

Medway Local Aggregates Assessment 2024

13th Report

Final Draft (Post - SEEAWP)

December 2025

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Executive Summary 2024

The Medway Local Aggregates Assessment is an annual report that monitors the supply and demand for aggregate in Medway. This is the thirteenth Local Aggregate Assessment (LAA) produced for Medway, in line with the requirements set out in the National Planning Policy Framework (NPPF) and in accordance with the Planning Practice Guidance (PPG). This LAA is mainly based on data reported to the Council for the 2024 calendar year.

Aggregate is essential to the functioning of society. Aggregate is used in the construction of buildings and infrastructure such as housing, roads, railways and flood defences. Monitoring the demand for, and supply of, aggregate is essential to ensuring that a 'steady and adequate supply' is maintained to meet current and future needs.

In compiling information on the demand for aggregates and supply options in this LAA, the council has considered a range of available data sources; with the annual aggregate monitoring survey, designed by the South East England Aggregates Working Party (SEEAWP), of local operators being a key source of data. Due to the limited number of active quarries, it is not possible to publish annual land won sales data due to commercial confidentiality.

This report also takes account of the latest four yearly national Aggregate Monitoring Survey that took place in 2024 and surveyed aggregate sales in 2023. In particular this includes data on imports and exports.

Land-won Aggregate

Sharp sand and gravel is the only land-won aggregate actively being extracted in Medway. There are currently two permitted quarries for the extraction of sand and gravel in Medway, one of which is inactive.

Current permitted reserves of sand and gravel have decreased to 366,000 tonnes, and, when taken together with an increase in the Aggregate Provision Rate (taken as 3 year average sales) has resulted in a reduction in the landbank from 9.25 years in 2023 to 7.46 years in 2024. It is important to note that while the landbank calculation takes account of the reserves at the inactive site, the likelihood of these ever being worked is uncertain due to neighbouring development (granted outline planning permission in 2021) that could result in their sterilisation.

The Proposed Submission Draft (Regulation 19) Medway Local Plan 2041 includes proposed Areas of Search for the extraction of land won sharp sand and gravel.

Recycled and Secondary Aggregate

According to survey returns and the Environment Agency Waste Data Interrogator (WDI) 2024, seven sites produced recycled aggregate in 2024. A site granted permission in 2018 started operations in 2024. Survey returns and data published in the WDI suggests around 58,000 tonnes of recycled aggregate was produced in 2024.

A Waste Needs Assessment prepared in 2020 to support the emerging Medway Local Plan suggested that at that time the permitted capacity for recycled aggregates production in Medway was around 135,000tpa. Recent data indicates that the capacity of sites active in 2024 is around 154,000tpa.

Marine-won sand and gravel

Medway's wharves, reporting

Sales of marine won sand and gravel sold from Medway wharves in 2024 amounted to 1.678 Mt which, although a 10% decrease on 2023 sales, continued to be regionally important.

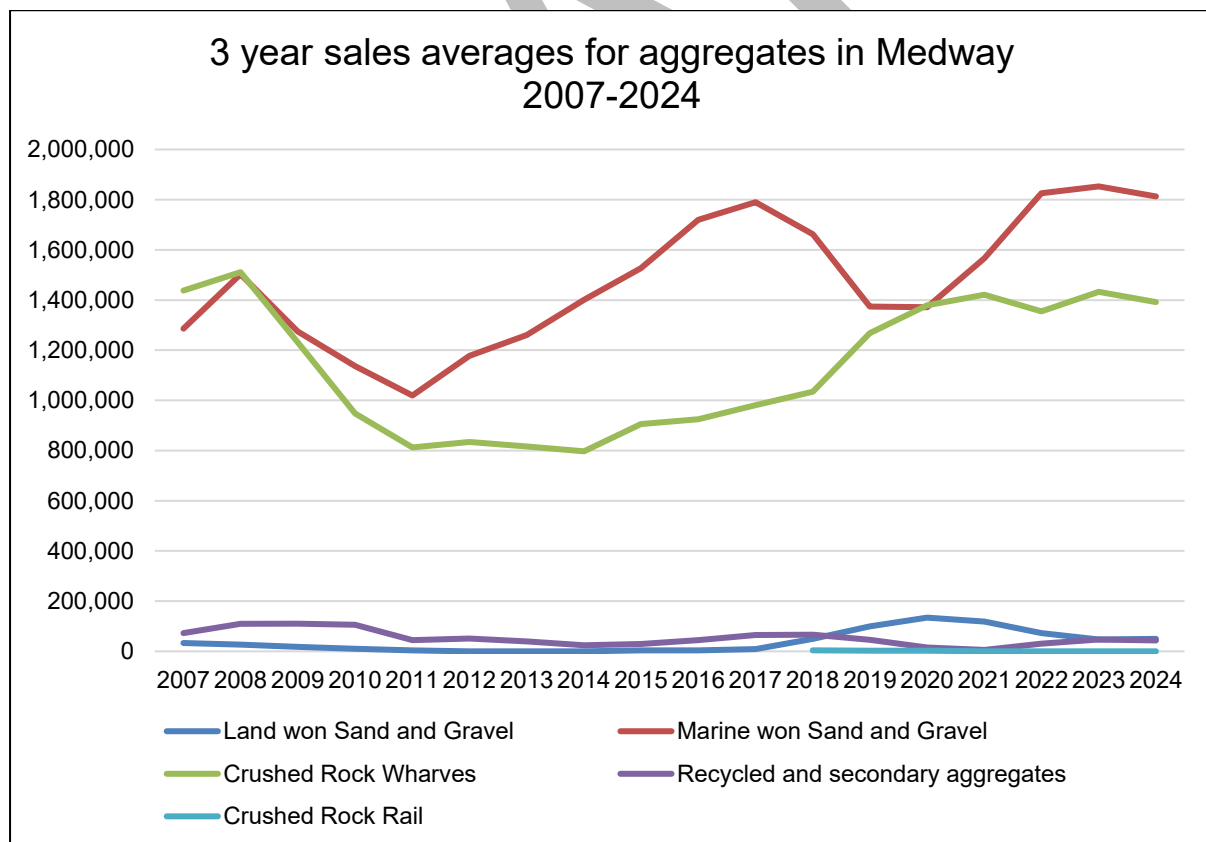
In line with historical patterns, no sales of marine-won soft sand were reported in 2024.

Imported Crushed Rock

Imports of crushed rock to wharves decreased to 1.253Mt, a 17% decrease on 2023 sales, the lowest level since 2018 and falling below the 3 and 10 year sales averages.

After high sales in 2023, total annual sales of aggregates from wharves in 2024 decreased by 13% to 2.930.

The overall trends in aggregate production in Medway are shown in the figure below.



Demand

The council has analysed a range of sources to project any trends that may be emerging that would influence demand for aggregate. The population of Medway is

projected to increase significantly. Housing delivery at recent high levels is expected to continue in the short to medium term. Nationally, after a fall in 2023/24, most forecasters expect housebuilding to stabilise in 2025 and then recover gradually from a low base. NHBC registrations rose 6% in Q2 2025 (on Q2 in 2024), indicating a modest upturn. A number of significantly large regional infrastructure projects are also expected to increase demand. The UK economy is expected to achieve modest growth in the next few years in line with ambitious government targets for housing and infrastructure which may see increasing growth in the demand for aggregates at least in the medium term.

After a 6% fall in net additional dwellings in 2023/24 (221,070), most forecasters expect housebuilding to stabilise in 2025 and then recover gradually from a low base. The CPA projects private housing output +4% in 2025 and +7% in 2026, while NHBC registrations rose 6% year-on-year in Q2 2025, indicating a modest upturn rather than no growth

Conclusion

Medway plays a strategic role in regional aggregates supply through the wharves located on the River Medway and the Thames estuary.

Current land won reserves of sand and gravel are nearing depletion, however this is more than compensated for by levels of imports at Medway's wharves.

The council is planning positively for the steady and adequate supply of aggregate, as evidenced by the separate section on minerals in the June 2024 Proposed Submission Draft Local Plan, in order meet the needs of the local and regional markets.

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Summary – Medway Council (for the calendar year 2024)

Quarry Sales	2024 Sales (Mt) & Trend ¹	Average (10-yr) Sales & Trend ¹	Average (3-yr) Sales & Trend ¹	APR (Mt) ²	Reserve (Mt)	Landbank (years)	Allocations (years)	Capacity (Mtpa)	Comments ³
Soft Sand									No known reserves
Sharp Sand & Gravel	c	66,349 ↑	49,154 ↑	0.049 ↑	0.366 ↓	7.46 ↓	n/a	>0.200	Two quarries, one inactive. APR taken as 3 year average in light of sales pattern.
All Sand & Gravel ⁴	c	66,349 ↑	49,154 ↑	0.049 ↑	0.366 ↓	7.46 ↓	n/a	>0.200	See above
Crushed Rock									No known reserves

Medway Local Aggregate Assessment 2024 FINAL DRAFT V3.0 (POST - SEEAWP)

Aggregate Infrastructure Sales	2024 Sales (Mt) & Trend ¹	Average (10-yr) Sales & Trend ¹	Average (3-yr) Sales & Trend ¹	APR ² (Mt)	Reserve (Mt)	Landbank (years)	Allocations (years)	Capacity (Mtpa)	Comments ³
Recycled / Secondary Aggregates	0.058 ↑	0.044 ↑	0.057 ↑	n/a				0.154 ↑	New site commenced operations in 2024. Closed Kingsnorth Power has a stock of approx. 1.4mt m ³ coal derived fly ash
Marine Sand & Gravel	1.678 ↓	1.672 ↑	1.813 ↓	n/a				4.5 ↑	Established importation and distribution facilities with potential for growth. Slight increase in capacity which is a combined total for all wharves across all aggregate types.
Rock Imports by Sea	1.253 ↓	1.263 ↑	1.392 ↓	n/a				4.5 ↑	Established importation and distribution facilities with potential for growth. Slight increase in capacity which is a combined total for all wharves across all aggregate types
Rail Depot Sales (Sand & Gravel)	n/a	n/a	n/a	n/a				0.56	Established aggregates rail depot linked to wharf used to export aggregate. Sand and gravel is not imported by rail
Rail Depot Sales (Crushed Rock)	n/a	n/a	0.000	n/a				0.100	Established aggregates rail depots linked to wharf used to export aggregate. Crushed Rock is not imported by rail

General Comments⁶

- The supply of aggregates in Medway is currently sufficient, with the existing importation facilities providing a high percentage of aggregates for the wider London and South East area. Total annual sales of aggregates from wharves in 2024 showed a decrease for the first time in six years (2.93Mt) following the highest level achieved in any one of the last sixteen years in 2023.
- Trend of increasing recycled aggregate production continues.
- Extraction of sand and gravel from the only productive quarry at Kingsnorth has continued. The landbank decreased to 7.46 years based on the 3 year sales average (the APR rate). The Local Plan allows for additional reserves, but no interest has been shown by industry for some time. The Proposed Submission Draft Medway Local Plan 2041 seeks to safeguard resources and infrastructure and identify Areas of Search for sand and gravel extraction.
- In common with much of the South East, there is high demand for housing in Medway and there have been relatively high rates of delivery in recent years.
- Other major construction projects proposed in the wider South East region which may place demands on aggregate supplied from Medway include Ebbsfleet Garden City, Lower Thames Crossing, Crossrail 2, HS2 and Silvertown Tunnel.

Notes:

1. **Trend** – indicates whether the average sales are (compared with the previous year's LAA average sales) increasing (upwards arrow), declining (downwards arrow) or no change (level arrow).
2. **APR = 'Aggregate Provision Rate'** – The APR is the level of sales used to estimate future requirements and is based on historic sales and other relevant local information. The term 'LAA Rate' has previously been used for the Aggregate Provision Rate.
3. **Comments** – Comments explain possible anomalies e.g. peculiarities about current sales, landbank limitations, important infrastructure changes, soft sand sales at wharves, origins of aggregate imports by sea/rail etc.
4. **All sand and gravel** – soft sand and sharp sand and gravel taken together.
5. **Shading** applied where aggregate supply source is not relevant.
6. **General Comments** – this provides the overall picture with reference to demand, factoring in export requirements and sustainability of supply – landbank, allocations, infrastructure capacity – to meet this. This includes whether an appropriate contribution is being made to what are understood to be the aggregate supply that is required of the area and an analysis of the adequacy of the current local plan and whether this should be reviewed.
7. **'c'** denotes where sales data is not published due to commercial confidentiality.

1. Introduction

- 1.1. Aggregate minerals such as sand and gravel and crushed rock are used as construction materials, and therefore are intrinsic to the nation's development, maintaining infrastructure and supporting economic growth. Local Aggregate Assessments (LAA) play an important role in the coordination of planning for the supply of minerals to meet the country's needs. As the Mineral Planning Authority for Medway, Medway Council is obliged to prepare an LAA for its area in line with requirements set out in the NPPF (2024) (Paragraph 226) and the PPG.
- 1.2. Paragraph 226 of the NPPF states Minerals Planning Authorities should prepare: *'an annual Local Aggregate Assessment, either individually or jointly, to forecast future demand, based on a rolling average of 10 years' sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources)'*. The LAA is submitted to the regional Aggregate Working Party which prepares an annual report for the National Aggregate Coordinating Group (NACG)¹. The national group should consider whether the totals provided by the area Aggregate Working Parties make appropriate provision to maintain a steady and adequate supply of aggregate. This process seeks to ensure the coordination of minerals planning at a strategic level.
- 1.3. This is the thirteenth LAA produced for Medway. Much of the data used in the preparation of this LAA comes from the annual monitoring of aggregates sales in Medway undertaken by Medway Council on behalf of the South East England Aggregate Working Party (SEEAWP). The annual Aggregate Monitoring (AM) survey collects sales data from active aggregate extraction sites, minerals wharves, minerals rail depots and recycled and secondary aggregate processing sites. Returns for 2024 were received from all the main aggregate producers in Medway. Data for recycled aggregate sites has been obtained using the Environment Agency 2024 Waste Data Interrogator.
- 1.4. Due to the size of Medway, and the limited number of quarries, related data is restricted and cannot be disaggregated to identify sales in any one year due to agreements made with industry operators concerning commercial confidentiality. This is reflected in the data is presented in this report.

¹ The National Aggregate Coordinating Group (NACG) is responsible for coordinating the supply and demand of aggregates (such as sand, gravel, and crushed stone) across the UK. The NACG consists of representatives from various sectors, including: Mineral Planning Authorities (MPAs); National Government Agencies; Industry Representatives and other stakeholders and experts with expertise in aggregates, planning, and environmental impact.

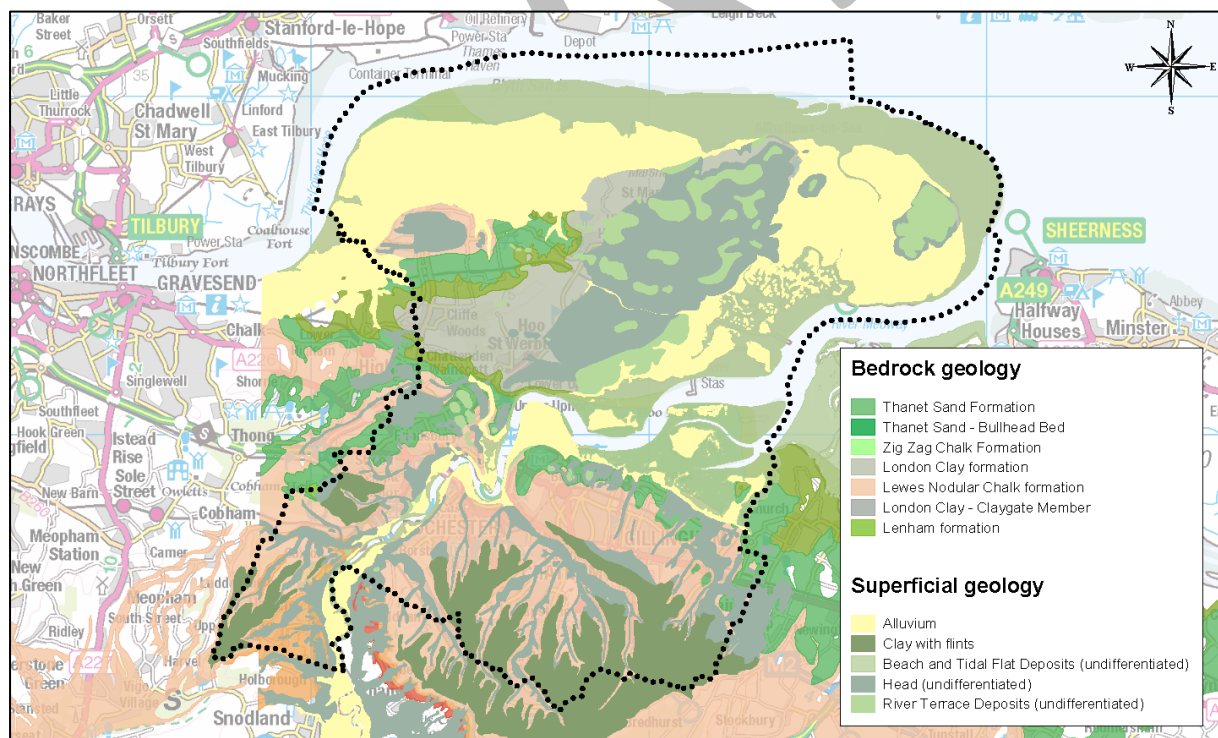
- 1.5. The 2023 Aggregate Minerals Survey for Great Britain was published by Government in 2025, and this includes updated data on imports and exports which have been used to inform this LAA.

2. Land-won Aggregate

Geology of Medway

- 2.1. The sand and gravel deposits in the Medway area are primarily concentrated on the Hoo Peninsula as a result of post-glacial melt water outwash deposition found in a series of 'river terraces', trending roughly from north west to south east across the peninsula's ridge, and on the Isle of Grain. There are also more recent water-lain deposits covering areas of land on the eastern and north-western marshes of the peninsula that include some sand and gravel seams. The deposits have not been significantly reworked by natural processes since their deposition and have a sand to gravel ratio and particle characteristics that makes them generally attractive for high specification value added concrete production. An overview of Medway's geology is provided in Figure 1. Note that the sand and gravel deposits considered of economic interest are those shown as 'River Terrace Deposits (undifferentiated)'.

Figure 1: The Geology of Medway

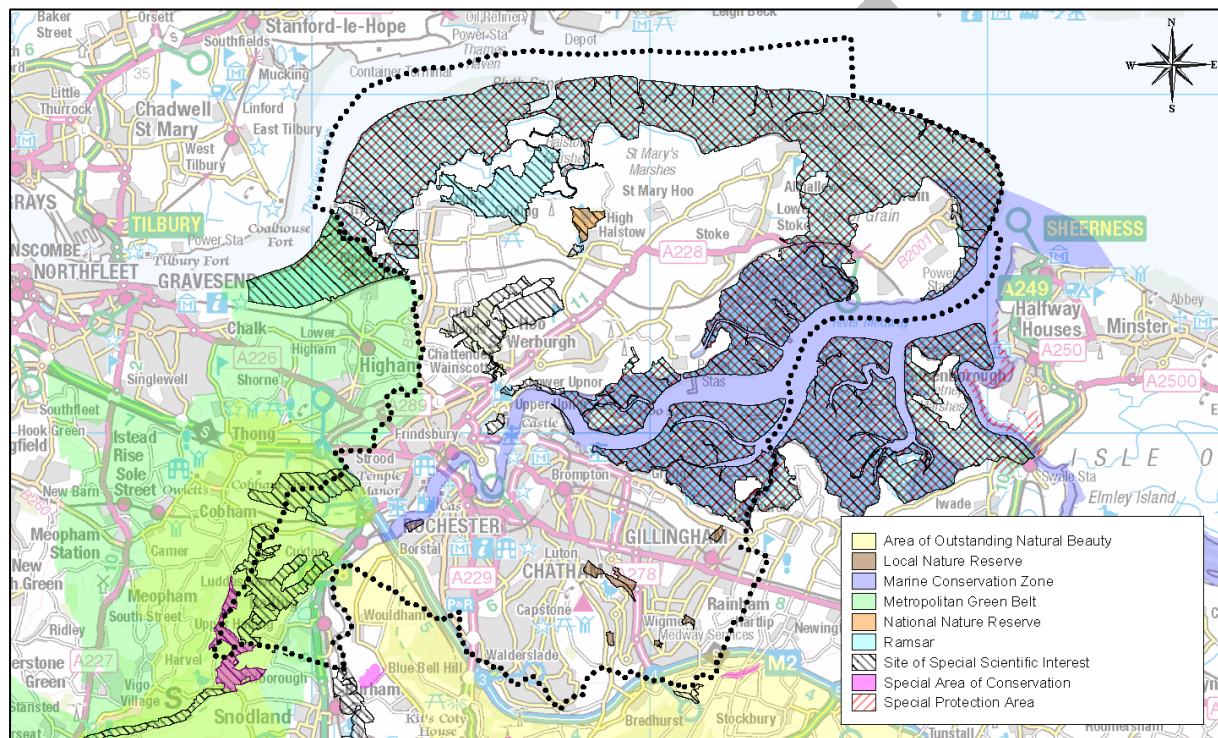


Environmental and Landscape Designations

- 2.2. Medway covers an area of 26,886 hectares (including rivers and coastal areas), and within this area are several landscape and environmental designations that

could constrain where minerals supply activities (including extraction) could take place. These designations include: Special Protection Areas; Ramsar sites; Special Areas of Conservation; National Landscape (formerly Areas of Outstanding Natural Beauty); Green Belt; Sites of Special Scientific Interest; Marine Conservation Zones; National Nature Reserves; Local Nature Reserves; and, Local Wildlife Sites. The extents of the environmental and landscape designations in Medway are provided in Figure 2.

Figure 2: Environmental and Landscape Designations in Medway



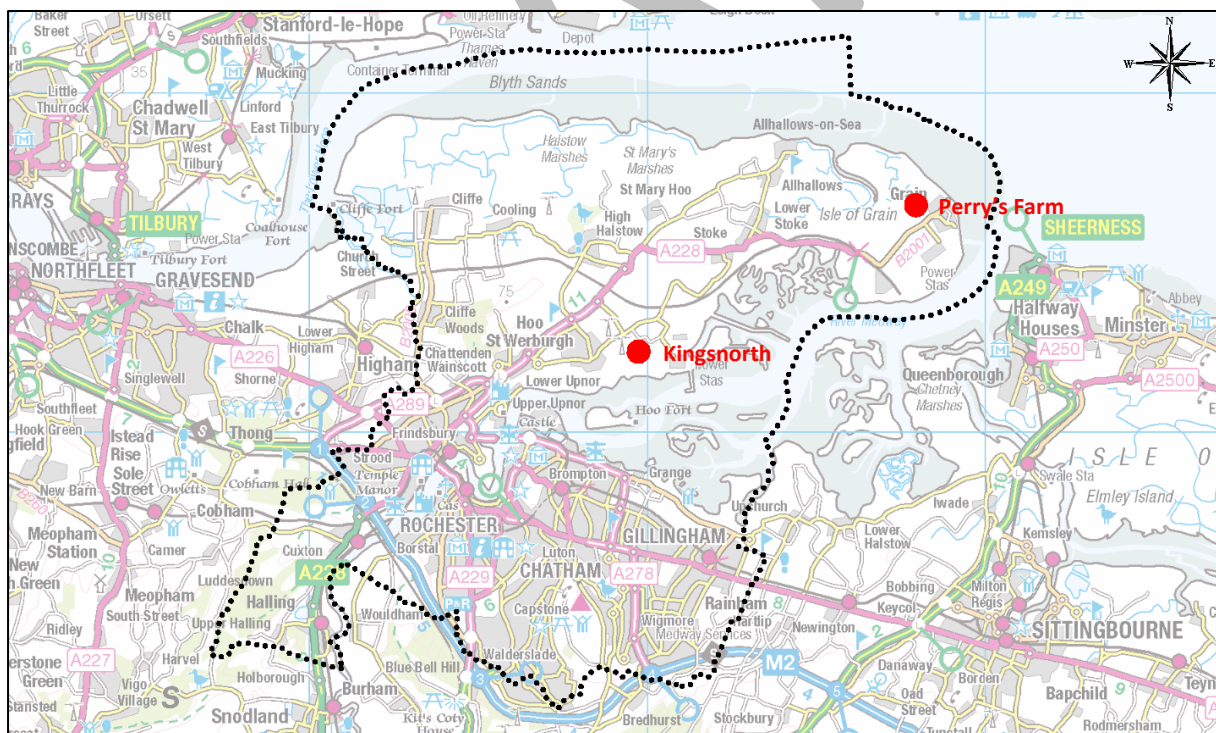
Extraction of Minerals

- 2.3. Within Medway's geology there are a range of minerals that have the potential to be economically viable for extraction. These deposits include sand and gravel, chalk, London clay and brick clay². Extraction for these minerals has predominantly taken place around the river edge and across the Hoo Peninsula, but in recent years there have only been limited operations for the extraction of London clay and sand and gravel.
- 2.4. The present total remaining permitted reserve of sand and gravel for extraction in Medway is 0.366Mt. This is derived from Kingsnorth Quarry to the south east of the village of Hoo St Werburgh operated by Tarmac, and a small reserve at Perry's Farm in Grain, operated by J Clubb Ltd. The locations of the two permitted quarries are shown in Figure 3.

² London clay and brick clay are not aggregate minerals. Chalk may have uses as an aggregate but is generally not extracted for this purpose.

- 2.5. Kingsnorth Quarry is operated by Ingrebourne Valley Ltd and includes a ready-mix concrete plant on site. Extraction commenced in 2017 and cumulatively 200,000 tonnes per annum of material can be removed from the site. It is currently the only operational quarry in Medway. The current permission for extraction at Kingsnorth Quarry expires on 1 May 2027.
- 2.6. In 2021, outline planning permission was granted at Perry's Farm for development associated with an interconnector that will create a link between the UK and German electricity networks and work is underway. It had been understood that this development might sterilise some of the mineral reserve associated with the quarry permission at the inactive Perry's Farm site, however this now appears unlikely.
- 2.7. Research to support mineral planning work in Medway has provided an indication of the significant available resources in the area that could be exploited to help meet future demand. The emerging Local Plan seeks to safeguard the resource from sterilisation.

Figure 3: Quarries in Medway



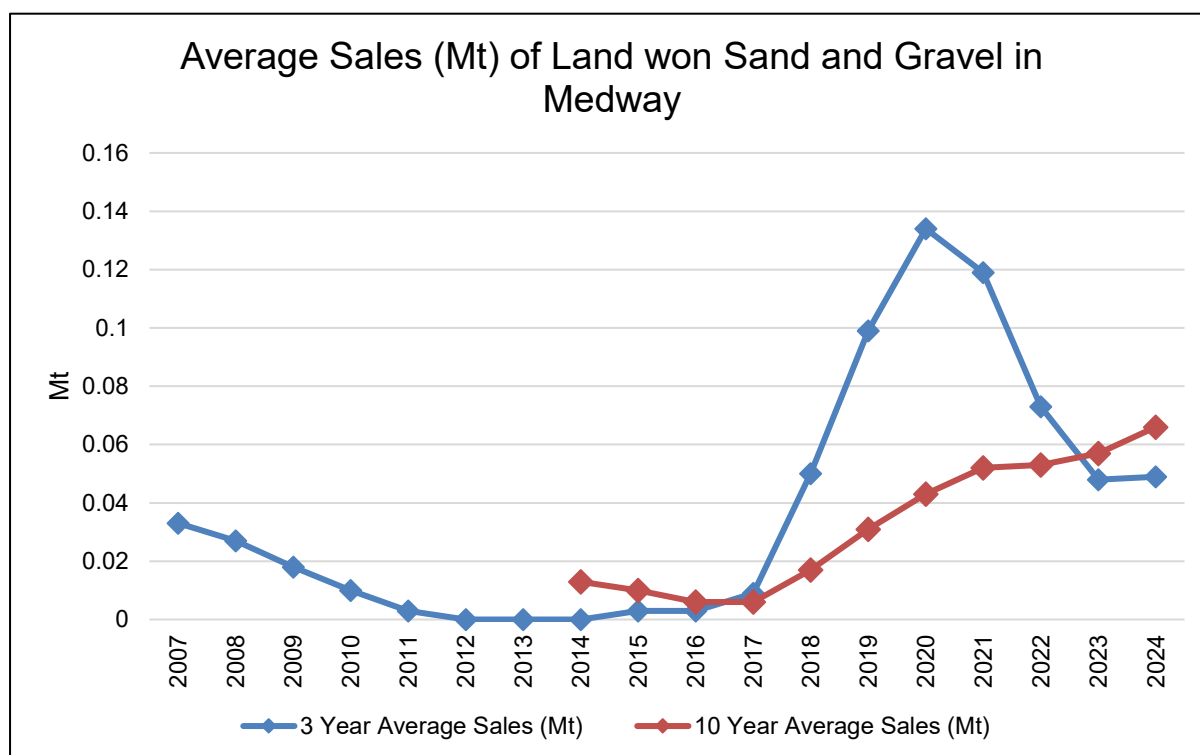
- 2.8. As noted above, due to the limited number of quarrying sites in Medway, it has not been possible to publish annual levels of sales of locally won sand and gravel. However, the council has been able to use data submitted as part of the annual aggregates survey to calculate 3-year and 10-year average sales figures.

2.9. The current 10-year average sales for aggregates from quarries in Medway is 0.066 million tonnes per annum (Mtpa) and the 3-year average sales is 0.049Mtpa. The 3-year and 10-year average sales data for land-won aggregate since 2007 is presented in Table 1 and Figure 4 below.

Table 1: 3-year and 10-year average sales (Mt) for land-won aggregate in Medway

Year	3-year average sales (Mt)	10-year average sales (Mt)
2007	0.033	n/a
2008	0.027	n/a
2009	0.018	n/a
2010	0.010	n/a
2011	0.003	n/a
2012	0	n/a
2013	0	n/a
2014	0	0.013
2015	0.003	0.010
2016	0.003	0.006
2017	0.009	0.006
2018	0.050	0.017
2019	0.1	0.031
2020	0.134	0.043
2021	0.119	0.052
2022	0.073	0.053
2023	0.048	0.057
2024	0.049	0.066

Figure 4: Average Sales (Mt) of Land won Sand and Gravel in Medway



2.10. Table 1 and Figure 4 demonstrate how the 3-year average sales gradually decreased due to the decline in minerals extraction to 2014. More recent increases in the 3-year average sales to levels not seen for well over 10 years reflect the commencement of extraction at Kingsnorth Quarry in 2017. More recent decreases in the 3 year average reflects a slowdown in extraction from this site.

Landbank

2.11. Medway is required to maintain a 7-year land bank for sand and gravel. Permitted reserves are estimated to be 0.366 Mt. The current landbank, calculated using the 3-year average sales, is now 7.46. The landbank has decreased significantly since last year (1.8 years) due to an increase in the 3 year sales average and decrease in reserves. Using the 10-year average sales the landbank decreases to 5.5 years. As extraction activity only restarted in 2017, it is still considered appropriate to use the 3-year average sales to inform the Annual Provision Rate, as this better reflects the current supply and demand status of land-won aggregates in Medway. However, if depletion of reserves continues at the current rate, the landbank will be less than 7 years at the end of 2025.

2.12. Medway's geology means there are no soft sand or crushed rock resources and therefore, it is not possible to maintain separate landbanks for land-won crushed rock or soft sand.

- 2.13. Saved Policy CA6 in the Kent Minerals Local Plan Construction Aggregates (1993) identifies Areas of Search for the extraction of aggregate within which suitable sites for sharp sand and gravel extraction may be found. [The Proposed Submission Draft Medway Local Plan 2041](#) is proposing several similar areas of search.

3. Recycled and Secondary Aggregates

- 3.1. Materials defined as recycled aggregate are derived from demolition and construction waste. Secondary aggregate is derived from industrial by-products such as power station ash, colliery spoil, and blast furnace slag. These materials can be used as substitutes for aggregates, such as in concrete production, or as fill.
- 3.2. The use of recycled and secondary aggregates is critical to the sustainable management of primary mineral resources. In line with national policy to secure a sustainable supply of materials required for development, Medway Council promotes the use of recycled and secondary aggregates in place of primary aggregates where it is suited to the application.

Recycled Aggregates Sales

- 3.3. In 2024, three³ sites in Medway responded to the annual operator survey and a further three sites were identified as managing waste types suited as recycled aggregate (and topsoil) feedstock.
- 3.4. Operators of waste management facilities with an Environmental Permit are required to make returns of waste inputs and outputs from their sites to the Environment Agency. For some sites, the waste reported includes Construction and Demolition waste that is processed on site to produce recycled aggregate. The Environment Agency Waste Data Interrogator (WDI) is a database that reports all the waste returns and so can also be used to estimate the production of recycled aggregate. The WDI that includes 2024 data was published in September 2025 and was used to estimate sales in 2024. Use of the WDI to estimate production of recycled aggregates is consistent with guidance updated by the National Waste Technical Advisory Board Chairs and Aggregate Working Party Chairs Aggregate Working Parties in January 2024.

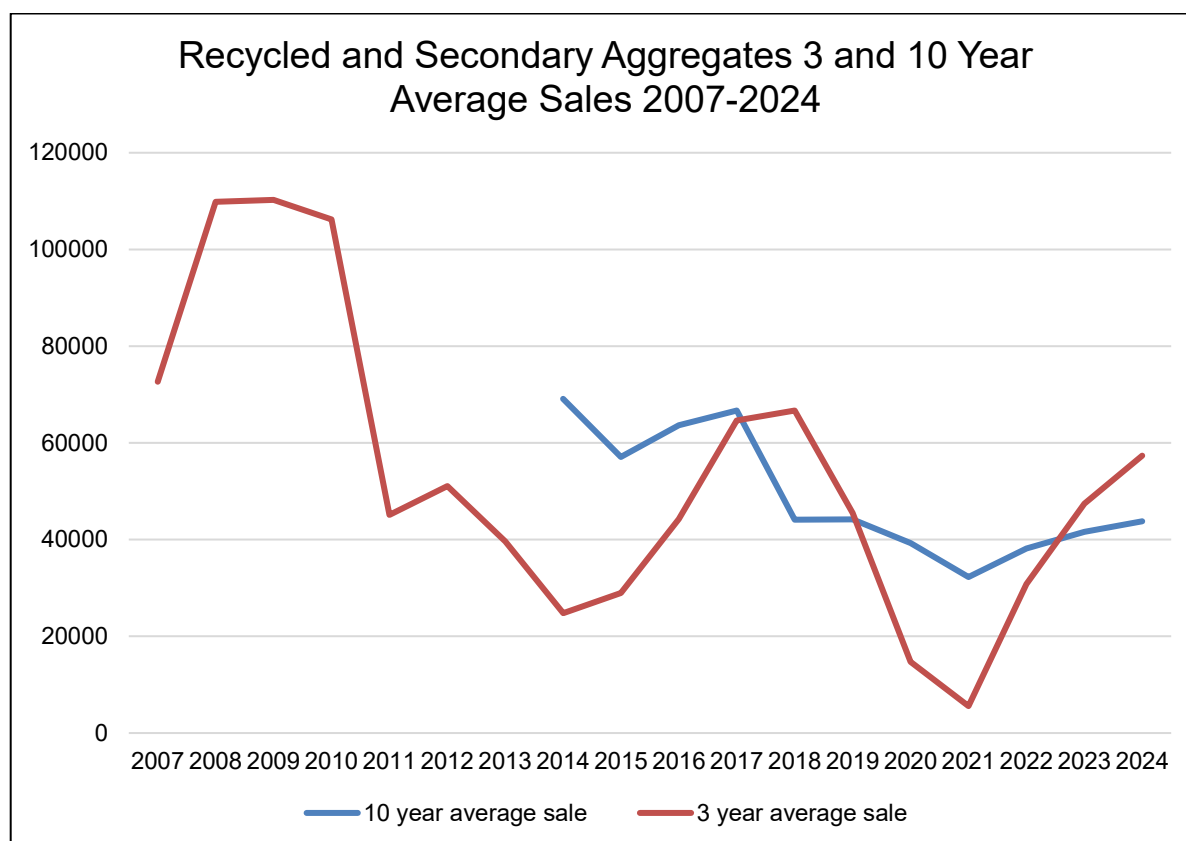
³ One of these is a new site that was granted planning permission in 2018 and commenced operations in 2024.

- 3.5. The production values generated through the WDI mass balance approach for three sites that did not respond to the survey, have been taken as a proxy for actual sales. These values have been combined with operator survey returns received for three sites to give an overall sales estimate in 2024 of 57,896t.
- 3.6. In 2024, both the 3-year and 10 year average sales increased. Table 2 provides the average sales since 2007, and this is presented as a line chart in Figure 5.

Table 2: Sales (Mt) of recycled and secondary aggregate in Medway

Year	Estimated annual sales (Mt)	3-year average sales (Mt)	10-year average sales (Mt)
2007	0.066	0.073	n/a
2008	0.263	0.110	n/a
2009	0.001	0.110	n/a
2010	0.054	0.106	n/a
2011	0.080	0.045	n/a
2012	0.019	0.051	n/a
2013	0.020	0.040	n/a
2014	0.036	0.025	0.069
2015	0.031	0.029	0.057
2016	0.065	0.044	0.064
2017	0.097	0.065	0.067
2018	0.037	0.067	0.044
2019	0.002	0.046	0.044
2020	0.005	0.015	0.040
2021	0.027	0.006	0.032
2022	0.060	0.031	0.038
2023	0.054	0.047	0.042
2024	0.058	0.057	0.044

Figure 5: Average Sales (t) of Recycled and Secondary Aggregate in Medway



3.7. In addition to the above sales, significant amounts of recycled aggregate may arise from the operation of mobile plant, such as crushers and screeners, during demolition and construction activity within Medway.

Recycled Aggregates Production Capacity

3.8. A Waste Needs Assessment prepared in 2020 to support the emerging Medway Local Plan suggested that the permitted capacity for recycled aggregates production in Medway was around 135,000tpa. More recent data indicates that the recycled aggregates production capacity is around 154,500tpa.

3.9. The emerging Local Plan includes policies which allow new sites to be developed which involve the production of recycled aggregate and also safeguards existing capacity.

Secondary Aggregate

3.10. Coal-derived fly ash is a secondary aggregate that can be used in various applications including those related to the construction of housing and infrastructure. A change to the National Planning Policy Framework in July 2021 recognised Coal-derived fly ash in single use deposits as a mineral resource of local and national importance. Approximately 1.4 million cubic metres of Coal-derived fly ash is present in a deposit at the disused Kingsnorth Power Station.

From the mid 1990's, this material was sold as a secondary aggregate for use in breeze block manufacture and other construction products, though this practice ceased in 2014 soon after the closure of the power station in 2012. The UK Quality Ash Association has recognised the deposit at the disused Kingsnorth Power Station as a potential future source of secondary aggregate⁴. While there are no plans to recover/use this material at present this may change in future.

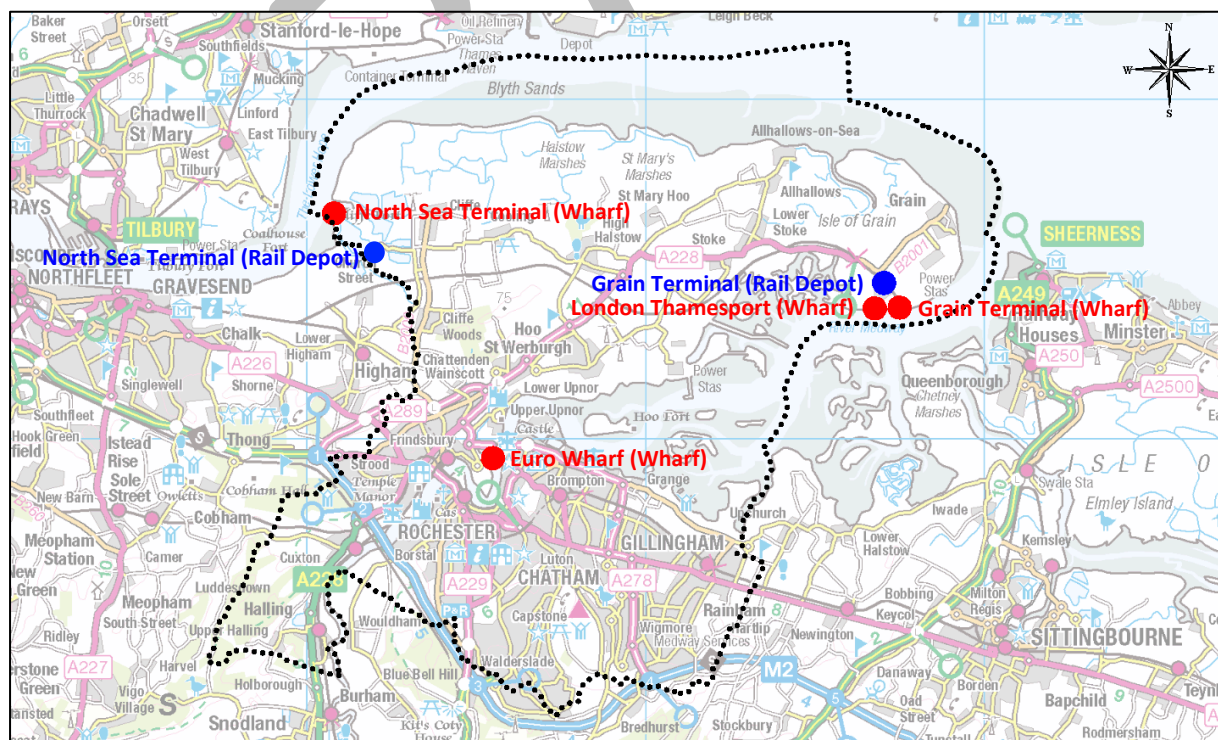
4. Wharves and Rail Depots

4.1. Medway makes a critical contribution to the South East's infrastructure for the importation of aggregates, particularly marine dredged sand and gravel. The scale of the importation makes Medway's wharves of regional and national significance. There are four wharves currently in operation:

- Grain Terminal, Isle of Grain (wharf and rail depot): operated by Aggregate Industries.
- North Sea Terminal, Cliffe, Rochester (wharf and rail depot): operated by Brett Aggregates.
- Euro Wharf, Frindsbury, Rochester: operated by Heidelberg Materials UK.
- London Thamesport, Isle of Grain: operated by Medway Aggregates.

The location of the wharves and rail depots in Medway is provided in Figure 6.

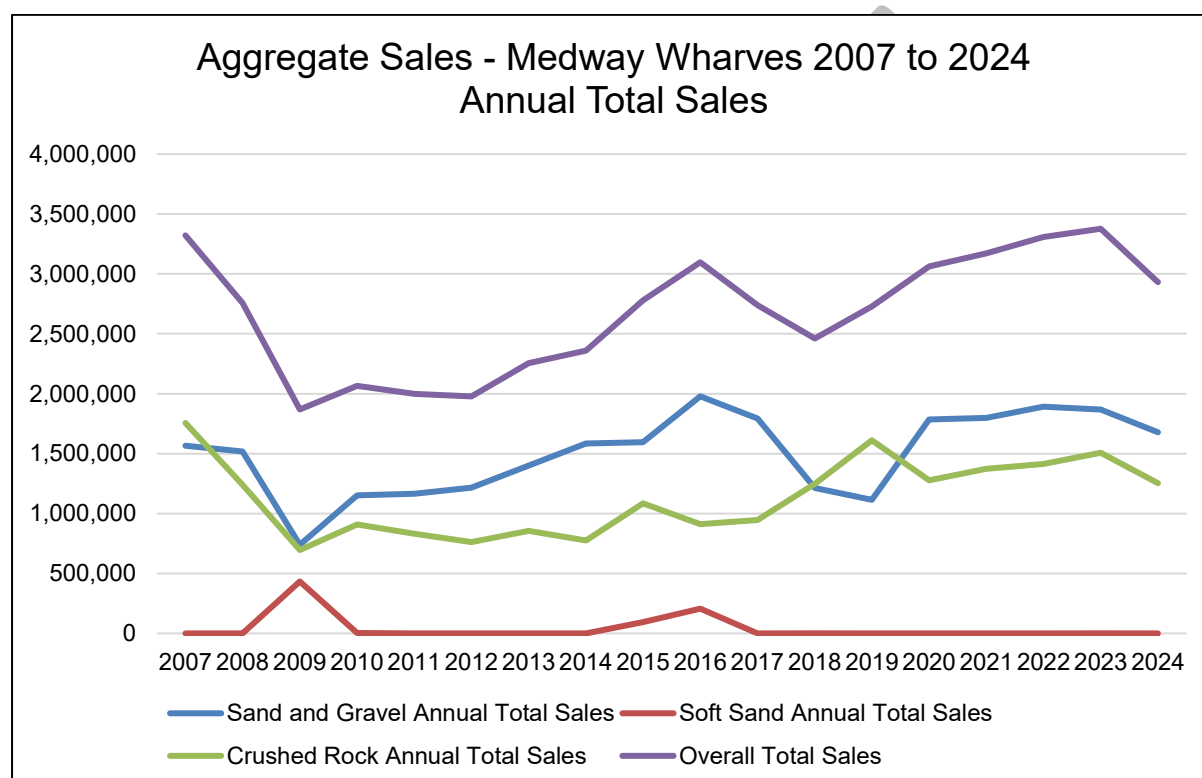
Figure 6: Wharves and Rail depots in Medway



⁴ http://www.ukqaa.org.uk/wp-content/uploads/UKQAA_SECONDARY_MATERIAL.pdf

- 4.2. Collectively, these six facilities make a significant contribution to the importation of minerals into London and the south east.
- 4.3. Medway's wharves are amongst the largest in Kent and Medway and have the greatest capacity (approximately 4.5 million tpa (a slight increase on 2023)). The wharves are operating within their capacity levels and so offer the ability to increase production in response to market demand. Figure 7 shows sales at wharves since 2007.

Figure 7: Sales (t) of Aggregates through Wharves in Medway



- 4.4. The total sales of aggregates from wharves in 2023 was 2.93Mt which was the first annual decrease recorded since 2018. Decreases were observed in both sales of marine won aggregate and imported crushed rock.

Marine-won Sand and Gravel

- 4.5. The table below provides an indication of the role wharves in Medway play in the importation of marine won aggregate to wharves in the south east.

Table 3: Marine won aggregates sales and landings: 2023 (thousand tonnes)⁵

Mineral planning authorities ⁶	Sales 2023	Sales 10-year average	Sales 3-year average	Landings ⁷ 2023	Landings 10-year average	Landings 3-year average
Medway	1,867	1,696	1,853	1,814	1,705	1,822
Kent	1,788	1,664	1,779	1,787	1,644	1,743
East and West Sussex	1,537	1,520	1,622	1,455	1,368	1,478
Hampshire and Isle of Wight	c	TBC	TBC	1,481	1,438	1,362
South East England	c	TBC	TBC	6,527	4,789	6,414

- 4.6. In 2023 of all the marine won sand and gravel landed at wharves in South East, 28% was landed at wharves in Medway, a 5% increase on data reported in 2019.
- 4.7. Medway receives sand and gravel from several dredging regions; those located in British waters have their minerals rights owned by the Crown Estate. The region most proximate to wharves in Medway is the Thames region. In 2024 the Crown Estate reported⁸ that, at the end of 2024, the Thames dredging region had around 18 years of permitted aggregate production capacity remaining.
- 4.8. The sale of marine-won sand and gravel in Medway is presented in Table 4 and Figure 8. In 2024, the level of sales was recorded at 1.678Mt⁹ which represents a notable 10% decrease on the previous year, dropping to below the 3-year average sales. The decline follows a marginal decline in 2023 but remains at a historically high level.

Table 4: Sales (Mt) of Marine-won Sand and Gravel at Wharves in Medway

Year	Annual sales (Mt)	3-year average sales (Mt)	10-year average sales (Mt)
2007	1.565	1.286	n/a
2008	1.518	1.502	n/a
2009	0.740	1.274	n/a
2010	1.152	1.231	n/a
2011	1.167	1.020	n/a

⁵ Source: South East England Aggregates Working Party

⁶ MPAs grouped to maintain confidentiality of an individual company's data.

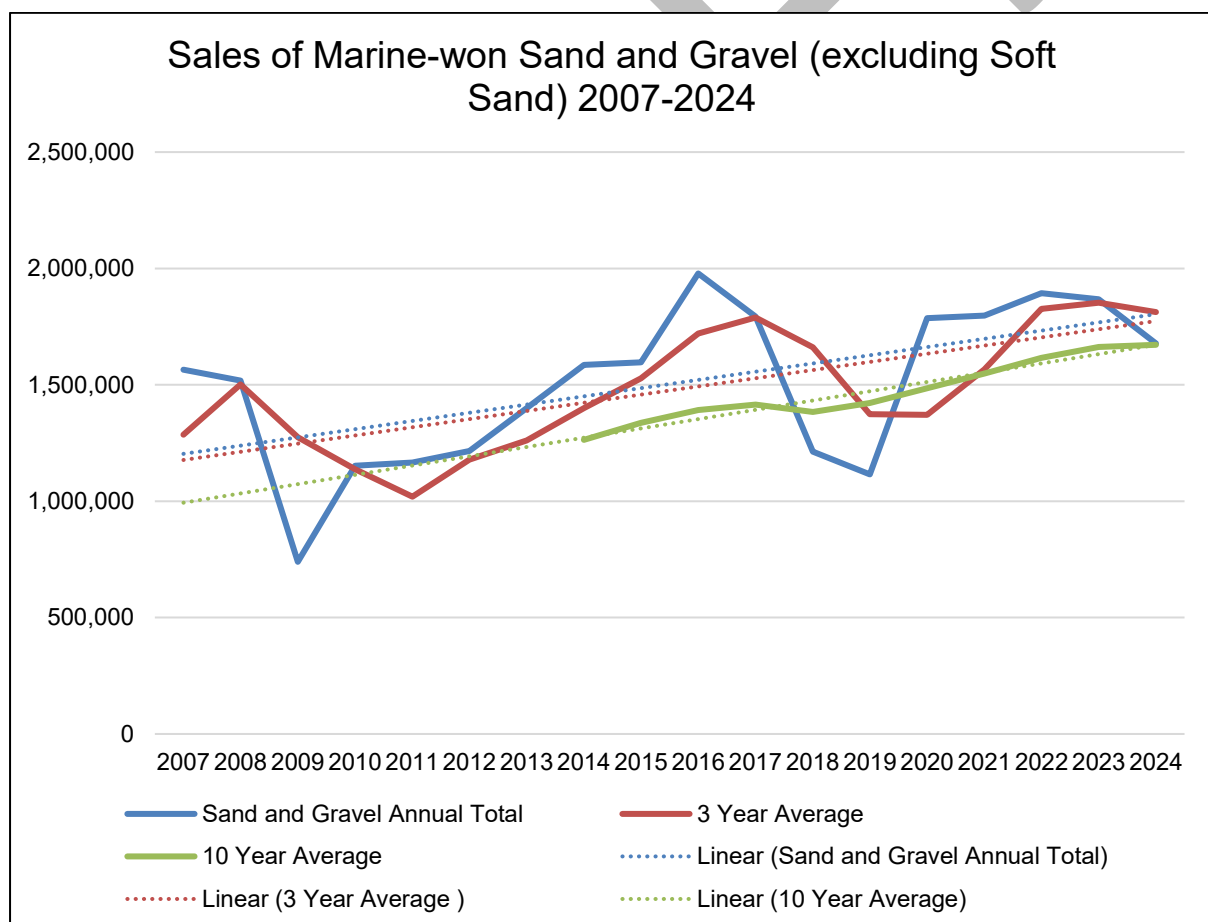
⁷ Landings data published by Crown Estate

⁸ Marine Aggregates Summary of Statistics 2024, Crown Estate, 2025

⁹ Crown Estate data for landings of marine won aggregate indicates that 1,812,553 tonnes was landed in 2023. N.B. landings and sales are not the same.

Year	Annual sales (Mt)	3-year average sales (Mt)	10-year average sales (Mt)
2012	1.215	1.178	n/a
2013	1.400	1.261	n/a
2014	1.586	1.400	1.264
2015	1.597	1.527	1.336
2016	1.978	1.720	1.392
2017	1.794	1.790	1.415
2018	1.213	1.662	1.384
2019	1.115	1.374	1.422
2020	1.786	1.372	1.485
2021	1.797	1.567	1.548
2022	1.893	1.826	1.616
2023	1.867	1.853	1.663
2024	1.678	1.812	1.672

Figure 8: Sales (Mt) of Marine-won Sand and Gravel (ex-soft sand) through Wharves in Medway



- 4.9. The 2023 national Aggregate Minerals Survey¹⁰ states that of the sand and gravel landed in Medway, 42% was utilised in the South East and 58% elsewhere. Data from the 2023 national Aggregate Minerals Survey will be used to update the position in next year's LAA.

Marine-won Soft Sand

- 4.10. It is likely that the demand for soft sand in the South East will increasingly need to be met by imports into the area and from marine won sources due to its scarcity and moreover by constraints upon its extraction. To help provide a detailed analysis of soft sand supply in the region, sales figures of marine-won soft sand are separated out from those of marine-won sand and gravel.
- 4.11. Sales of marine-won soft sand from wharves in Medway since 2007 is shown in Figure 7. While minimal soft sand sales were reported in 2023, none were reported in 2024. Figure 7 shows that such sales have been sporadic and are at a relatively low level which may indicate that material is imported for a particular project or use where it is considered suitable to use marine-won soft sand in place of land-won material. Further discussions with aggregates operators may provide insight into its use and the fluctuating nature of the sales data.

Crushed Rock

- 4.12. Medway does not have any natural hard rock resources and therefore relies on imports of crushed rock such as limestone and granite to meet demand for this type of aggregate. Other areas similarly rely on imports and Medway's wharves and rail depots help facilitate supply to them.
- 4.13. Crushed rock arrives in Medway through its wharves. In the past imports of limestone from Torr Works Quarry in Somerset were received at the rail depot at Grain to support infrastructure projects around Medway. Granite arrives at the wharves from Scotland (Glensanda Quarry) and Norway. Crushed rock is distributed to other areas beyond Medway, including London, by road and rail.
- 4.14. Due to commercial confidentiality, sales of imports from the rail depots cannot be broken down other than by a 3-year sales average. The 10-year average sales from rail depots is 1,790 tonnes – this is a reduction from 8,725 in 2023. To avoid double counting of the supply of aggregates from Medway, the reported sales from rail depots relate solely to aggregate that has been imported by rail and not

¹⁰

https://assets.publishing.service.gov.uk/media/68c270797596dbfa052bfe48/Aggregate_Minerals_Survey_2023.pdf

that which is exported from Medway as the sales have already been reported as landings at Grain and the North Sea terminal at Cliffe.

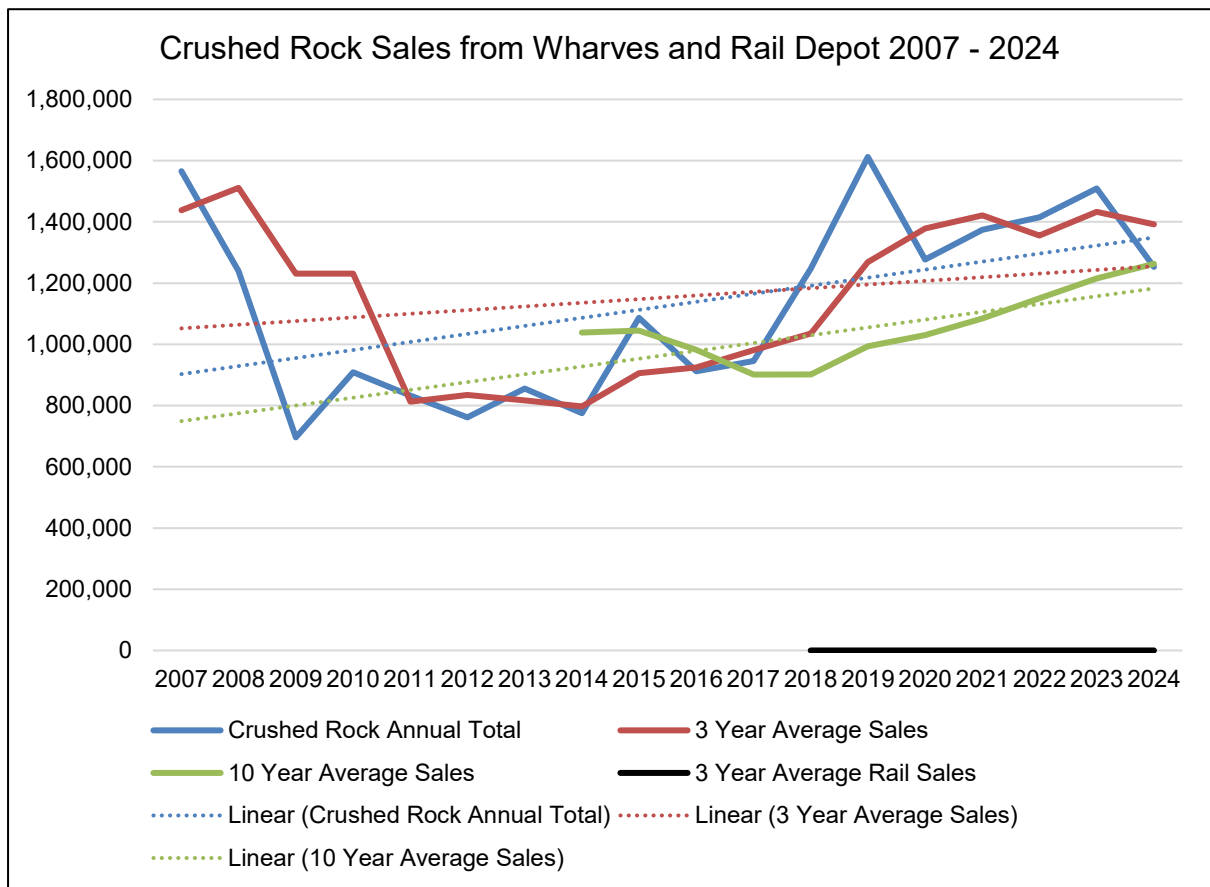
4.15. Sales data for crushed rock through wharves and the rail depot are presented in Table 5 and Figure 9. In 2024, sales of crushed rock through Medway's wharves were reported as 1.252 Mt; a decrease for the first time since 2020. The 2024 sales were below the average 3-year sales and the 10-year average sales.

Table 5: Sales (Mt) of crushed rock through wharves and rail depot in Medway

Year	3-year average sales (Mt): Rail depot	10-year average sales (Mt): Rail Depot	Annual sales (Mt): Wharves	3-year average sales (Mt): Wharves	10-year average sales (Mt): Wharves
2007	n/a	n/a	1.756	1.437	n/a
2008	n/a	n/a	1.240	1.511	n/a
2009	n/a	n/a	0.696	1.231	n/a
2010	n/a	n/a	0.909	0.948	n/a
2011	n/a	n/a	0.833	0.813	n/a
2012	n/a	n/a	0.761	0.834	n/a
2013	n/a	n/a	0.856	0.817	n/a
2014	n/a	n/a	0.775	0.797	1.038
2015	0.056	n/a	1.086	0.906	1.045
2016	0.025	n/a	0.912	0.924	0.982
2017	0.005	n/a	0.945	0.981	0.901
2018	0.004	n/a	1.247	1.035	0.902
2019	0.003	n/a	1.611 ¹¹	1.268	0.994
2020	0.002	n/a	1.277	1.379	1.030
2021	0.000	n/a	1.374	1.421	1.085
2022	0.000	0.018	1,414	1.355	1.150
2023	0.000	0.008	1.508	1.432	1.215
	0.000	0.002	1.252	1.392	1.263

¹¹ Value taken from BGS AMS 2019

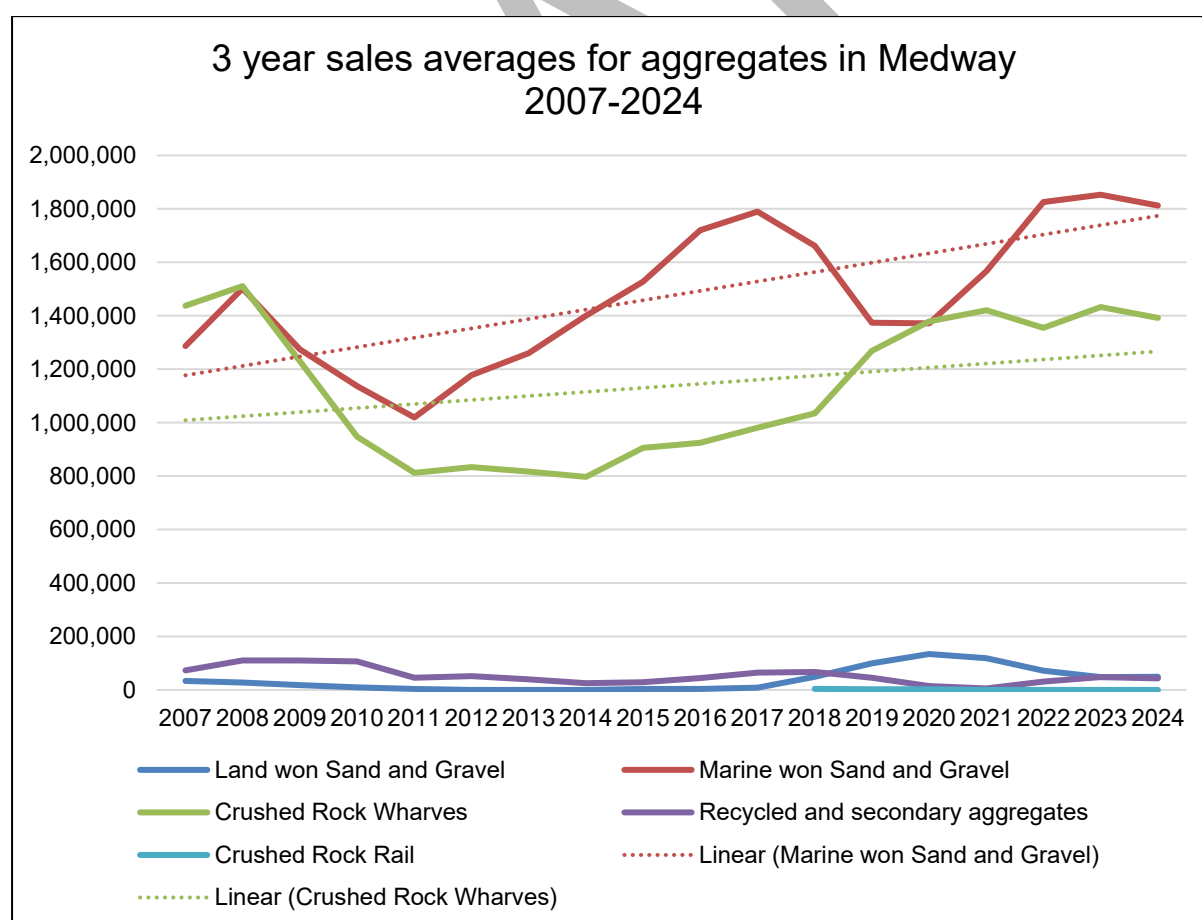
Figure 9: Sales (Mt) of crushed rock through wharves and the rail depot in Medway



5. Overview of Aggregate Sales

- 5.1. In order to provide an overview of aggregate sales in Medway, average 3-year sales of aggregates from all sources are presented in Figure 10 below.
- 5.2. Relatively low levels of sales of land-won sand and gravel decreased further past 2011 until 2015 when sales restarted; this upward trend continued with extraction at Kingsnorth Quarry, however this is only temporary as the limited remaining reserves become exhausted, indeed a decline in the 3 year sales is now being observed.
- 5.3. While sales of marine won sand and gravel declined in 2018 and 2019, data for 2024 shows that despite a slight decrease, the rebound in sales has largely been maintained. Imports of crushed rock via wharves had increased steadily but now appear to be plateauing.
- 5.4. Recycled and secondary aggregate sales have made a steady but minor contribution to overall sales.

Figure 10: Amalgamated average 3-year sales (Mt) for aggregates in Medway

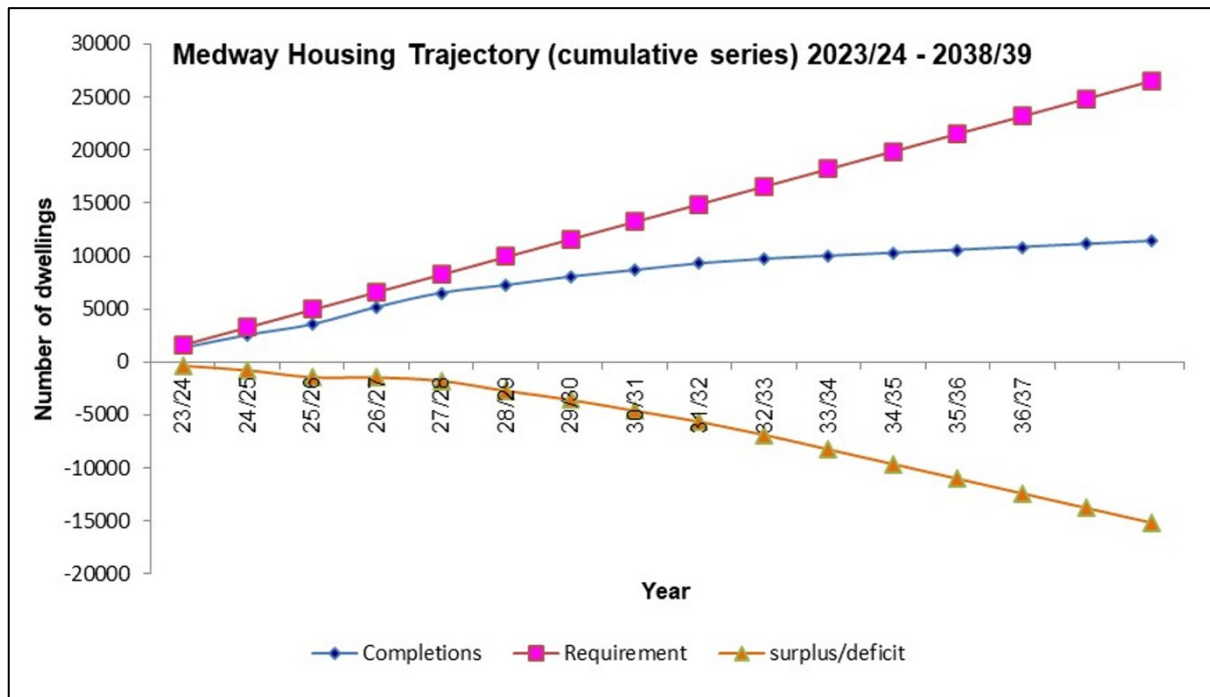


6. Future Aggregate Supply

Future Housing and Development

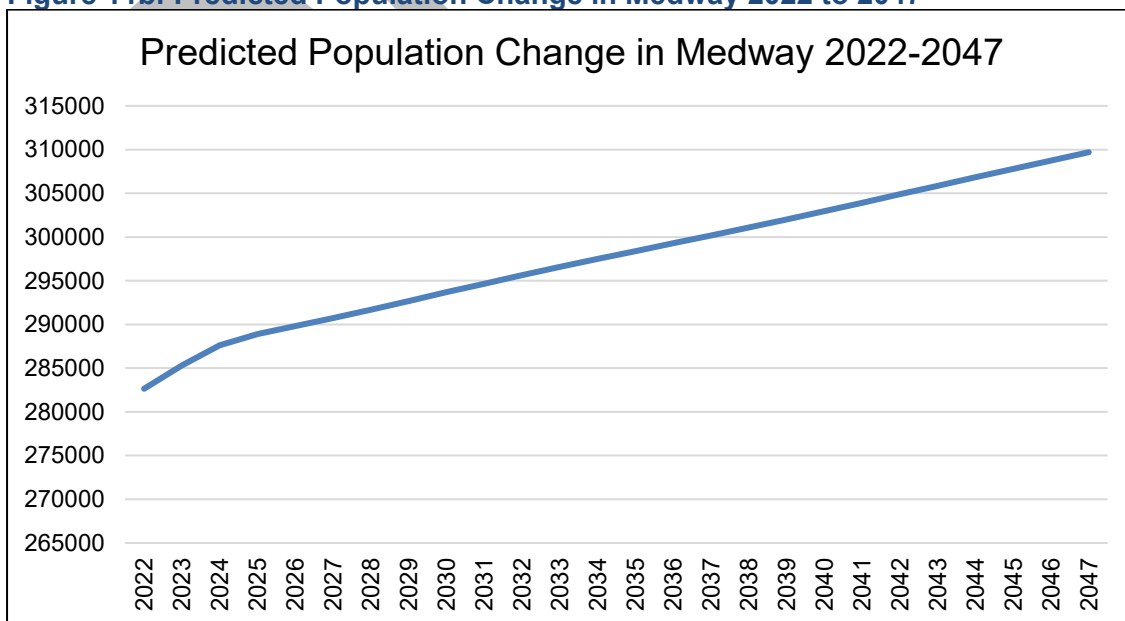
- 6.1. At May 2025, the Local Housing Need for Medway was 1,636 homes per year, which equates to a plan period (2025/26 to 2040/41) need for 26,176 homes.
- 6.2. Housing delivery has stepped up markedly since 2019/20 and has been sustained over multiple years. The Council's latest Housing Delivery Test Action Plan (HDTAP) records continuing strong delivery, including 1,310 completions in 2023/24 (alongside 961 in 2022/23), and describes this as a sustained step-change in output.
- 6.3. The HDTAP notes that major brownfield regeneration schemes (e.g. Rochester Riverside, Kitchener Barracks, Chatham Waters, Temple Waterfront) have continued but typically build out more slowly, whereas recent greenfield sites (e.g. Street Farm, Hoo; Walnut Tree Farm, High Halstow; sites in Rainham/Cliffe Woods/Chattenden) moved from permission to first completions relatively quickly supporting a more immediate flow of construction activity.
- 6.4. Alongside housing, the Regulation 19 Local Plan identifies employment floorspace needs of 204,000 sqm (industrial) and 36,500 sqm (office), with the strategy recognising the role of Grain and Kingsnorth (including the MedwayOne site) in growth sectors. This additional employment development will add further pressure for construction materials alongside the housing programme.
- 6.5. Combined housing and employment growth to 2041 indicates sustained construction demand in Medway. Faster-starting greenfield phases are likely to front-load some demand, while large brownfield schemes extend activity into the middle and later plan years.
- 6.6. Figure 11 shows projected housing completions of new homes in Medway to 2038/39.

Figure 11: Medway Housing Trajectory 2023/24 to 2038/39¹²



6.7. The Regulation 19 Proposed Submission Medway Local Plan 2041 document (published in June 2024) noted that there are huge pressures on housing in Medway and the supply of new housing is central to the new Local Plan. The most recent population trend projected by the Office of National Statistics is included below in Figure 11b.

Figure 11b: Predicted Population Change in Medway 2022 to 2047¹³



¹² Source: Medway Annual Monitoring Report 2024, December 2024

¹³ Source: [Subnational population projections for England: 2022-based, ONS, June 2025](#)

- 6.8. More broadly the Government has made an objective to increase housebuilding (specifically to 300,000 homes per year) one of its key aims and is proposing further updates to the National Planning Policy Framework and making changes to legislation to help achieve this.
- 6.9. In addition to housing, the Regulation 19 Local Plan (June 2025) identifies a need for a minimum of 240,000 sqm of office / industrial and warehousing floorspace up to 2041. This equates to approximately 53ha of employment land.
- 6.10. The Regulation 19 Local Plan is accompanied by an updated Infrastructure Delivery Plan (IDP). Policy S24 confirms the Council will secure the timely delivery of physical, social and green infrastructure, safeguard land where required and use planning obligations to mitigate cumulative impacts. The IDP will be reviewed during the plan period
- 6.11. The Council is collating evidence as part of the preparation of the Local Plan, which includes identifying the infrastructure and services needs linked to growth. Regionally, a number of planned infrastructure projects are likely to put increased pressure on the supply of aggregates through Medway, including:
- **Lower Thames Crossing:** A 13-mile new road and bored tunnel crossing under the River Thames between the east of Gravesend and Tilbury. The Government granted consent for the Lower Thames Crossing March 2025. Financial support for the project has also been confirmed, with main construction expected to take place between 2026 and 2030.
 - **Crossrail 2:** A proposed, though now paused, major new rail route through London between Surrey and Hertfordshire.
 - **High Speed Rail 2:** A high-speed rail link being constructed between London and Birmingham (Phase 1) although the Phase 2 line to Manchester has been shelved.
 - **Housing and infrastructure delivery across Kent:** Includes in the region of 178,600 additional homes (2011-31) and the provision of 163 extra form entries for schools (2017-23). This includes development associated with Ebbsfleet Garden City.
- 6.12. In order to deliver the projects noted above, Medway will endeavour to maintain a landbank and ensure that infrastructure, essential for the import and distribution of aggregate, is safeguarded through the application of appropriate planning policy.

Economy

- 6.13. Economic forecasts are considered useful for providing an overall contextual picture and an indication of potential aggregate demand. This is because a

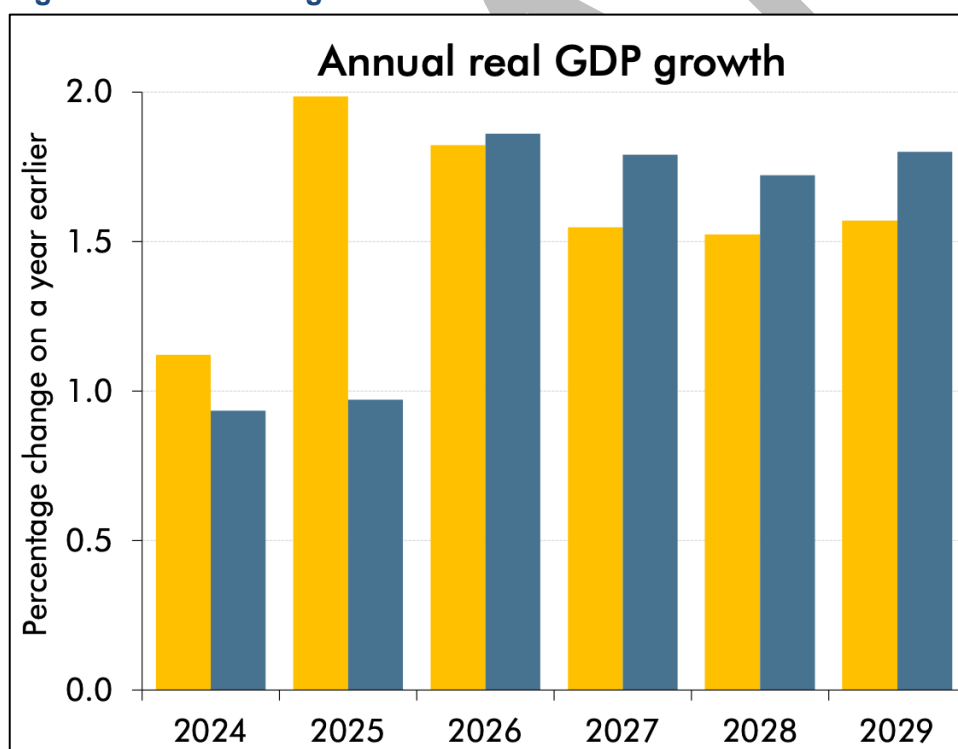
growing economy is more likely to require greater supplies of aggregate (and vice versa).

6.14. The Office for Budgetary Responsibility (OBR) March 2025 forecasts for UK GDP until 2029¹⁴ are included in Table 5a and illustrated in Figure 11c below. The OBR forecasts growth of 1.0% in 2025, 1.9% in 2026, 1.8% in 2027, with growth averaging about 1.75% over the rest of the decade. These projections supersede the October 2024 forecasts and incorporate Government policy decisions up to March 2025.

Table 5a OBR forecasts for GDP 2025-2029

	2025	2026	2027	2028	2029
GDP % growth forecast	1.0	1.9	1.8	1.7	1.8
<i>GDP % growth forecast (October 2024)</i>	<i>2.0</i>	<i>1.8</i>	<i>1.5</i>	<i>0.5</i>	<i>1.6</i>

Figure 11c Real GDP growth forecast¹⁵



6.15. These forecasts will be superseded by those which take account of the government's spending plans to be set out in its November (2025) budget.

¹⁴ Economic and fiscal outlook – March 2025 (OBR) <https://obr.uk/economic-and-fiscal-outlooks/>

¹⁵ Economic and fiscal outlook – March 2025 (OBR) <https://obr.uk/economic-and-fiscal-outlooks/>

- 6.16. The Mineral Products Association published its latest '[Regional overview of construction and mineral products markets in Great Britain](#)' in October 2024 which considers the state of the aggregates market and considers potential future growth. It includes the following summary:

'The expected recovery in construction activity will give a boost to demand for construction materials such as aggregates, ready-mixed concrete, asphalt and mortar. The MPA forecast indicates a gradual recovery in mineral product sales from 2025, assuming housing bounces back and other construction sectors pick up. The upturn will be from a low base, following three years of decline'.

- 6.17. The above information about the need for housing, infrastructure and the current and future performance of the economy suggests that demand for aggregate is likely to be maintained and may well increase in the short to medium term.

Landbank

- 6.18. As reported in Section 2, the current landbank for land-won sand and gravel is 7.46 years, based on the 3-year sales average; this decreases to 5.5 years when applying the 10-year sales average. The landbank shows a decrease on 2023 due to a slight increase in the 3 year sales average (used as the 'Aggregate Provision Rate' (APR)) and depletion of existing reserves.
- 6.19. Significant deposits of sand and gravel exist across the Hoo Peninsula; the council will actively plan to safeguard these areas through the emerging Medway Local Plan 2041 in order to help ensure that a steady and adequate supply of aggregates is maintained. The emerging Medway Local Plan 2041 also seeks to identify specific Areas of Search within which it may be possible to identify suitable sites for the working of sharp sand and gravel.

Capacity

- 6.20. The Aggregate Monitoring Survey includes a survey of site capacity to assist planning for future demand. Details of capacity against the recorded 3-year average sales are detailed in Table 6.
- 6.21. Sales against capacity data indicate sufficient headroom to accommodate a significant level of demand, with a capacity gap at the wharves of 35%. There is potential for capacity to be substantially increased with space available for additional wharf facilities at London Thamesport. A slight increase in wharf capacity is reported in 2024.

Table 6: Sales of aggregates (Mt) against capacity (Mt)

		2019	2020	2021	2022	2023	2024
Land-won sand and gravel	Average 3-year sales of land-won sand and gravel (Mt)	0.1	0.134	0.119	0.072	0.048	0.049
	Total annual capacity (Mt)	>0.200	>0.200	>0.200	>0.200	>0.200	>0.200
	Percentage of sales against capacity (%)	<50	<67	<60	<36	<24	<24
Recycled and secondary aggregates	Average 3-year sales of recycled and secondary aggregate (Mt)	0.046	0.017	0.01	0.03	0.05	0.06
	Total annual capacity (Mt)	>0.135	>0.135	>0.135	>0.135	>0.150	c0.154
	Percentage of sales against capacity (%)	<35	<12	<8	<22	<34	c38
Wharves	Sales through wharves (Mt)	2.727	3.062	3.172	3.308	3.377	2.930
	Total annual capacity (Mt)	4.3	4.3	4.3	4.3	4.3	4.5
	Percentage of sales against capacity	66%	74%	74%	77%	78%	65%
Rail Depot	Average 3-year sales through rail depot (Mt)	0.003	0.002	0.001	0	0	0
	Total annual capacity (Mt)	n/k	n/k	n/k	n/k	n/k	n/k
	Percentage of sales against capacity (%)	n/k	n/k	n/k	n/k	n/k	n/k

6.22. With regard to recycled and secondary aggregate, it is estimated that current permitted capacity for recycled aggregates production in Medway is around 150,000tpa. Active operational capacity is anticipated increased in 2024 when a

plant producing 'Hydraulically Bound Material'¹⁶ (HBM) from recycled aggregates began production at Malmaynes Hall Farm, Stoke. This plant is estimated to have an operational capacity of 0.075 Mtpa.

- 6.23. Exports of aggregate from the rail depot at the North Sea Terminal site at Cliffe suggest that the depot has capacity of at least 550,000tpa. However, this depot is used exclusively for the export of aggregate landed at the associated wharf.

7. Conclusion

- 7.1. This LAA indicates that Medway continues to play an important strategic role in regional aggregates supply through the wharves located on the Medway and Thames. The ability to handle large vessels and their proximity to markets in the wider South East and London elevates the wharves' importance to a regional level. The importance of the wharves is exemplified by the fact that crushed rock imported from Scotland to the Grain terminal wharf is being used in the construction of HS2. The current surplus handling capacity allows for flexibility and provides assurance in there is headroom allowing for a response to increased market demand.
- 7.2. A new 'Medway Local Plan 2041' is currently being prepared and is scheduled to be adopted in Autumn 2026¹⁷. A Proposed Submission Draft ('Regulation 19') Local Plan was published in July 2025. This, and previous LAAs are being used to inform the approach taken to the provision of aggregates in the Local Plan.
- 7.3. Although land won reserves of sand and gravel continue to deplete, it is considered that Medway is making sufficient provision to ensure a steady supply of aggregates. The Council will rigorously apply its mineral safeguarding policies to ensure that it can continue to make an effective contribution to meeting local and wider needs. The council will continue to actively participate in the work of SEEAWP and maintain cooperative working with neighbouring MPAs and industry operators.

¹⁶ 'Hydraulically Bound Material' is a generic term referring to soil or aggregates that have been bound together with additives such as cement, lime-based binders, gypsum or fly ash, then hardened by a hydraulic reaction with water. HBM is used in several construction applications including pavement sub-bases.

¹⁷ Medway Local Development Scheme 2024 to 2026