

MARINE AGGREGATES

THE CROWN ESTATE LICENCES

SUMMARY OF STATISTICS 2021

I N D E X

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NC Non confidential

ACCOMPANYING NOTES

1. These statistics refer to removal of sand and gravel from the bed of the English and Welsh Territorial Sea and Continental Shelf, under licence from The Crown Estate Commissioners. Removals from areas not in The Crown Estate ownership are not included in these statistics, nor are dredged materials removed purely for navigational reasons and not used beneficially.
2. All the statistics relate to royalty returns for the 2021 calendar year.
3. All permitted and actual extraction figures are expressed in metric tonnes. A conversion factor of 1.73 for aggregate and 1.5 for sand, has been applied where necessary, to convert cubic metres to metric tonnes.
4. The reported permitted removal tonnages shown within this report refers to the tonnage permitted within The Crown Estate production agreement. This is correct as at 31 December 2021.
5. The tonnages exclude corrections relating to late declarations and those identified during the audits.
6. The regional landing statistics totals will not equate to the amount dredged from each region, due to the presence of the export market and movement of aggregate to meet differing home market demands.
7. The county landing statistics for England are based on ceremonial counties and preserved counties for Wales.
8. An Official Port Listing is included (pages 17-18), which illustrates the individual landing locations (current and historic) and the standard name used within this document.

Summary 2021

1. Regional Dredging Statistics

Licences to Dredge Marine Minerals

Dredging Area	Permitted Removal * ¹	Primary Aggregates	Rivers and Miscellaneous	Secondary Aggregates		Total Removal
				Beach Nourishment	Reclamation Fill	
Humber	6,875,000	3,502,998	-	739,196	-	4,242,194
East Coast	7,125,000	3,304,010	-	-	-	3,304,010
Thames Estuary	3,800,000	1,601,306	-	515,639	-	2,116,945
East English Channel	9,916,667	4,483,312	-	103,925	-	4,587,237
South Coast	8,125,000	3,986,079	-	1,657	-	3,987,736
South West	3,049,998	1,433,749	-	24,338	-	1,458,087
North West	1,100,000	257,360	-	671,861	-	929,221
Total	39,991,665	18,568,814	-	2,056,616	-	20,625,430

2. Regional Landing Statistics

Humber / North East	1,056,272
East Coast	221,500
Thames Estuary	8,214,791
East English Channel	488,302
South Coast	2,586,312
South West	1,429,624
North West	257,360
Export	4,314,653
Primary Aggregates Total	18,568,814
Beach Nourishment / Reclamation Fill / Rivers and Misc	2,056,616
TOTAL LANDED	20,625,430

3. National Landing Statistics - Primary Aggregate

England	13,554,487
Wales	699,674
Belgium	1,582,030
France	146,069
Netherlands	2,586,554

Primary Aggregates Total **18,568,814**

*¹ Relates to Average Annual Tonnages (total tonnage / term). This does not include specific permitted tonnages for Secondary Aggregates only.

Tonnages exclude corrections. See note 5 on page 1.

The Humber region

Landing locations

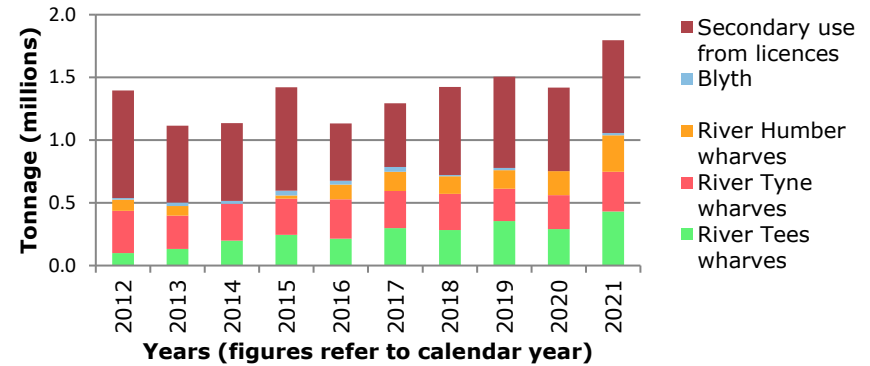
Blyth	17,186
River Humber Wharves	290,341
River Tees Wharves	430,688
River Tyne Wharves	318,057

Humber / North East total

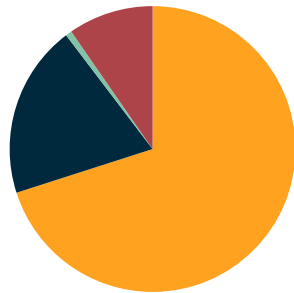
2021 tonnages

1,056,272

Delivery of marine aggregates to the region

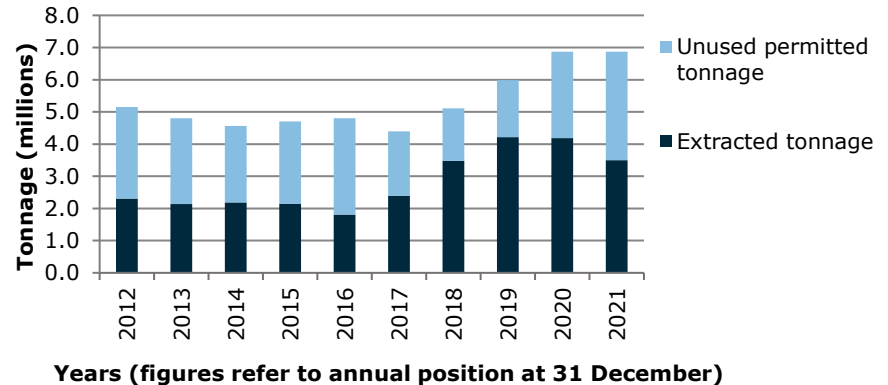


During 2021 material extracted from the region was delivered to:



- Mainland Europe (70.1%)
- Humber (including North East) (19.6%)
- East English Channel (0.7%)
- Thames Estuary (9.6%)

Permitted and extracted tonnage



6.88

million tonnes can be extracted from **10 licences** annually *

19

Current estimates suggest there are **19 years** of primary aggregate production permitted *

1

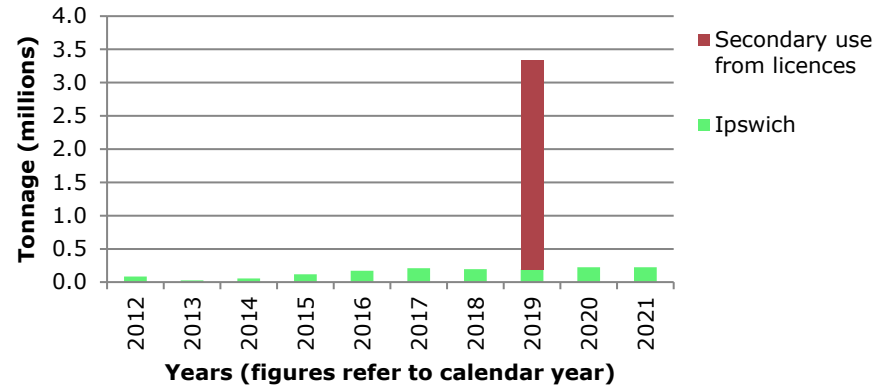
Current application for a licence could, if approved **increase** the permitted tonnage by **0.5 million tonnes** *

* As at April 2022

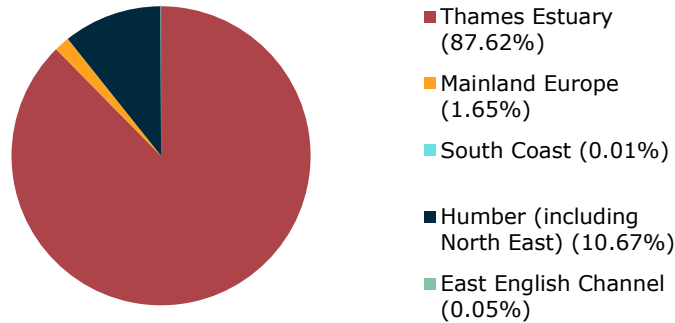
The East Coast region

Landing locations	2021 tonnages
Ipswich	221,500
East Coast total	221,500

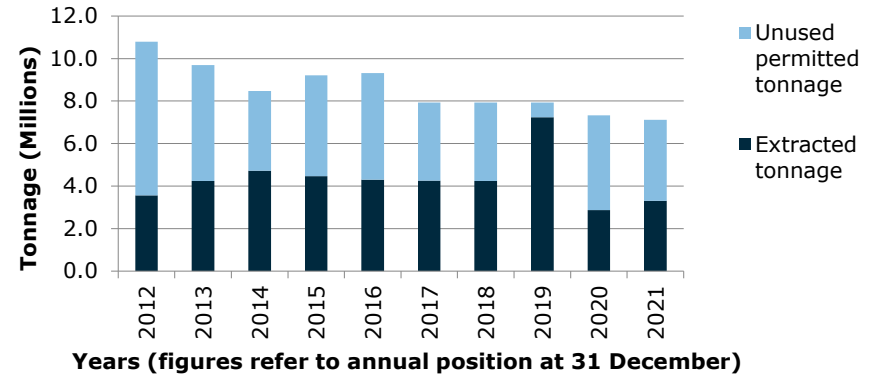
Delivery of marine aggregates to the region



During 2021 material extracted from the region was delivered to:



Permitted and extracted tonnage



7.13

million tonnes can be extracted from **11 licences** annually *

11

Current estimates suggest there are **11 years** of primary aggregate production permitted *

1

Current application for a licence could, if approved **increase** the permitted tonnage by **0.65 million tonnes** annually *

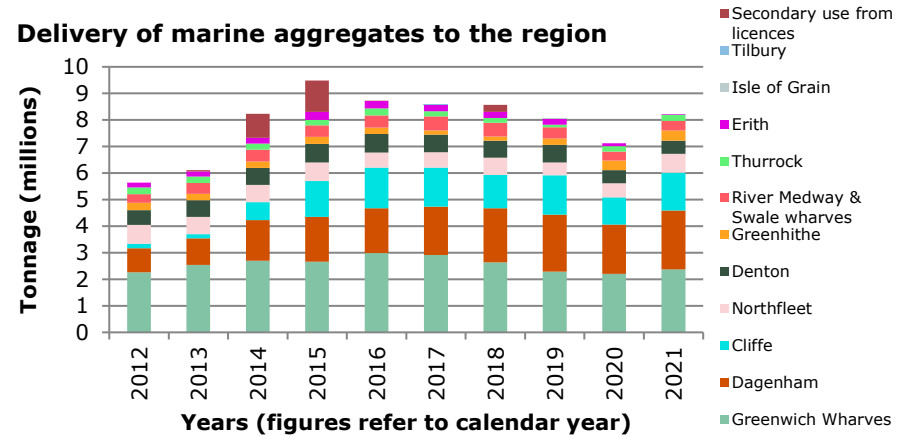
* As at April 2022

The Thames region

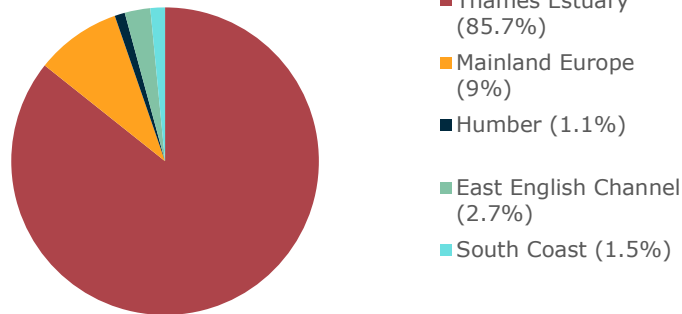
Landing locations 2021 tonnages

Cliffe	1,417,867
Dagenham	2,214,092
Denton	496,693
Erith	19,066
Greenwich Wharves	2,376,516
Greenhithe	386,445
Northfleet	712,121
River Medway Wharves	321,155
Swale Wharves	37,713
Thurrock	233,123
Thames Estuary total	8,214,791

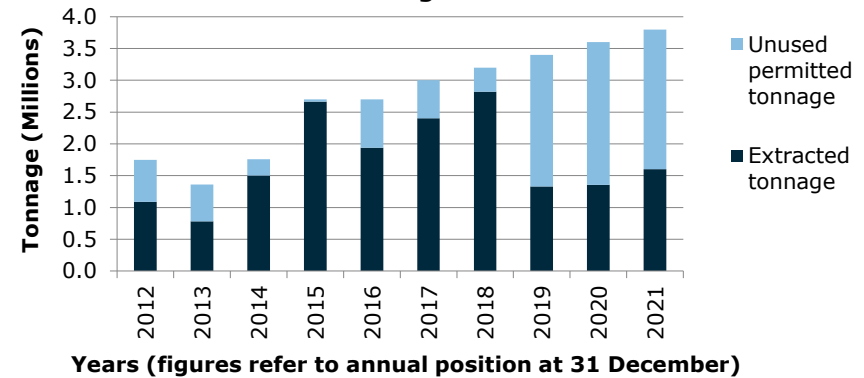
Delivery of marine aggregates to the region



During 2021 material extracted from the region was delivered to:



Permitted and extracted tonnage



4.4

million tonnes can be extracted from **8 licences** annually *

28

Current estimates suggest there are **28 years** of primary aggregate production permitted *

2

Current application for a licence could, if approved **increase** the permitted tonnage by **1.3 million tonnes** annually *

* As at April 2022

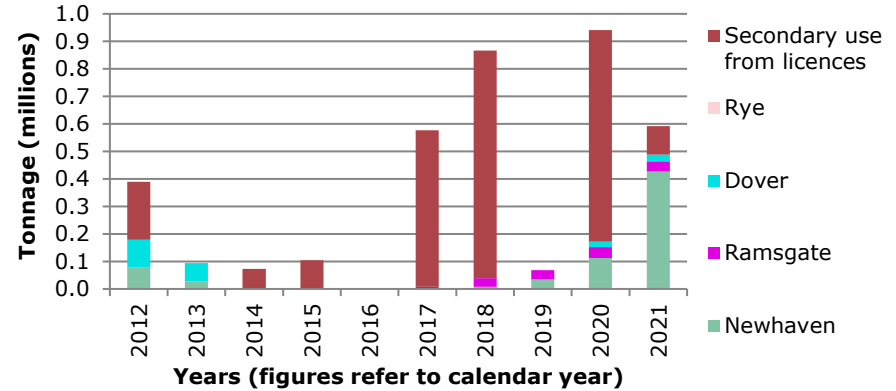
The East English Channel region

Landing locations 2021 tonnages

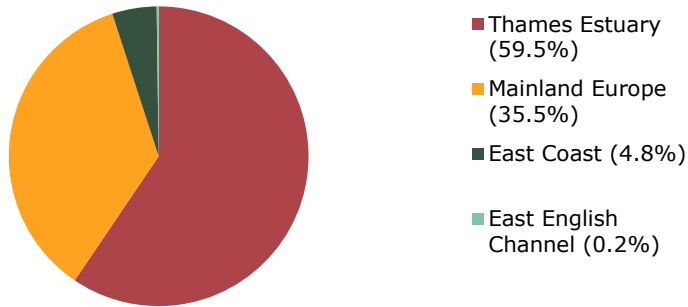
Dover	24,820
Newhaven	426,738
Ramsgate	36,744

East English Channel total **488,302**

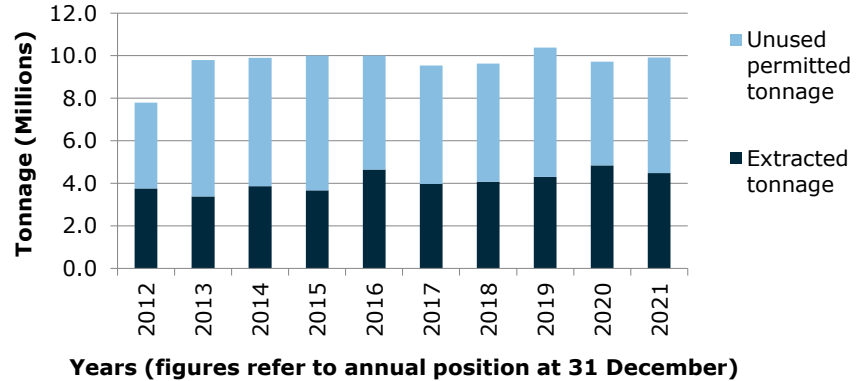
Delivery of marine aggregates to the region



During 2021 material extracted from the region was delivered to:



Permitted and extracted tonnage



9.92

million tonnes can be extracted from **10 licences** annually *

24

Current estimates suggest there are **24 years** of primary aggregate production permitted *

5

Current application for a licence could, if approved **increase** the permitted tonnage by **4.1 million tonnes** annually*

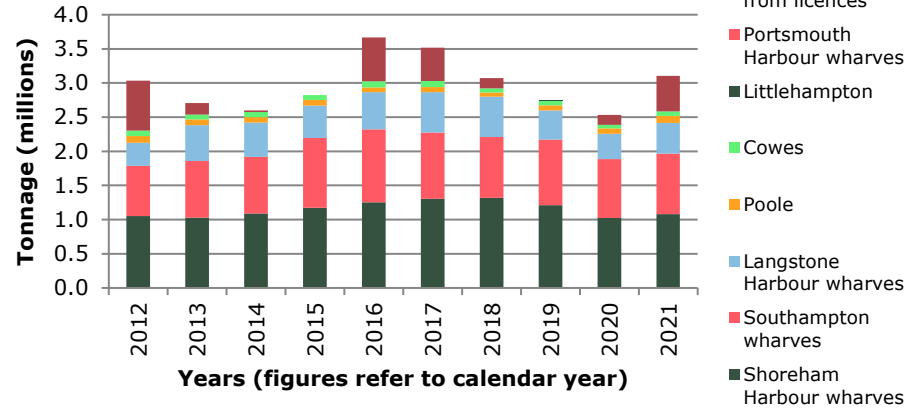
* As at April 2022

The South Coast region

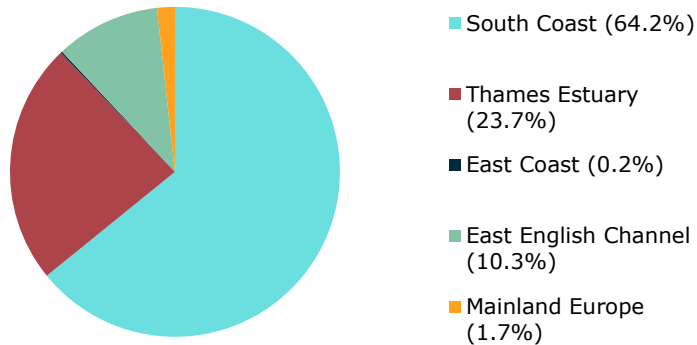
Landing locations 2021 tonnages

Cowes	65,697
Langstone Harbour Wharves	448,029
Poole	104,659
Shoreham Harbour Wharves	1,078,498
Southampton Wharves	889,429
South Coast total	2,586,312

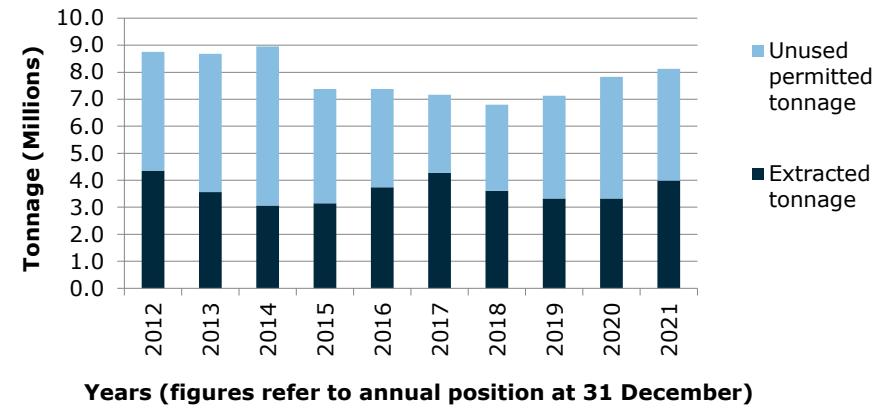
Delivery of marine aggregates to the region



During 2021 material extracted from the region was delivered to:



Permitted and extracted tonnage



8.13

million tonnes can be extracted from **16** licences annually *

22

Current estimates suggest there are **22 years** of primary aggregate production permitted *

0

There are currently **no applications** for new licences on the South Coast *

* As at April 2022

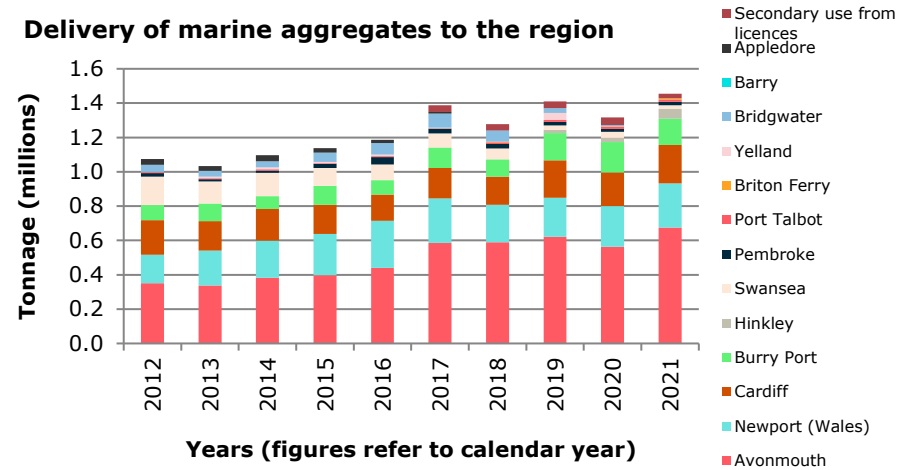
The South West region

Landing locations 2021 tonnages

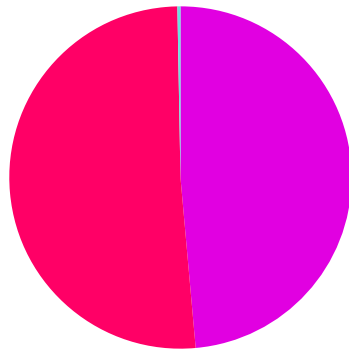
Avonmouth	675,317
Briton Ferry	7,781
Burry Port	152,471
Cardiff	222,873
Hinkley	57,755
Newport	258,202
Pembroke	20,318
Port Talbot	14,113
Swansea	20,794

South West total **1,429,624**

Delivery of marine aggregates to the region

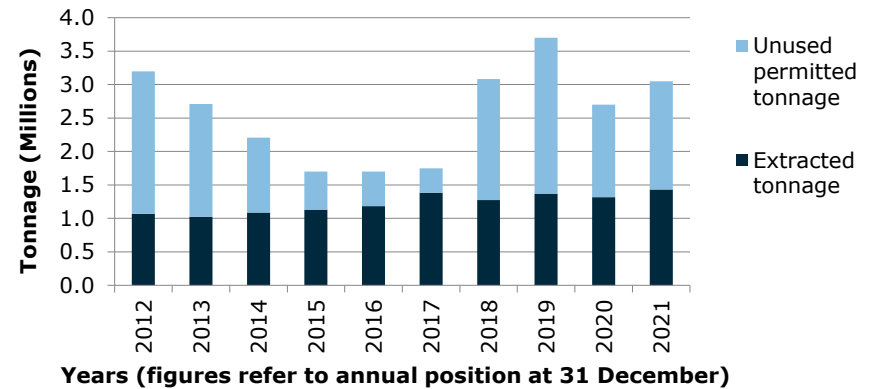


During 2021 material extracted from the region was delivered to:



- South West - Welsh wharves (48.58%)
- South West - English wharves (51.13%)
- South Coast (0.29%)

Permitted and extracted tonnage



3.05

million tonnes can be extracted from **9 licences** annually *

27

Current estimates suggest there are **27 years** of primary aggregate production permitted *

0

There are currently **no applications** for new licences on the South Coast *

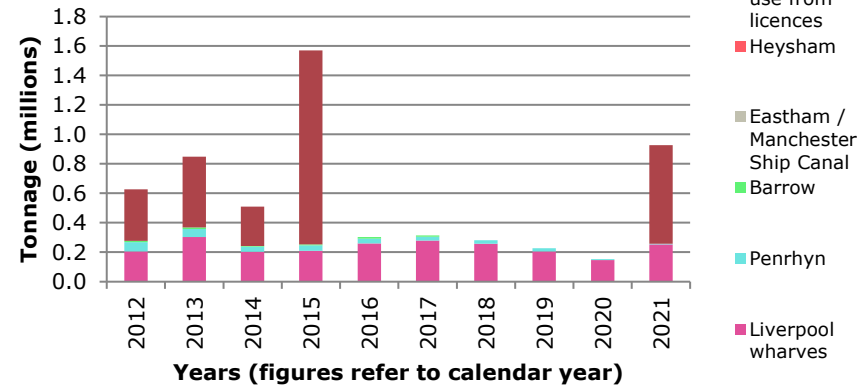
* As at April 2022

The North West region

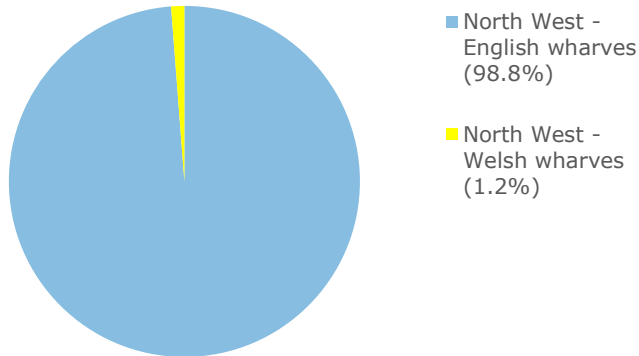
Landing locations 2021 tonnages

Liverpool Wharves	254,238
Penrhyn	3,122
North West total	257,360

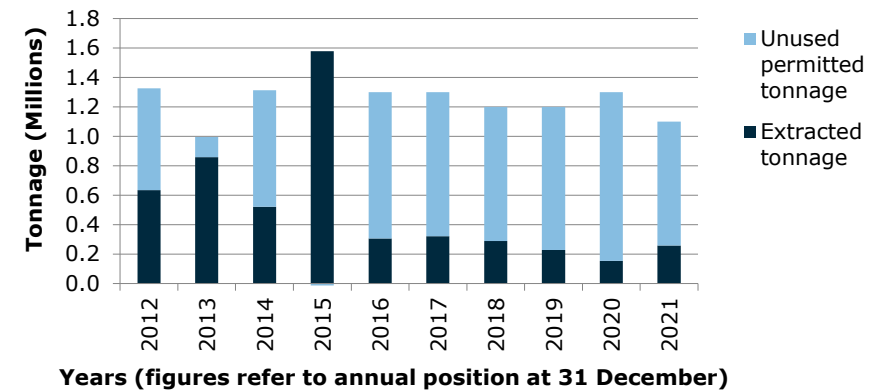
Delivery of marine aggregates to the region



During 2021 material extracted from the region was delivered to:



Permitted and extracted tonnage



1.10

million tonnes can be extracted from **2 licences** annually *

34

Current estimates suggest there are **34 years** of primary aggregate production permitted *

1

Current application for a licence could, if approved **increase** the permitted tonnage by **0.5 million tonnes** annually*

* As at April 2022

Exports

Landing locations

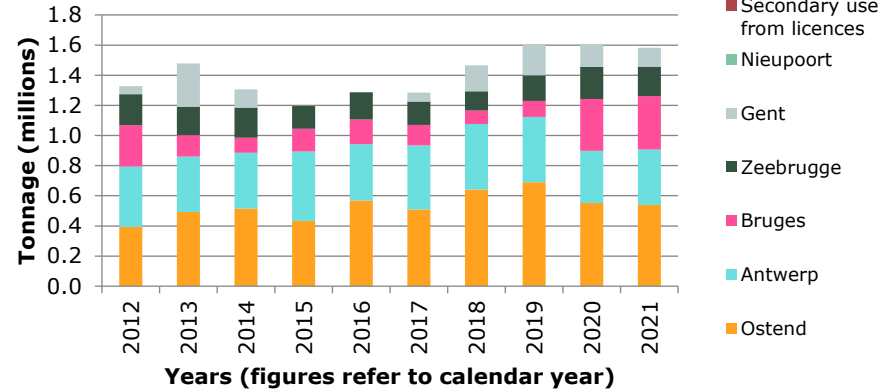
2021 tonnages

Amsterdam	789,906
Antwerp	368,745
Boulogne	19,084
Bruges	355,116
Dunkirk	102,397
Gent	126,128
Harlingen	261,532
Ijmuiden	54,162
Le Havre	855
Ostend	538,111
River Seine Wharves	23,733
Vlissingen	1,480,954
Zeebrugge	193,930

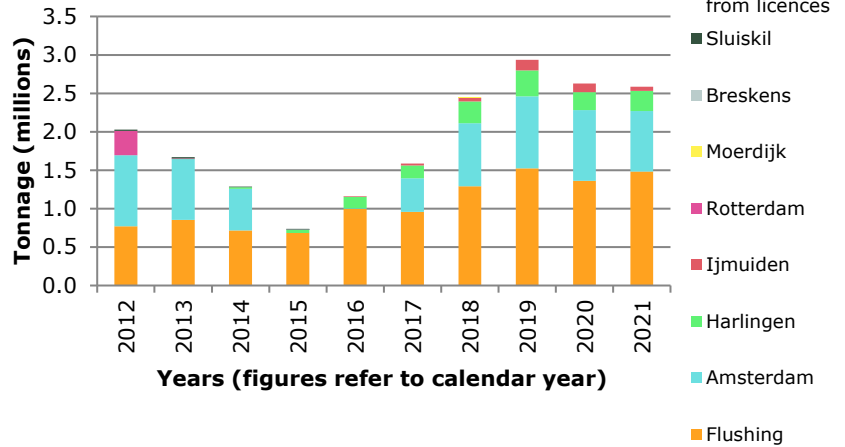
Export Total

4,314,653

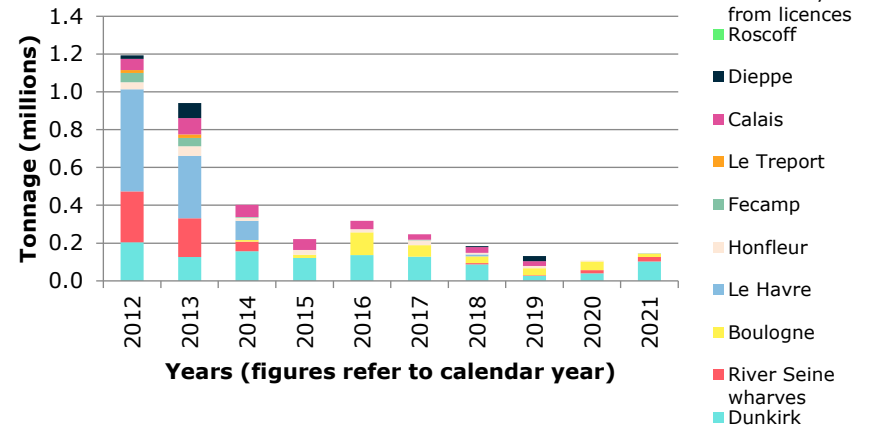
Delivery of marine aggregates to Belgium



Delivery of marine aggregates to The Netherlands



Delivery of marine aggregates to France



Secondary use aggregate

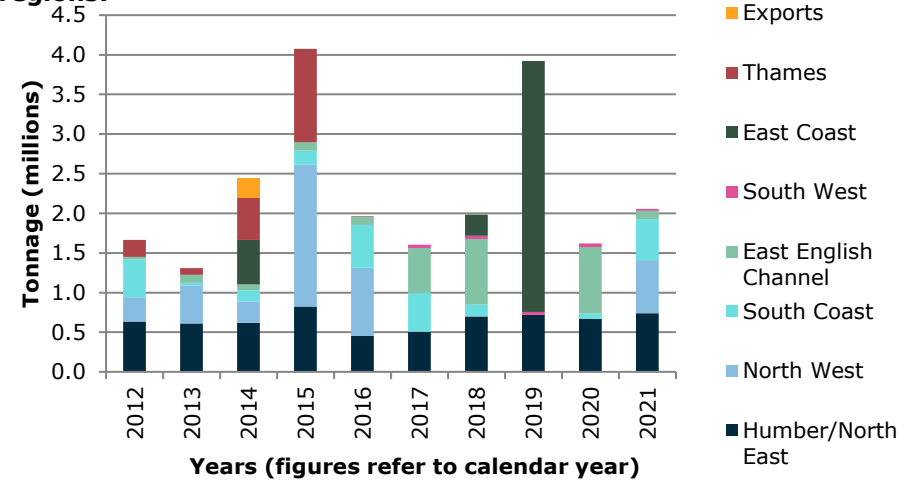
Beach nourishment/reclamation fill/rivers and miscellaneous

Landing locations 2021 tonnages

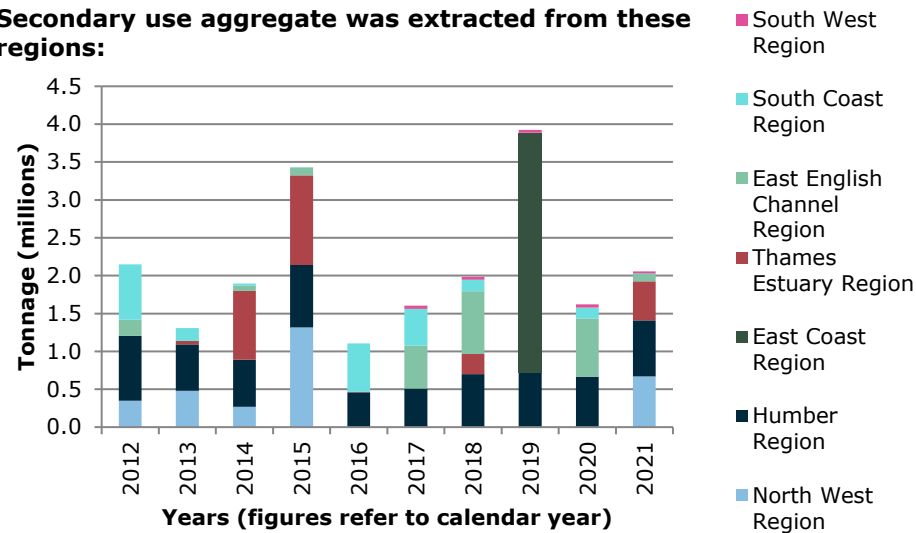
Bournemouth	515,639
Bramley Moore Docks	670,664
Lincshore	739,196
Lydd	103,925
Southsea	1,657
Yelland	25,535

Beach Nourishment Total 2,056,616

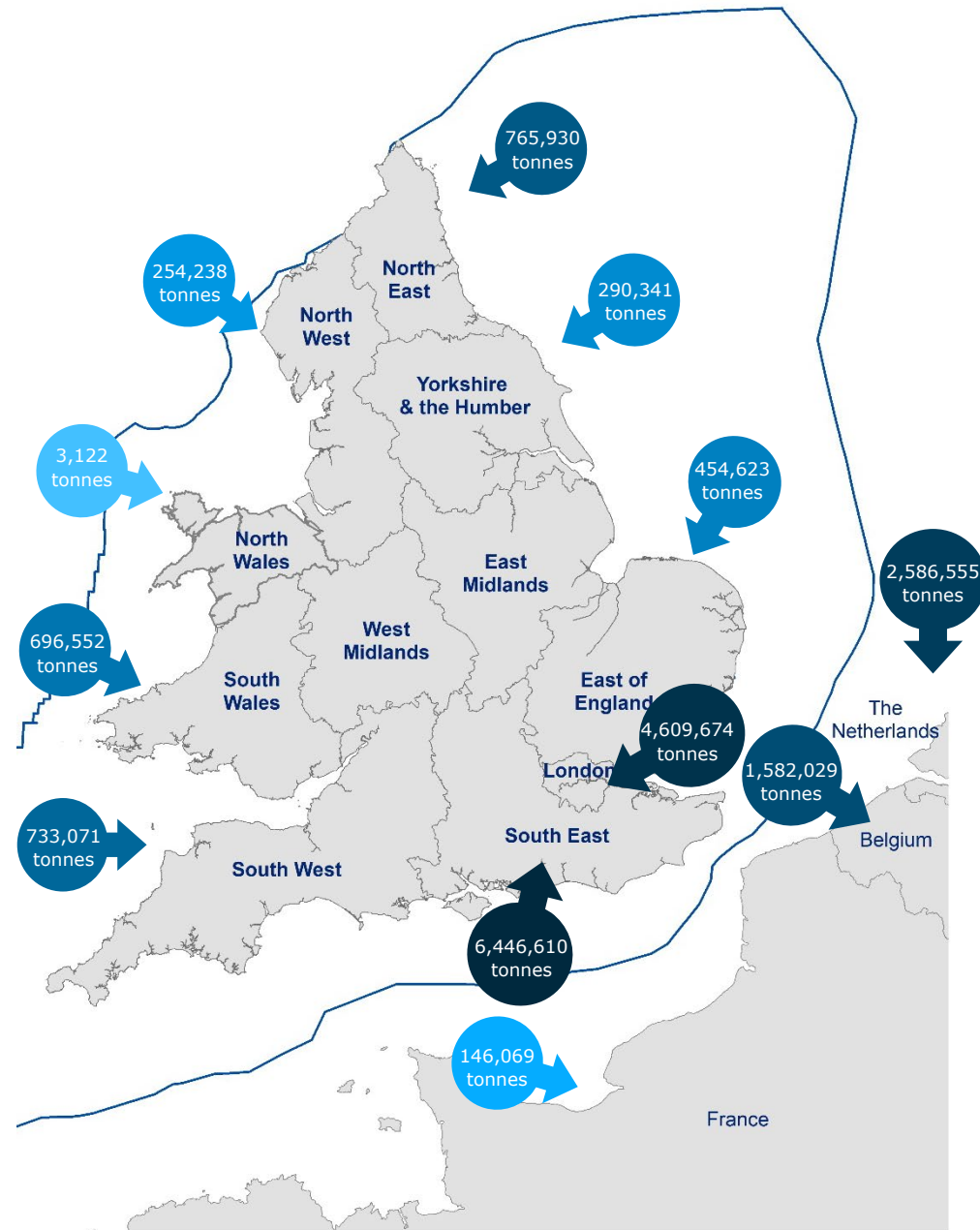
Secondary use aggregate was delivered to these regions:



Secondary use aggregate was extracted from these regions:



Delivery by region/country



Reserves and Resources

Region	Total current primary reserves	10-year average annual offtake	3-year average annual offtake	Peak annual offtake during 10-year period*	Annual permitted offtake (as March 2022)	Regional reserve life @ 10-year average annual offtake
		Primary (construction aggregate)				
Humber	41.88	2.24	3.51	3.52	6.87	18.69
East Coast	44.37	4.01	3.42	4.72	7.12	11.07
Thames Estuary	38.19	1.37	1.43	1.94	3.80	27.77
East English Channel	95.60	3.98	4.28	4.65	9.92	24.03
South Coast	75.97	3.39	3.50	3.99	8.13	22.44
South West	32.55	1.22	1.36	1.43	3.05	26.62
North West	9.28	0.27	0.21	0.38	1.10	34.00
TOTAL	337.84	16.48	17.71	18.10	39.99	20.50

All figures are in millions of tonnes
 *Totals are national peaks, not the sum of regional figures

Reserves and Resource

The PERC code defines “**reserves**” as the proportion of a mineral “**resource**” that can be mined for economic purposes

21

Current national estimates suggest there are **21 years** of primary marine aggregate production permitted

338

Million tonnes estimated national primary reserve

**SUMMARY OF NATIONAL LANDING STATISTICS
FOR MARINE DREDGED PRIMARY AGGREGATES - 2021**

Landing Locations		2021 Tonnage
England	Avonmouth	675,317
	Blyth	17,186
	Cliffe	1,417,867
	Cowes	65,697
	Dagenham	2,214,092
	Denton	496,693
	Dover	24,820
	Erith	19,066
	Greenhithe	386,445
	Greenwich Wharves	2,376,516
	Hinkley	57,755
	Ipswich	221,500
	Langstone Harbour Wharves	448,029
	Liverpool Wharves	254,238
	Newhaven	426,738
	Northfleet	712,121
	Poole	104,659
	Ramsgate	36,744
	River Humber Wharves	290,341
	River Medway Wharves	321,155
	River Tees Wharves	430,688
River Tyne Wharves	318,057	
Shoreham Harbour Wharves	1,078,498	
Southampton Wharves	889,429	
Swale Wharves	37,713	
Thurrock	233,123	
	England Total	13,554,487
Wales	Briton Ferry	7,781
	Burry Port	152,471
	Cardiff	222,873
	Newport (Wales)	258,202
	Pembroke	20,318
	Penrhyn	3,122
	Port Talbot	14,113
	Swansea	20,794
	Wales Total	699,674

**SUMMARY OF NATIONAL LANDING STATISTICS
FOR MARINE DREDGED PRIMARY AGGREGATES - 2021**

Landing Locations		2021 Tonnage
Belgium	Antwerp	368,745
	Bruges	355,116
	Gent	126,128
	Ostend	538,111
	Zeebrugge	193,930
	Belgium Total	1,582,030 -----
France	Boulogne	19,084
	Dunkirk	102,397
	Le Havre	855
	River Seine Wharves	23,733
	France Total	146,069 -----
Netherlands	Amsterdam	789,906
	Harlingen	261,532
	Ijmuiden	54,162
	Vlissingen	1,480,954
	Netherlands Total	2,586,554 -----
	Total	18,568,814 -----

**SUMMARY OF COUNTY LANDING STATISTICS
FOR MARINE DREDGED PRIMARY AGGREGATES - 2021**

LANDING LOCATIONS		2021 Tonnage
ENGLAND	Bristol	675,317
	Dorset	104,659
	East Riding of Yorkshire	260,655
	East Sussex	823,835
	Essex	233,123
	Greater London	4,609,674
	Hampshire	1,337,458
	Isle of Wight	65,697
	Kent	1,694,537
	Lincolnshire	29,685
	Medway	1,739,022
	Merseyside	254,238
	Middlesbrough	9,208
	North Yorkshire	421,480
	Northumberland	17,185
	Somerset	57,755
	Suffolk	221,500
	Tyne & Wear	318,057
	West Sussex	681,402
	England Total	13,554,487
WALES	Carmarthenshire	152,471
	Gwent	258,202
	Gwynedd	3,122
	Pembrokeshire	20,318
	South Glamorgan	222,873
	West Glamorgan	42,688
	Wales Total	699,674

OFFICIAL PORT LISTING

Region	Landing Port (Standard Name)	Wharves/Alternative Names
North East	Blyth	Blyth
Humber	Immingham	Immingham
	Lincshore	Lincshore
	River Humber Wharves	Goole, Grimsby, Howden, Hull, Hull N&Y, Hull Northern Aggregates, Pyewipe, St Andrew's Quay, Stema Hull
	River Tees Wharves	Able Tees, Billingham, Middlesbrough, Tees, Tees Sand, Seaton, Middlesbrough Dawsons, TCP East Quay (Shire Aggregates)
	River Tyne Wharves	Gateshead, Jarrow, Tyne, Jarrow Wharf (Cemex)
	Sunderland	Hendon, Hendon Dock, Sunderland
East Coast	Bacton	Bacton
	Ipswich	Hanson/ARC Ipswich, Ipswich
	Lowestoft	Lowestoft
Thames Estuary	Barking	Barking, Docklands Wharf
	Cliffe	Alpha Wharf, Cliffe, North Sea Terminal
	Dagenham	Hanson/ARC Dagenham, Dagenham, Dagenham Deport (Cemex)
	Denton	Denton, Denton B.A.D, Denton Sand, J Clubbs
	Erith	Erith, Pioneer Wharf
	Felixstowe	Felixstowe
	Greenhithe	Greenhithe, Hanson Greenhithe
	Greenwich Wharves	Angerstein, Blackwall Wharf, Charlton, Delta Wharf, Greenwich, Murphy's Wharf, Phoenix Wharf, Victoria Deep Wharf
	London Docklands Wharves (mostly disused)	Canning Town, Cargo Fleet Wharf, Clarence Wharf, East India Dock, Heron Quay, Millwall, Orchard Wharf, Peruvian Wharf, Rotherhithe, Silvertown, Thames Wharf, Thamesmead, Union Wharf, Victoria Wharf
	Northfleet	Northfleet, Northfleet Brett, Robin's Wharf
	River Medway & Swale Wharves	Queenborough, Ridham, Rochester, Rochester Hanson, Sheerness
	Swale Wharves	Ridham, Queenborough
	Tilbury	Tilbury Stema
Thurrock	Purfleet, Purfleet PAL, Thurrock, West Thurrock	
East English Channel	Dover	Dover
	Hythe	Hythe
	Lydd	Lydd
	Newhaven	Newhaven, Cemex Newhaven
	Ramsgate	Ramsgate
	Rye	Rye
South Coast	Cowes	Cowes, East Cowes, IOWA/Isle of Wight Aggregates, Kingston Wharf, Medina Wharf, Cemex/SCS West Cowes, TMD/UMD West Cowes, West Cowes
	Eastbourne	Eastbourne Beach
	Elmer	Elmer Beach
	Langstone Harbour Wharves	Bedhampton, Havant, Kendall's Wharf, Langstone, TMD/UMD Bedhampton/ Portsmouth
	Littlehampton	Littlehampton, TMD/UMD Littlehampton
	Newport, Isle of Wight	Blackhouse Quay (disused), Newport IoW, Solent Services, West Medina Mills (disused)
	Pevensey	Pevensey Beach
	Plymouth	Millbay, Plymouth, Stonehouse
	Poole	Poole
	Portsmouth Harbour Wharves	Fareham, Gosport, LRA Tipner, LRA Upper Wharf, Portsmouth
	Shoreham Harbour Wharves	Hanson/ARC Shoreham, Hall's Wharf, Hiedelberg Portslade, Kendall's Wharf Shoreham, Portslade, Cemex/SCS Shoreham, Shoreham, Shoreham Ferry Wharf, TMD/UMD Shoreham
	Southampton Wharves	Burnley Wharf, Dibles Wharf, Eling Wharf, JP Marks, JPM Super Wool, Leamouth, LRA Marchwood, Marchwood, Cemex/SCS Southampton, Southampton, Southampton (Fawley), Spitfire Wharf, Totton, TMD/UMD Burnley Wharf, Woolston
	Southsea	Southsea
Channel Islands	Guernsey	Guernsey, St Sampson

OFFICIAL PORT LISTING

Region	Landing Port (Standard Name)	Wharves/Alternative Names
South West	Appledore	Appledore, Appledore Evans, Bidna
	Avonmouth	Avonmouth, BCA Avonmouth, Cemex/BDL Avonmouth, Hanson Avonmouth, Remix Avonmouth, TMD/UMD Avonmouth
	Barnstaple	Barnstaple
	Barry	Barry
	Bridgwater	Bridgwater, Dunball Wharf
	Briton Ferry	Briton Ferry, Cemex Briton Ferry, Giant's Wharf, Hanson Briton Ferry, Ironworks, Riverside Wharf, Tarmac Briton Ferry
	Burry Port	Burry Port
	Cardiff	Cardiff, TMD Cardiff, Cemex Cardiff, Hanson Cardiff, Empire Wharf, Roath Dock
	Hinkley	Hinkley Jetty
	Newport, Wales	Alexandra Dock, Hanson/ARC Newport, East Bank/Ferry Terminal, Eastern Wharf, Newport, Newport (Wales), Newport 2
	Pembroke	Pembroke
	Port Talbot	Port Talbot
	Swansea	Prince of Wales Dock, Cemex/BDL Swansea, Swansea
	Yelland	Yelland
North West	Barrow	Barrow
	Eastham	Eastham
	Glasson	Glasson
	Heysham	Heysham
	Liverpool Wharves	Albert Dock, Birkenhead, Bramley Moore Dock, Garston, Liverpool, Mersey Wharf, Mostyn
	Penrhyn	Penrhyn
Northern Ireland	Belfast	Belfast
Continental Europe	Amsterdam	Amsterdam, Amsterdam AGM, Amsterdam PAES, Hanson/CM/Hiedelberg Amsterdam, Steen Korrel
	Antwerp	Antwerp, Hanson/CM Antwerp, Kallo, Antwerp Sands
	Breskens	Breskens
	Boulogne	Boulogne, Boulogne-sur-mer
	Bruges	Alzagri, Bruges, Brugge, Hanson/CM Brugge
	Caen	Caen
	Calais	Calais
	Dieppe	Dieppe
	Dunkirk	Hanson/CM Dunkirk Sand, Dunkerque, Dunkirk, Dunkirk Gravel, Dunkirk Sand, Mardyck
	Fecamp	Fecamp, Fecamp Mercier
	Flushing	Flushing, Vlissingen
	Gent	Gent, Kluizendok
	Harlingen	Harlingen
	Honfleur	Honfleur
	Ijmuiden	Ijmuiden
	Le Havre	Le Havre, Treguier
	Le Treport	Le Treport
	Moerdijk	Moerdijk
	Nieupoort	Nieupoort
	Ostend	Ostend, Ostend ISG
	River Seine Wharves	Lillebonne, Rouen, St Wandrille, Vatteville, Vattewille-la-Rue
	River Somme Wharves	Vattier
	Roscoff	Roscoff
	Rotterdam	De Hoop Rotterdam, Europoort, Rotterdam, Schiemond
	Sluiskil	NL Sluiskil, Sluiskil
	Terneuzen	Terneuzen
	Thyboron	Thyboron
Zeebrugge	Zeebrugge, Zeebrugge DVSII, Zeebrugge Hanson	