

The English Channel and Thames Estuary

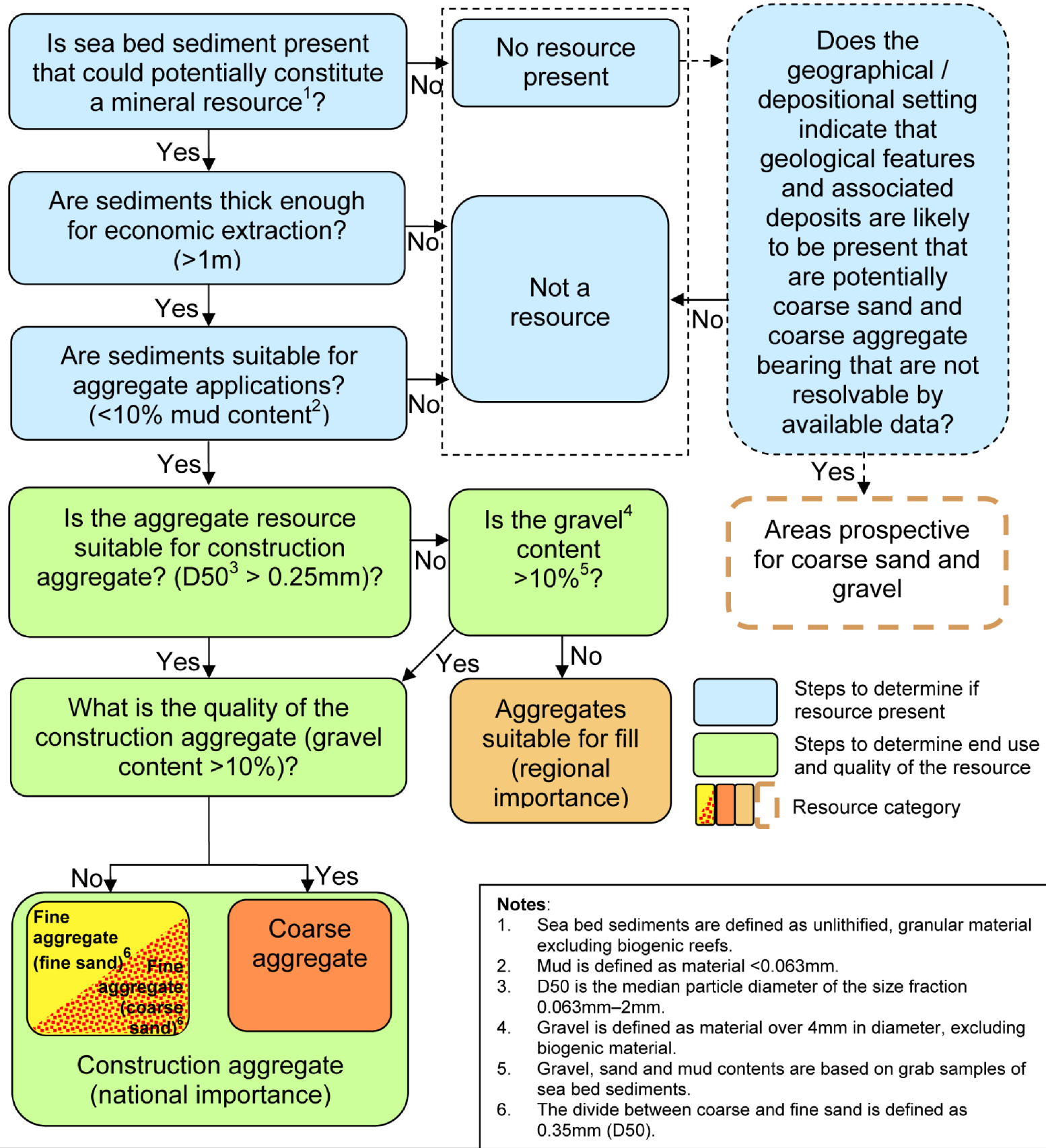
Marine Sand and Gravel Resources Scale 1:500 000

Compiled by T.P. Bide, P.S. Balson and E. Campbell
Project Leaders: T.P. Bide and J.M. Mankelov
Digital Cartography: J. Smalley
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This map has been commissioned by The Crown Estate. This map is to be used with the accompanying guide 'The mineral resources of the English Channel and Thames Estuary'. British Geological Survey Open Report, OR/12/096.

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Marine sand and gravel resources of the English Channel and Thames Estuary
Bide, T.P., Balson, P.S. and Campbell, E.

Aggregate resource categorisation flow sheet



AGGREGATE RESOURCES

- Coarse aggregate
- Fine aggregate (fine sand)
- Fine aggregate (coarse sand)
- Aggregate suitable for fill
- No resource inferred from available data
- Carbonate content of sand exceeds 50%
- Area prospective for coarse sand and gravel

AGGREGATE LICENCE AREAS

- Licence and application areas as of March 2013

REGIONAL ENVIRONMENT CHARACTERISATION SURVEYS (REC)

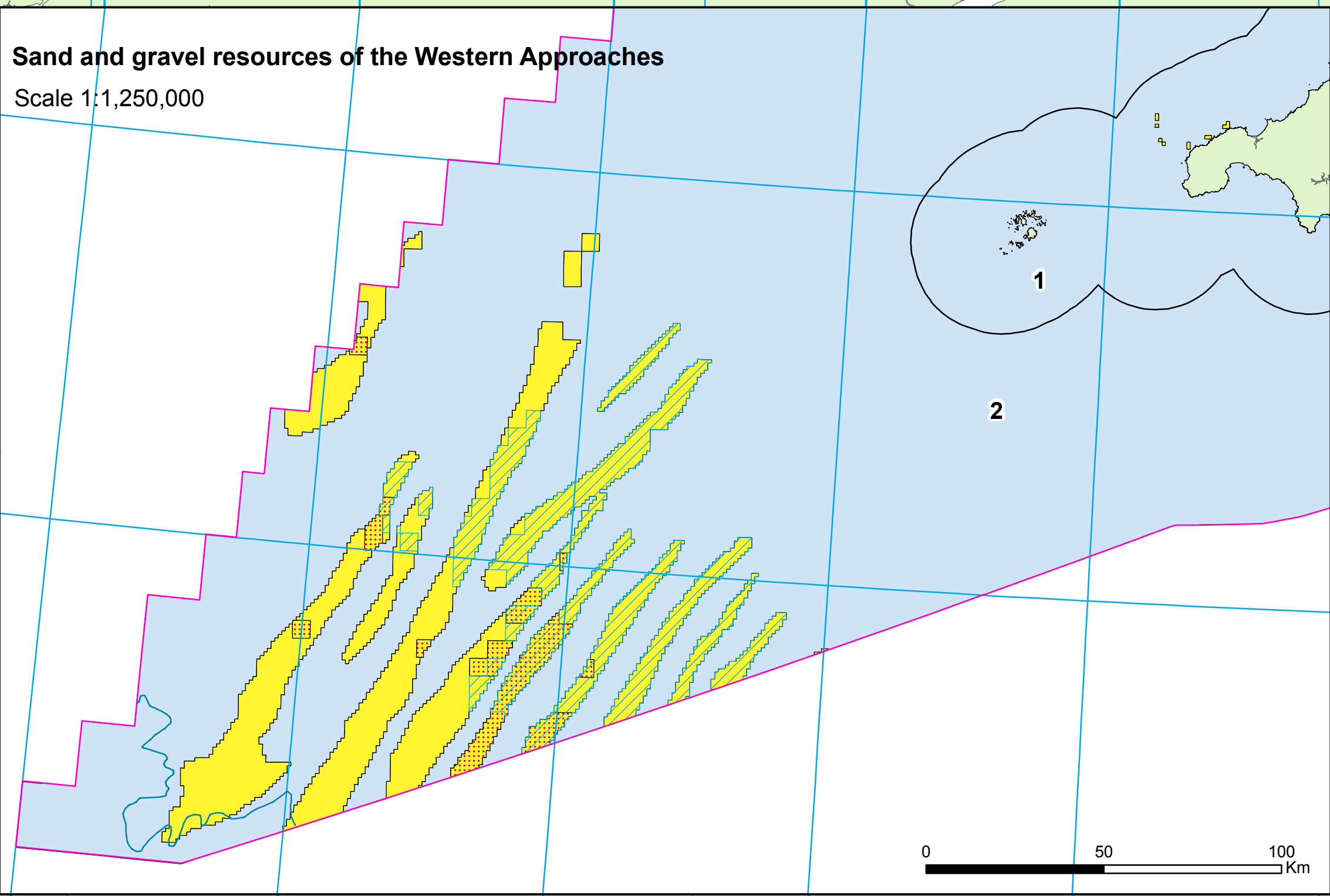
- East English Channel
- Outer Thames

PLANNING AREAS

- Marine Management Organisation Marine Plan Areas -
1: South West Inshore. 2: South West Offshore.
3: South Inshore. 4: South Offshore. 5: South East Inshore.
- Shelf break defined by 200m bathymetry contour
- Median line

Sand and gravel resources of the Western Approaches

Scale 1:1,250,000



Depositional settings used to define areas prospective for coarse sand and gravel

- Area known to contain palaeo-river channels and terraces

The geological and depositional setting indicate that sediment suitable for coarse sand and gravel are likely to be present but are not resolvable by the data available for this study.

Areas containing important sand and gravel resources

- Area of coarse sand and gravel related to infilled palaeo-river channels

These areas represent geological environments that host the largest, highest quality and currently most economically important areas of sand and gravel resources. High levels of confidence can be attributed to the location and properties of resources in these areas.

For further information please refer to the accompanying report
'The mineral resources of the English Channel and Thames Estuary'.

Aims and Limitations

The purpose of the maps in this series is to show the broad distribution of those mineral resources which may be of current or potential economic interest. The maps are intended to assist strategic decision-making in respect of mineral extraction and the protection of important mineral resources against sterilisation. They bring together a wide range of information, much of which is disparate and not always available in a convenient form.

The maps have been produced by the collation and interpretation of mineral resource data principally held by the British Geological Survey. As such the mineral resource data presented are based on the best available information, but are not comprehensive and their quality is variable. The inferred boundaries shown are, therefore, approximate. Mineral resources defined on the map delineate the areas within which potentially workable minerals may occur. These areas are not of uniform potential and also take no account of planning constraints that may limit their working. The economic potential of specific sites can only be proved by a detailed evaluation programme. Such an investigation is an essential precursor to submission of a planning application for mineral working. Extensive areas are shown as having no mineral resource potential, but some isolated mineral extraction may occur in these areas. The presence of these operations generally reflect very local or specific situations that are not resolved by the resolution of data that is available for compilation of this regional-scale map and require site-specific investigation to identify. This can result in marine mineral licences covering areas where no resource is shown. It is possible that local variations in geology that are too subtle to be resolved by this regional-scale survey can contain substantial volumes of resource and could prove to be significant future resources. For example, areas around the Thames Estuary have been identified by the aggregate industry as localised sand and gravel deposits. These deposits can cover small areas, less than 1km (the smallest grid spacing used on the maps), but nevertheless can contain several million cubic metres of sand and gravel.

The locations of application and licence areas for aggregate extraction are shown. These have been supplied by The Crown Estate, March 2013.

Not to be used for navigation.

The maps are intended for general consideration of mineral issues and not as a source of detailed information on specific localities. The maps should not be used to determine individual planning applications or to take decisions on the acquisition or use of a particular area, although they may give useful background information which sets a specific proposal within context.

The area covered by this map includes several major embayments. For the majority of these data coverage is poor and sediments are highly variable, as such they have not been included in the study. Bay closing lines, which delineate the boundary of internal waters defined by the UKHO as of August 2012 have, where appropriate, been used to determine the extent of these embayments.

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Regional Environmental Characterisation Reports have been supported by the Marine Aggregate Levy Sustainability Fund (MALSF) and commissioned by the Marine Environment Protection Fund (MEPF).

EMU LTD and the University of Southampton. 2009. Outer Thames Estuary Regional Environmental Characterisation. MALSF 08/09

James, J.W.C., Coggan, R.A., Blyth-Skymie, V.J., Morando, A., Birchough, S.N.R., Bee, E., Limpenny, D.S., Verling, E., Vanstaen, K., Pearce, E., K., B., Johnston, C.M., Rocks, K.F., Philpott S.L., and Rees, H.L. 2007. The Eastern English Channel Marine Habitat Map. CEFAAS, technical report 139.

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