encouraging investment and further infrastructure to maximise the availability of alternatives’.
- 2.9 The provision of recycled and secondary aggregates is further supported by Policy 30 (Construction, demolition and excavation waste development) which supports development to ‘maximise the recovery of construction, demolition and excavation waste to produce at least 1mpta of high quality recycled/secondary aggregates’.
- 2.10 Policy 27 (Capacity for waste management and development) does not specifically refer to recycled and secondary aggregate but sets out the forecasted arisings of inert waste (the source of recycled and secondary aggregate). The Policy also outlines the minimum amounts of infrastructure capacity that is required to manage these arisings including non-hazardous waste recycling under which aggregate recycling would be considered. The Policy then outlines the criteria against which non-hazardous recycling proposals would be considered.

⁶ Hampshire Minerals & Waste Plan (adopted 2013) -

<https://documents.hants.gov.uk/mineralsandwaste/HampshireMineralsWastePlanADOPTED.pdf>

2.11 The Plan outlines that at the time of preparation (2010) sales of recycled and secondary aggregate were 0.79 million tonnes per annum (mtpa) (the 10-year average (2001-2010) being 0.64mtpa) and capacity was estimated to be 1.66mtpa of which around 1mtpa was capable of producing high quality aggregates⁷.

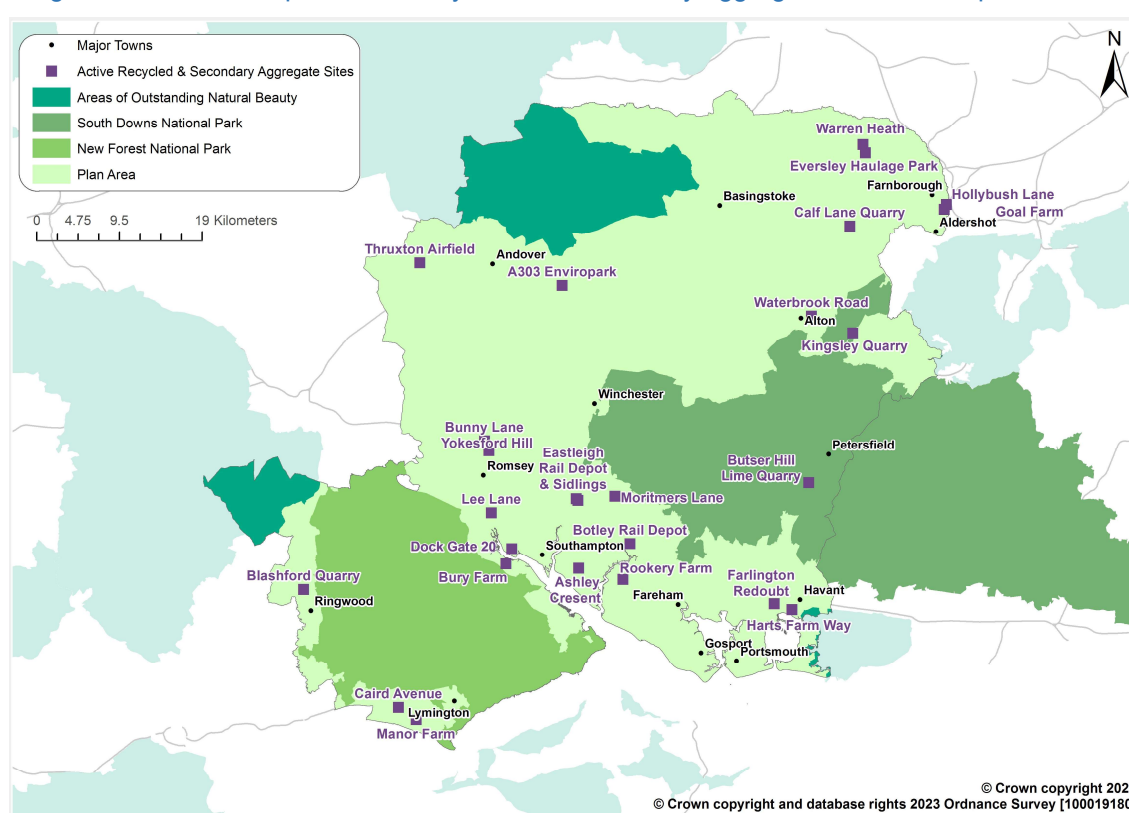
⁷ Hampshire Minerals & Waste Plan (2013) – para. 6.39.

3. Aggregate Recycling in Hampshire

Local Aggregate Assessment

- 3.1 Data pertaining to sales of recycled or secondary aggregates is collected yearly as part of the surveys carried out by mineral planning authorities to inform the Local Aggregate Assessment. Figure 1 shows the location of all active recycling sites in operation in Hampshire during 2022. It should be noted that whilst all sites were surveyed, not all responded and so in the absence of a response, estimates were used. As such, the results should be used with caution to indicate a general trend of what is happening.

Figure 1: Location map of active recycled and secondary aggregate sites in Hampshire, 2022⁸



- 3.2 There are 26 active sites (there are two operators at Hollybush Lane) which hold valid planning permission for the production of recycled and secondary aggregates in Hampshire. Of these sites, there was a response rate of 42% to the AM survey 2022. This response rate is a significant improvement on last year's survey, which saw a response rate of only 28%. The response indicates a collective capacity of 2.8Mt⁹. The total capacity for recycled or secondary aggregate processing in Hampshire is likely to be higher than 2.8Mt when

⁸ Hampshire Local Aggregate Assessment (2023)

⁹ Capacity data was estimated for those sites that did not provide a response.

accounting for temporary sites permitted, as well as the potential for unauthorised operations.

- 3.3 The sales figures of the recycled and secondary aggregate in Hampshire for the most recent 10-year period are shown in Table 2. Sales had been increasing up to a peak in 2014, where sales started to decline. With the exception of 2020, sales have remained steady since 2017. Given the extremely poor response rate in recent years it is difficult to be certain whether this could a trend or attributed to the effect of estimated data evening out the sales data.
- 3.4 Recycled materials made up the majority of sales, with 79% being recycled materials as opposed to secondary aggregate sales.
- 3.5 Table 2 shows sales of recycled and secondary aggregate to be 0.74Mt in 2022. This figure was derived from a combination 2021 sales data responses and an estimate based on 2020 sales data where a response was not provided this year.

Table 2: Recycled and Secondary aggregate sales in Hampshire, 2013-2022 (Million tonnes, Mt)

Year (yr)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Last 10 yr average	Last 3 yr average
Sales	0.93	1.11	0.99	0.83	0.76	0.72	0.77	0.67	0.75*	0.74	0.83	0.72

Footnotes

Source: Aggregate Monitoring Surveys, 2013-2022

*Low response rate from operators in AM survey so includes estimates from 2020 sales data

- 3.5 Road planings (material removed from the surface layer of roads or footpaths as part of resurfacing operations) is also considered as recycled aggregate. However, data on this material is difficult to obtain as it is more often processed in a closed loop system which means the planings are used in the production of new surface materials. A recent example of this is the new plant in Micheldever, Hampshire¹⁰. The benefits of systems of this nature are not only financial but also reduce carbon emissions which contribute to climate change.
- 3.6 The South East England Aggregate Working Party sought to collate data on this material in 2018 recognising that information would be held by 'disparate organisations including Highway Authorities, Highways England and the utility

¹⁰ Recycling Materials Launch: [Highways Magazine - Hampshire saves £300k a year with new materials recycling centre](#)

companies'¹¹. A local operator suggested that the material is 'difficult to track, as the material was moved, in some instances long distances (including by rail) and involved waste transfer notes and EA permits'. The survey generated a limited response from Highway Authorities and the Highways Agency did not participate. The limited data received suggested that it was arising from the material increasing but due to the limitations of the data, this was not a reliable source of information.

- 3.7 Whilst the market share of recycled and secondary aggregates has increased overall, the Mineral Products Association view¹² is that the use of these aggregates may be nearing their full potential in Britain and that there will still be a reliance on land-won and marine-won aggregates. As such, there will be a need to plan for infrastructure to sustain the demand for recycled and secondary aggregates, as well as land-won and marine-won aggregates.

Capacity

- 3.8 Site capacity is included as part of the Aggregate Monitoring 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 3.
- 3.9 The data suggests there is currently additional capacity to accommodate an increase in demand, particularly on recycled and secondary aggregates which based on survey data has the potential to provide almost an additional 1.75Mt over the current demand of 0.75Mt. In 2022, it is shown that there was additional capacity of 70% for managing recycled and secondary aggregate.
- 3.10 It is worth noting that not all operators returned information on capacity, and therefore the capacity data provided is not 100% accurate.

Table 3: Recycled and Secondary Aggregate Capacity 2022

	Sales	Capacity	% Sales/ Production	Capacity 3 yr Average
Recycled & Secondary Aggregate Sites	0.74	2.64	28%	2.68

Footnotes

Source: Aggregate Monitoring Survey, 2022. Please note that capacity data collection is still in the early stages, and as such, results should be treated with caution.

¹¹ South East England Aggregate Working Party: Annual Report 2018: <https://documents.hants.gov.uk/see-awp/SEEAWP-annual-report-2018.pdf>

¹² Mineral Products Association (2017) – Recycled Aggregates: http://www.mineralproducts.org/prod_agg_recy01.htm

- 3.11 There may be a number of factors which impact the capacity of a site including planning conditions which cap vehicle movements or annual tonnages, the management of other wastes and the difference between the theoretical capacity of a site and how the site is used on a daily basis.
- 3.12 The current wording of Policy 17 (Aggregate supply – capacity and source) sets a requirement of 1 million tonnes per annum of recycled aggregate and secondary. However, it is recognised that the Policy suggests that this is production, but the wording indicates that this is capacity. This is emphasised by Policy 30 (Construction, demolition and excavation waste).

Demand

- 3.13 The Local Aggregate Assessment (2023) highlights that the estimated inert recycling capacity has been above 2mtpa for at least the last 3 years (averaging 2.68mtpa). Over the last 10 years, the supply (sales) of recycled and secondary aggregate averages 0.83mtpa and 0.72mtpa over the last 3 years. Sales of over 1mtpa have only been achieved once in this period. If sales are considered to dictate demand, the evidence would suggest that the estimated capacity is incorrect and is actually below 1mtpa. This would be supported by the fact that the number of permitted sites is at its lowest level (26 sites) since the data was reported in the LAA.
- 3.14 Despite the reliability of the AM survey data, the estimated 2.8Mt suggests that there is available capacity to manage an increase in demand and a drive-in productivity at existing sites.
- 3.15 Current demand could be determined by sales and with a general decline in sales since 2014, it could be suggested that there has been a decline in demand. However, if the view is taken that sales are a better representation of demand, it could also be suggested that capacity is actually closer to sales and therefore, demand is declining as there is insufficient capacity to increase sales.

High quality product

- 3.16 The adopted Plan outlines that it 'is important that recycled and secondary aggregates are processed to a high standard to be able to replace primary aggregates as described in the WRAP Aggregates Quality Protocol Standard¹³.
- 3.17 The purpose of the Quality Protocol¹⁴ is to provide a uniform control process for producers from which they can reasonably state and demonstrate that their

¹³ Hampshire Minerals & Waste Plan (2013) – para. 6.46

¹⁴ Aggregates Quality Protocol - http://aggregain.wrap.org.uk/quality/quality_protocols/index.html

product has been fully recovered and is no longer a waste. It also provides purchasers with a quality-managed product to common aggregate standards, increasing confidence in performance.

- 3.18 High quality recycled/secondary aggregates support the production of end uses such as concrete which requires the removal of fines¹⁵ and organic matter from inert waste material, which is generally achieved by washing the recycled material. British Standard BS8500¹⁶ specifies the basic requirements for producers of concrete from primary or secondary (i.e. recycled materials) sources. To increase the management of inert waste further up the waste hierarchy, all inert waste elements capable of producing high quality (washed) recycled aggregate material should therefore be removed for recycling.
- 3.19 A number of operators including R Collard¹⁷, Ace Liftaway¹⁸ and Waltet¹⁹ have, or are intending to, invest in new wash plants to improve the quality of their outputs. The output of these new plants will need to be monitored along with the impact they have on capacity and future sales.

Local Plan Review

- 3.20 The Hampshire Minerals & Waste Plan was adopted in 2013. Government policy requires the Plan to be reviewed after 5 years of adoption to determine whether the policies need to be updated. A Review of the Hampshire Minerals & Waste Plan was undertaken in 2018 which concluded that there was not a requirement to update the Plan at that time, but a commitment was made to undertake a further Review in 2020.
- 3.21 The 2020 Review of the Hampshire Minerals & Waste Plan outlined the 7-year trend for recycled and secondary aggregate production for the period 2012-2018 (see Figure 2). The monitoring data for Policy 18 (Recycled and secondary aggregate development) showed a year-on-year increase during the period 2012 - 2015, there was a significant decrease in capacity in 2016 which has recovered in 2017/2018.

¹⁵ Generally defined as small particles of inert material such as stones, aggregates and glass in this context, but the term may also refer to fibre, films, rigid plastics, wood, metal and textiles

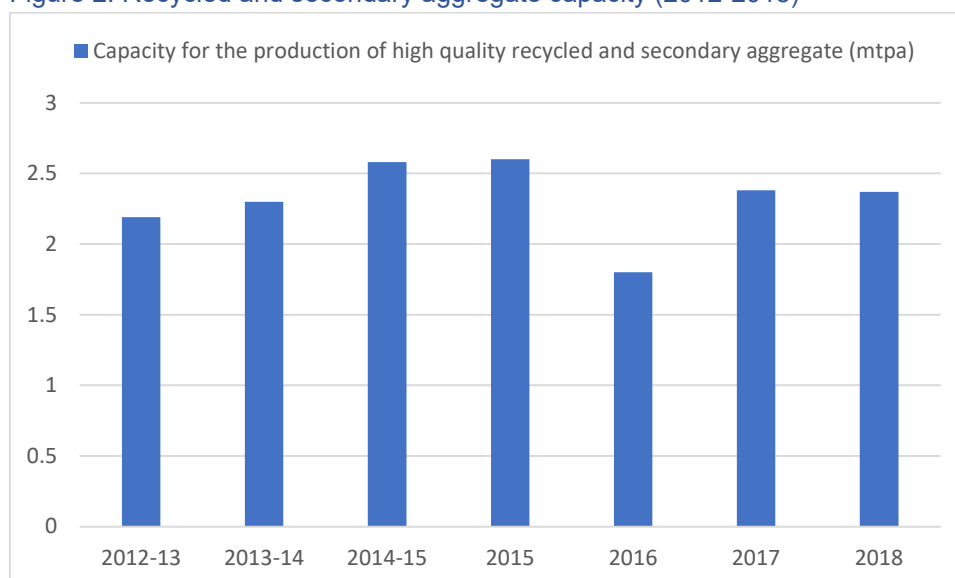
¹⁶ British Standard BS8500-Part 2 - Concrete Complementary British Standard to BS EN 206-1 - Part 2: Specification for constituent materials and concrete (British Standards Institute, 2006)

¹⁷ <https://www.agg-net.com/resources/articles/recycling-waste/new-tws-washing-plant-for-r-collard>

¹⁸ <https://www.agg-net.com/news/new-cde-recycling-plant-for-ace-liftaway>

¹⁹ <https://waltet.co.uk/waltet-invests-in-new-wash-plant/>

Figure 2: Recycled and secondary aggregate capacity (2012-2018)



3.22 In addition, the monitoring data for Policy 30 (Construction, demolition and excavation waste development) showed that during the same period, there was a downward trend in maintaining the minimum 1 million tonnes per annum production (see Figure 3) based on sales data.

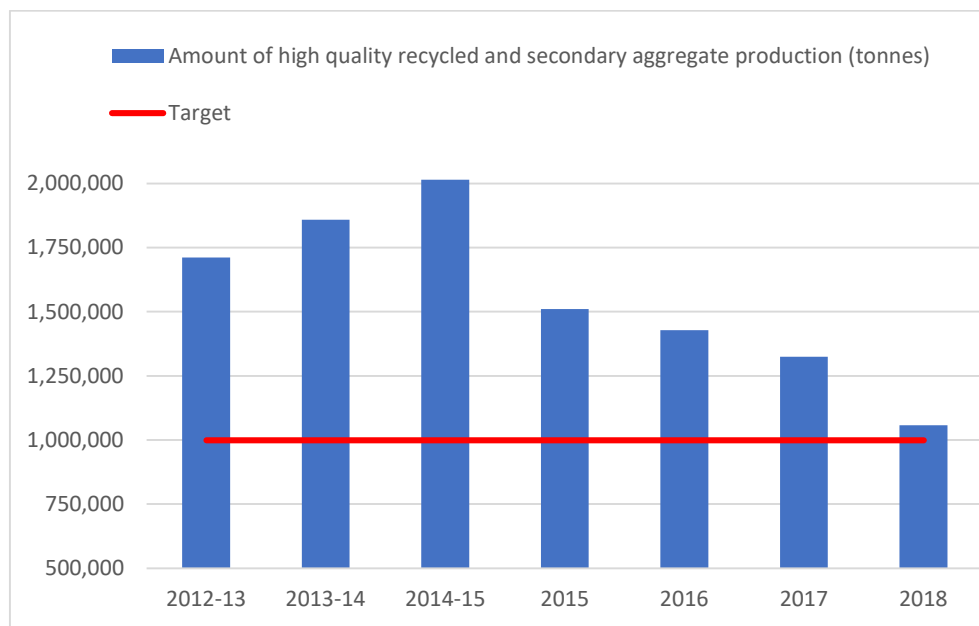
3.23 As capacity has been maintained but sales have declined, this suggests that there could be a change in the market in relation to recycled and secondary aggregates.

3.24 Discussions with operators²⁰ have highlighted that there could be further reduction in capacity as demand for housing increases and there is competition for sites with good transport connections. Issues have also been raised regarding the availability of good quality inert material for recycling. It is considered that this is impacted further by demolition sites where the use of crushers on-site means that material never enters the market.

3.25 This will place greater emphasis on the safeguarding of minerals infrastructure to ensure that careful consideration is given to the potential loss of sites and the maintenance of capacity.

²⁰ Source: Correspondence regarding safeguarding status of aggregate recycling site (2017).

Figure 3: Construction, demolition and excavation waste production (2012-2018)



3.23 The 2020 Review²¹ concluded that ‘whilst it is recognised that there has been a decline in sales of recycled and secondary aggregate, Policy 18 seeks to encourage this form of development recognising its importance in aggregate supply. The recent decline in sales may be due to market changes and this is something that cannot be influenced by the mineral planning authorities. However, due to the unsteady nature of capacity and possible future decline in capacity below 1mpta, it is considered that this issue does need to be addressed, through an update of the Plan’.

3.24 Further consideration of Policy 30 concluded that the ‘wording of the policy would benefit from clarification on its purpose and more suitable monitoring and indicators to determine the extent of beneficial outcomes should be explored’.

3.25 Obtaining data on recycled and secondary aggregate can be complicated as there is currently no agreed national methodology. The Mineral Productions Association suggests that recycled material only makes up a third of total demand²² with recycled and secondary aggregate sales accounting for 29% of total supply in 2023²³.

²¹ 2020 Review of the Hampshire Minerals & Waste Plan (2013) - <https://documents.hants.gov.uk/mineralsandwaste/HWMP-2020Review.pdf>

²² Mineral Products Today (MPA, Summer 2021) - https://www.mineralproducts.org/MPA/media/root/Publications/2021/Mineral_Products_Today_22.pdf

²³ Profile of the UK Minerals Product Industry (MPA, 2023) - https://www.mineralproducts.org/MPA/media/root/Publications/2023/Profile_of_the_UK_Mineral_Products_Industry_2023.pdf

- 3.26 Aggregate Monitoring surveys are used to inform the Local Aggregate Assessment and has been the basis for Plan-making. However, alternative methodologies are being explored by Minerals & Waste Planning Authorities and a Guidance note on Recycled Aggregate Data²⁴. This includes the use of the Waste Data Interrogator (WDI) which is compiled by the Environment Agency.
- 3.27 To gain a greater understanding of the situation in Hampshire, a specific operator survey was sent to recycled and secondary aggregate operators. However, as with the Aggregate Monitoring survey, this means that temporary/mobile plants have not been surveyed.

Industry

- 3.28 The Mineral Products Association (MPA) estimate²⁵ that in the UK overall, about 30% of aggregate is supplied from recycled or secondary sources. The MPA suggest that as this level of supply has been maintained for several years it might represent a maximum capacity for recycled aggregate. If this factor is applied to Hampshire's primary aggregates sales of 2.81Mt about 0.84Mt of recycled and secondary aggregate would have been produced in 2022.

Waste Data Interrogator

- 3.29 The Waste Data Interrogator (WDI) includes 'fixed' sites²⁶ that handle construction, demolition, and excavation (CDE) waste. Therefore, recycled aggregate production can be estimated from the WDI but to support this, a recycling rate needs to be applied.
- 3.30 Recycling or recovery rate of CDE wastes vary and depend on the type of material processed and the capability of the facility. Those that have sorting, handling, screening, crushing, and washing plant can process wastes with a high proportion of hard material that readily produces clean aggregates that meet appropriate specifications. Evidence from industry indicate such sites can

²⁴ Guidance on Aggregate Recycling Data (May 2020) -

https://khub.net/group/southeastwasteplanningadvisorygroupsewpag/group-library/-/document_library/Sz8Ah1O1ukgg/view_file/682713038?com_liferay_document_library_web_portlet_DLPortlet_INSTANCE_Sz8Ah1O1ukgg_redirect=https%3A%2F%2Fkhub.net%3A443%2Fgroup%2Fsoutheastwasteplanningadvisorygroupsewpag%2Fgroup-library%3Fp_p_id%3Dcom_liferay_document_library_web_portlet_DLPortlet_INSTANCE_Sz8Ah1O1ukgg%26p_p_lifecycle%3D0%26p_p_state%3Dnormal%26p_p_mode%3Dview [Registration with Knowledge Hub is required]

²⁵ Mineral Products Association 'Economic & Market Briefing 2018' - <https://mpani.org/download/mpa-members-briefing-economic-and-market-briefing/>

²⁶ Site registered under the Environment Agency's publicly accessible Waste Data Interrogator (WDI) as handling construction etc wastes - temporary sites associated with the life of a construction projects are excluded

achieve a 75% or higher recovery rate²⁷. On the other hand, some sites have lower recycling rates and produce less recycled aggregate. Accordingly, an upper and lower 'rates' are employed in Table 4 that estimates between 1.36 to 2.05Mt of recycled aggregate were produced on average in Hampshire during 2020 to 2022. The 10-year average suggests a lower estimate of between 1.37 and 2.06Mt.

Table 4: CDE arisings in Hampshire, 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	3 yr Av.	10 yr Av
CDE ¹ Waste Received for Treatment	2.48	3.04	2.53	2.67	2.89	2.78	2.82	2.51	2.9	2.8	2.7	2.7
Recycled Aggregates (lower estimate) ²	1.24	1.52	1.26	1.34	1.44	1.39	1.41	1.25	1.45	1.4	1.36	1.37
Recycled Aggregates (upper Estimate)	1.86	2.28	1.89	2.01	2.17	2.08	2.12	1.88	2.16	2.1	2.05	2.06

Source: Environment Agency Waste Data Interrogator 2013-2022

Notes: ¹ Construction, Demolition and Excavation

² Lower and Upper bands for estimated tonnage are 50% and 75% respectively of all relevant CD&E waste treated at CDE waste recycling sites in Hampshire

3.31 Owing to the limited information it is not possible to estimate capacity of recycled and secondary aggregates facilities. Generally, Environmental Permits include limits that are much more than the throughput of the sites. It is therefore concluded there are no major capacity issues for the facilities.

Operator survey

3.32 To explore the reasons behind the decline in production and potential issues with capacity, local Hampshire operators were interviewed with a set of questions (see Appendix 2). Of the 28 forms that were sent out, ten responses were received which provided a response rate of 36%. One of the responses outlined that the site had now been sold and was no longer operational.

3.33 The findings of the responses are not attributed to any operator, but the following information was derived from this exercise:

²⁷ Mineral Products Association 'From Waste to Resources 2019' - https://www.agg-net.com/files/aggnet/attachments/news/from_waste_to_resource_a_uk_mineral_products_industry_success_story.pdf

- Half the sites were operating at a significantly lower capacity than that which is estimated for the site. The difference in capacity ranged from 93-30% (an average of 39%). The remaining were similar to their estimated capacity, although one site has since ceased operations completely and two were not currently operational with availability of material being noted as the reason.
- None of the sites specified any long-term ambitions including any succession sites, although many benefited from permanent permission.
- Four of the operators contacted were considering additional sites but no locations had been identified.
- Of the nine operational sites, all sourced their material from Hampshire, but two sites suggested that their material came from the wider southeast or a neighbouring County.
- Half of the sites stated that the source of their material did not change frequently, but others stated that it could change daily and was influenced by construction site or the market.
- Most sites had not experienced supply issues but there had been some experience of demand outstripping supply during the winter months. It was also highlighted that current issues with primary land-won materials could be an opportunity to boost the recycled/secondary aggregate market.
- Most of the operators felt that there had not been a change in the market. Although, the impact of the Covid-19 pandemic was recognised as this reduced throughput during periods of lockdown. In addition, it was felt that Road Inspectors at Hampshire County Council were demonstrating a preference for a particular type of material (Primary Type 1 over recycled Type 1 803).
- Operators wanted Policy 18 (Recycled and secondary aggregate development) in the Hampshire Minerals & Waste Plan to encourage the use of recycled and secondary aggregates in construction projects. This included a specific request that the use of recycled Type 1 is encouraged as well as the use of local suppliers.
- When considering whether the existing Policy 30 (Construction, demolition and excavation waste development) was effective a mixed response was received. Comments suggested that planning permissions should encourage the use of [recycled] materials on-site with specific reference to the impact of a lack of national quality protocols for soils. It was considered that this was restricting the market by requiring sites to have a waste management licence or a higher specification aggregate.

Climate change

- 3.34 Most of the HMWP partner Authorities and district Local Planning Authorities within the Plan area have declared climate emergencies and have prepared associated strategies and action plans. These strategies/plans set out policies, objectives and actions to achieve net zero carbon by target dates prescribed by each Authority and implement climate change mitigation and adaption measures.
- 3.35 Achieving net zero carbon within the minerals industry has been focussed on the cement and concrete sector and a Roadmap to Beyond Net Zero²⁸ was published by the Mineral Products Association in 2020. However, achieving net zero could have implications for the recycled aggregate industry if developers are being discouraged to demolish and re-build old and poorly insulated buildings²⁹. Whilst this will not be possible in every case, this could lead to a reduction in available material for recycling and create further demand for primary resources.

²⁸ <https://mineralproducts.org/Sustainability/Net-Zero-Carbon.aspx>

²⁹ <https://www.bbc.co.uk/news/science-environment-61580979>

4 Conclusion

Data

- 4.1 This Paper highlights the difficulties with collating data on recycled and secondary aggregate.
- 4.2 Sales data suggests that on average over the last 10-years, **0.83Mt** of recycled and secondary aggregate has been produced. Sales peaked at **1.11Mt** in 2014 and have been declining since.
- 4.3 The WDI suggests that in Hampshire between **1.3Mt** and **2.0Mt** of recycled and secondary aggregate is being produced.
- 4.4 The Aggregate Monitoring survey suggests that capacity has remained relatively constant above 2Mt with a slight reduction in 2016. Capacity has been recovering since and currently is estimated to be **2.8Mt**.
- 4.5 The specific operator survey suggests that capacity estimate figures may be inflated as many reported lower capacities than that quoted. If a 39% reduction were applied to the estimated 2.8Mt, this would suggest that capacity is closer to **2.1Mt**. It should be noted that only 36% of operators provided responses but does suggest that the 2.8Mt is an over-estimate. It is also recognised that the information was collected in 2021 and other sources within this Paper are based on 2022 data. However, lack of responses to the Aggregate Monitoring places a reliance on Environmental Permit data and this is usually reported in ranges rather than a likely actual throughput.
- 4.6 There was suggested concern over the future supply of material for recycling and most of those surveyed covered Hampshire or a slightly wider remit. However, it was highlighted that supply was influenced by the construction market and specific projects.
- 4.7 The Mineral Products Association outlines that only a third of demand is met by recycled and secondary aggregate. Based on total planned supply of aggregates in Hampshire, this would suggest that at least **1.72Mt** capacity should be maintained.

Policy

- 4.8 Existing policy seeks to support recycled and secondary aggregate production to maximise alternatives to primary aggregates (Policy 18: Recycled and secondary aggregate development) and seeks to maximise the recovery of construction, demolition and excavation waste to produce at least 1 mpta of

high quality recycled and secondary aggregate (Policy 30: Construction, demolition and excavation waste development).

- 4.9 The specific operator survey suggests that policy should be focused on encouraging the use of recycled and secondary materials and local suppliers.

Recommendations

- 4.10 In relation to gathering Data, the Hampshire Authorities should continue to monitor sales and capacity through the annual Aggregates Monitoring survey as well as reviewing the Waste Data Interrogator.
- 4.11 In order to improve reporting, consideration could be given to applying a condition to planning permissions to require annual sales/capacity with the understanding that the data would be reported on collectively to ensure commercially sensitive data is protected.
- 4.12 The Hampshire Authorities should continue to work with regional bodies such as the South East Waste Planning Advisory Group and the South East England Aggregate Working Party as well as the Department for Levelling Up, Housing and Communities to gain a better understanding of recycling and secondary aggregate data as well as future demand.
- 4.13 Policies 18 and 30 both support development to enable production and increase capacity. However, despite suitable capacity, sales are decreasing. This suggests that there is a market issue. As such, the Plan could seek to encourage the use of recycled and secondary aggregates not only in minerals and waste developments but within wider construction projects within Hampshire.
- 4.14 Whilst it is recognised that the capacity figures may be inflated based on the information received or obtained from permits, it is also recognised that a large proportion of capacity from temporary or mobile plants is not recorded at all. Therefore, an aspiration to maintain at least **1.8Mt** (and increase of 800t from the adopted Plan) of permanent recycled and secondary aggregate capacity could be included within the Plan. This also allows for the variation of approaches that could be applied for determining capacity.

Glossary

Circular economy

A circular economy is an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.

Climate change

A change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

Climate Change Emergency

A climate emergency declaration or declaring a climate emergency is an action taken by governments and scientists to acknowledge humanity is in a climate emergency.

Heavy Good Vehicles (HGV)

A vehicle that is over 3,500kg unladen weight and used for carrying goods.

Inert Landfill

One of the three classifications of landfills made by the Landfill Directive, taking inert waste.

Managed Aggregate Supply System

The underpinning concept behind the Managed Aggregate Supply System is that Mineral Planning Authorities which have adequate resources of aggregates make an appropriate contribution to national as well as local supply, while making allowance for the need to reduce environmental damage to an acceptable level.

Minerals and Waste Planning Authorities (MWPA)

The local planning authorities (County and Unitary Councils) responsible for minerals and waste planning.

Minerals Products Association (MPA): The Mineral Products Association is the United Kingdom trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar, and silica sand industries.

Mitigation

The reduction of something harmful or the reduction of its harmful effects.

National Planning Policy Framework (NPPF)

The National Planning Policy Framework sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally-prepared plans for housing and other development can be produced.

Net zero

Refers to achieving carbon neutrality by balancing carbon emissions with carbon removal or simply eliminating carbon emissions altogether.

National Planning Policy for Waste (NPPW)

This document sets out the government's detailed waste planning policies. It should be read in conjunction with the National Planning Policy Framework.

Planning Practice Guidance (PPG)

A web-based resource which brings together planning guidance on various topics into one place. It was launched in March 2014 and coincided with the cancelling of the majority of Government Circulars which had previously given guidance on many aspects of planning.

Appendix 1: Hampshire Minerals & Waste Plan (2013) – relevant policies

Policy 16: Safeguarding - minerals infrastructure

Infrastructure that supports the supply of minerals in Hampshire is safeguarded against development that would unnecessarily sterilise the infrastructure or prejudice or jeopardise its use by creating incompatible land uses nearby.

Minerals sites with temporary permissions for minerals supply activities are safeguarded for the life of the permission.

The Hampshire Authorities will object to incompatible development unless it can be demonstrated that:

- a. the merits of the development clearly outweigh the need for safeguarding; or
- b. the infrastructure is no longer needed; or
- c. the capacity of the infrastructure can be relocated or provided elsewhere. In such instances, alternative capacity should:
 - i. meet the provisions of the Plan, that this alternative capacity is deliverable; and
 - ii. be appropriately and sustainably located; and
 - iii. conform to the relevant environmental and community protection policies in this Plan; or
- d. the proposed development is part of a wider programme of reinvestment in the delivery of enhanced capacity for minerals supply.

The infrastructure safeguarded by this policy is illustrated on the Policies Map and identified in '[Appendix B - List of safeguarded minerals and waste sites](#)'.

Policy 17: Aggregate supply – capacity and source

An adequate and steady supply of aggregates until 2030 will be provided for Hampshire and surrounding areas from local sand and gravel sites at a rate of 1.56mtpa, of which 0.28mtpa will be soft sand.

The supply will also be augmented by safeguarding and developing infrastructure capacity so that alternative sources of aggregate could be provided at the following rates:

- 1.0mtpa of recycled and secondary aggregates; and
- 2.0mtpa of marine-won aggregates; and
- 1.0mtpa of limestone delivered by rail.

Policy 18: Recycled and secondary aggregates development

Recycled and secondary aggregate production will be supported by encouraging investment and further infrastructure to maximise the availability of alternatives to marine-won and local land-won sand and gravel extraction.

Policy 27: Capacity for waste management development

In order to reach the objectives of the Plan and to deal with arisings by 2030 of:

- 2.62mtpa of no-hazardous waste;
- 2.49mtpa of inert waste;
- 0.16mtpa of hazardous waste.

The following minimum amounts of additional waste infrastructure capacity are estimated to be required:

- 0.29mtpa of non-hazardous recycling capacity; and
- 0.39mtpa of non-hazardous recovery capacity; and
- 1.4mtpa of non-hazardous landfill void.

Proposals will be supported where they are maintained and provide additional capacity for non-hazardous recycling and recovery through:

- a. the use of existing waste management sites; or
- b. extensions to suitable sites:
 - i. that are ancillary to the operation of the existing site and improve current operating standards, where applicable, or provide for the co-location of compatible waste activities; and
 - ii. which do not result in inappropriate permanent development of a temporary facility and proposals for ancillary plant, buildings and additional developments that do not extend the timescale for completion of the development; or
- c. extension of time to current temporary planning permissions where it would not result in inappropriate development; or
- d. new sites to provide additional capacity (see Policy 29 – Locations and sites for waste management).

Policy 30: Construction, demolition and excavation waste development

Where there is a beneficial outcome from the use of inert construction, demolition and excavation waste in developments, such as the restoration of mineral workings, landfill engineering, civil engineering and other infrastructure projects, the use will be supported provided that as far as reasonably practicable all materials capable of producing high quality recycled aggregates have been removed for recycling.

Development to maximise the recovery of construction, demolition and excavation waste to produce at least 1mtpa of high quality recycled/secondary aggregates will be supported.

Appendix 2: Operator survey questions



Hampshire
County Council



Portsmouth
CITY COUNCIL



Hampshire Minerals and Waste Plan (2013) Partial Update

Aggregate Recycling Operator Questionnaire

Guidance Notes

Before completing this form, please read the following guidance notes:

- Combined capacity and tonnage figures will be published in the Recycled and Secondary Aggregate Topic Paper, and so will be treated confidentially.
- Please complete the form in as much detail as possible based upon the most up-to-date and accurate information that you hold.
- Please complete a separate form for each site.
- Where/if information has been pre-filled, please amend if incorrect.
- **Personal information given on this form will be used for the purpose of correspondence only.**

Site Details

Site Name	
Site Address	
Operator Name	
Respondent Name	
Email	
Phone No.	

Question 1: You have reported that your site has a throughput capacity of 380,000 tonnes per annum. Are you operating at this level now and if not, why not?

or

Can you provide an estimated throughput capacity for your site in tonnes? Please provide details of how this estimate is calculate / what is it based upon.

Question 2: What are your long-term ambitions for the site?

and/or

Do you have a succession site identified following the end of the temporary permission on this site? If so, did you experience any difficulties identifying a suitable site? If so, what were these?

Question 3: Do you intend to operate additional sites in Hampshire? If yes, have sites already been identified?

Question 4: Where is your material being sourced from e.g. within Hampshire, Portsmouth, Southampton, outside of Hampshire etc?

Question 5: Does the location of your source material change frequently?

Question 6: Have you experienced issues with supply of material? If so, do you know why?

Question 7: Have you noticed any changes in the market (use and/or location) for your product? If so, what are these changes and why do you think they have occurred?

Question 8: What would you like to see outlined in Hampshire's recycled and secondary aggregate policy (18) to help maintain production of your product?

Please see pages 69 - 70 of the adopted Hampshire Minerals and Waste Plan (2013)
<https://documents.hants.gov.uk/mineralsandwaste/HampshireMineralsWastePlanADOPTED.pdf>

Question 9: Is it your experience that all materials capable of producing high-quality recycled aggregates is being removed before inert material is used as fill or in engineering projects? If not, is there anything you would like to see outlined in Hampshire's construction, demolition and excavation waste (30) policy to encourage this?

Please see pages 110 - 112 of the adopted Hampshire Minerals and Waste Plan (2013)
<https://documents.hants.gov.uk/mineralsandwaste/HampshireMineralsWastePlanADOPTED.pdf>

Data Protection and Freedom of Information

I agree that Hampshire County Council can hold contact details and related responses. I understand that these details will only be used in relation to Minerals and Waste Planning Policy matters.

To the best of my knowledge the information provided is currently an accurate representation of the material managed on the site.

Signed.

Date

Please note that only signed and dated forms can be accepted (please type in for electronic forms).

This information is collected by Hampshire County Council, as data controller in accordance with the General Data Protection Regulations (2021). More information on how the Council manages data can be found at: <https://www.hants.gov.uk/aboutthecouncil/privacy>. Specific Privacy Notices for minerals and waste planning policy are also available: <https://documents.hants.gov.uk/mineralsandwaste/StrategicPlanningPrivacyNoticeMineralsandWastePolicy.pdf>

The purposes for collecting this data are:

1. To assist in monitoring and reporting of waste management capacity in the plan area.
2. To contact you, if necessary, regarding the answers given on this form.

The above purposes may require public disclosure of any data received by Hampshire County Council on the form, in accordance with the Freedom of Information Act 2000 (as amended).

If you have any concerns regarding the processing of your data, please contact planning.policy@hants.gov.uk

A summary of this document can be made available in large print, in Braille or audio cassette. Copies in other languages may also be obtained. Please contact the Minerals and Waste Policy Team at Hampshire County Council by email HMWP.consult@hants.gov.uk or by visiting hants.gov.uk.