

Area 366/367 Biodiversity Action Plan

Area 366/367, Hastings Shingle Bank, is a marine aggregate extraction area situated 6 miles south of Hastings, East Sussex, in the English Channel. Sand and gravel is removed from the site by dredging vessels and delivered to markets along the south coast of England and the Thames Estuary. This Biodiversity Action Plan has been produced to give due consideration to the biodiversity issues of the site and wider area and inform extraction management decisions through the life of the operations.



Background Information

Site Name and Location	Area 366/367, Hastings Shingle Bank 6 miles (13km) south of Hastings - full boundary coordinate details shown with location plan
Hanson Company and Region	Hanson Aggregates Marine Ltd, Southampton Hanson South East region
Local BAP or other BAP(s) that will be targeted	Marine Habitats and Species of the UKBAP Relevant Sussex & Kent Coastal and Marine Biodiversity Action Plans
UK or Local BAP Habitat(s) to be monitored	Rock and biogenic reef, sublittoral sands and gravels.
UK or Local BAP species to be considered	<i>Sabellaria spinulosa</i> , grouped commercial fish, sharks and rays.
Designated Natural area	Eastern English Channel Marine Natural Area as defined by English Nature (2004).
Background and site description	The Hastings Shingle Bank lies in water depths of 15-25m. The total area licensed for aggregate extraction is 3.54km ² . Seasonal restrictions are enforced on some zones within the overall licence area. Active zones are defined on a 6 monthly basis subject to licence conditions. Flint dominated (silty) sandy gravel deposited in a fluvial environment is extracted from the area. Licensed maximum extraction rate from Area 366/367 is 2Mtpa (1Mtpa each for Area 366 and 367). Screening during extraction is not permitted. Specific biodiversity features are the sand and gravel of the resource deposit and also recently identified biogenic (<i>S. spinulosa</i>) reef. In addition to this the licence exists in an area that is important for sole and crab that are commercially exploited. General issues relate to the nature and extent of primary and secondary impacts on the seabed within and surrounding the licence area.
Resource Requirements - comment on cost if appropriate	Ecological monitoring issues related to Area 366/367 are dictated by specific licence conditions. HAML Resources department are responsible for commissioning monitoring and reporting services in fulfilment of the licence conditions. Resources for completion of monitoring and reporting tasks are determined on an annual basis and budget request made by HAML to plc.
Benefits	Recent work undertaken during the monitoring of the licence area highlighted significant <i>S. spinulosa</i> communities within and just beyond the boundaries of Area 366/367. Specific monitoring of these features is not stipulated in the licence conditions. The existence of the <i>S. spinulosa</i> communities has been determined through interpretation of ground-truthed sidescan sonar data acquired during routine monitoring of the site and surrounding seabed. Work undertaken to date may provide important information regarding the development of biogenic reef communities in association with aggregate extraction activities and best methods of monitoring the nature and extent of features. Also may be able to provide value and assistance to Natural England and SSFDC in fulfilment of their duties, especially under the requirements of the Habitats Directive (Natura 2000). The communities identified may also benefit from the protection afforded by exclusion of other activities from the licence area.
Contribution to marine biodiversity understanding	Monitoring of Area 366/367 (and the proposed southern extension Area 460) and surrounding seabed has provided important information regarding the nature and extent of <i>S. spinulosa</i> communities and detailed information regarding the general nature of seabed habitats over a total area of seabed of approximately 50km ² . Future work may improve the understanding of the development of <i>S. spinulosa</i> communities and the effects of marine aggregate extraction on seabed habitats.
Partners and Local initiatives	Natural England, JNCC, Sussex and Kent Biodiversity Partnerships, SSFDC, Wildlife Trust South East Marine Programme, Hastings Fisherman's Protections Society.
Other documents supporting the site BAP	HAML Sustainability Reports HAML Resources and Reserves Documentation Area 366/367 Environmental Statement, Technical Notes and Consultation Report Area 366/367 Licence Conditions Hanson plc BAP Hanson plc Environmental Policy
Contacts	Robert Langman (Resources Manager, Hanson Aggregates Marine Ltd) Ian Selby (Operations and Resources Director, Hanson Aggregates Marine Ltd)



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Objectives, Targets and Actions

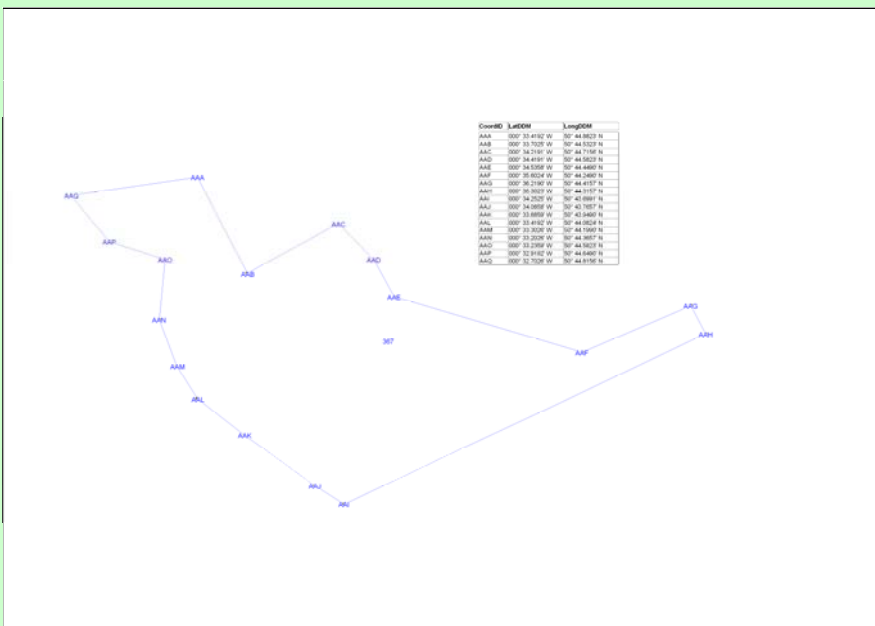
Item No	Objective	Biodiversity Feature	Targets	Action	Assessing Indicator	Responsible Person	Timescale (Completion)	To Achieve HANSON BAP Targets
1	Undertake acoustic monitoring to determine extent and character of biogenic reefs and sub-littoral sand and gravel habitats	UKBAP biogenic reefs and sub-littoral sand and gravel	Develop clear understanding of the extent of reef and sand/gravel habitats in the licence area and wider region	Develop clear plans showing the boundaries of seabed types within the area of monitoring	Seabed habitat interpretation chart	RL	End 2007	1, 2, 3, 4, 6, 7, 10
2	Undertake habitat and species audit for Area 366/367 and surrounding seabed	UKBAP reefs and sub-littoral sand and gravel and associated species	Determine and report the key benthic species present in reef and sand and gravel habitats in the vicinity of Area 366/367	Review ES and baseline benthic survey and list important species	Determination that species present are representative of reef and sand and gravel habitats in the wider region	RL	End 2007	1, 2, 3, 4, 6, 7, 10
3	Undertake monitoring of seabed surrounding Area 366/367 to detect habitat change	UKBAP biogenic reefs and sub-littoral sand and gravel	Determine the extent of aggregate extraction influence and the nature of changes to seabed (spatial and temporal)	Monitor the boundaries of the licence area to assess the behaviour of sand deposited as a result of extraction	Maintenance of existing natural sediment transport regime	RL	As per licence conditions	1, 2, 3, 4, 6, 7, 10
4	Monitor recovery of the seabed habitats following cessation of dredging	UKBAP Sub-littoral sand and gravel	Provide a comparison of pre-dredge status of habitats with those that exist upon cessation of extraction	Compare pre-dredge, operational and post-dredge monitoring reports to determine the nature and significance of changes to seabed habitats	Comparative report showing the character of seabed before, during and after dredging has occurred	RL	Following cessation of dredging and post-dredge monitoring surveys	
5	Develop and maintain links with aggregate extraction companies operating in the Marine Natural Area to improve biodiversity planning	UKBAP reefs and sub-littoral sand and gravel	Engage Natural England and others to determine what plans they have for promotion of marine biodiversity	Form strategy for developing associations with other operators with a view to issuing aggregate industry biodiversity plan for the wider area	Strategy document summarising companies, benefits of forming association and possible management mechanisms	RL	April Annually	1, 2, 3, 4, 6, 7, 10
6	Develop and maintain links with regional stakeholders interested in reviewing biodiversity information generated by operations in Area 366/367	UKBAP reefs and sub-littoral sand and gravel	Engage Natural England and others to determine what plans they have for promotion of marine biodiversity	Generate HAML position statement for circulation to limited audience to determine how marine biodiversity planning might develop in the next 12 months	Letter issued to relevant stakeholders	RL	April Annually	1, 2, 3, 4, 6, 7, 10

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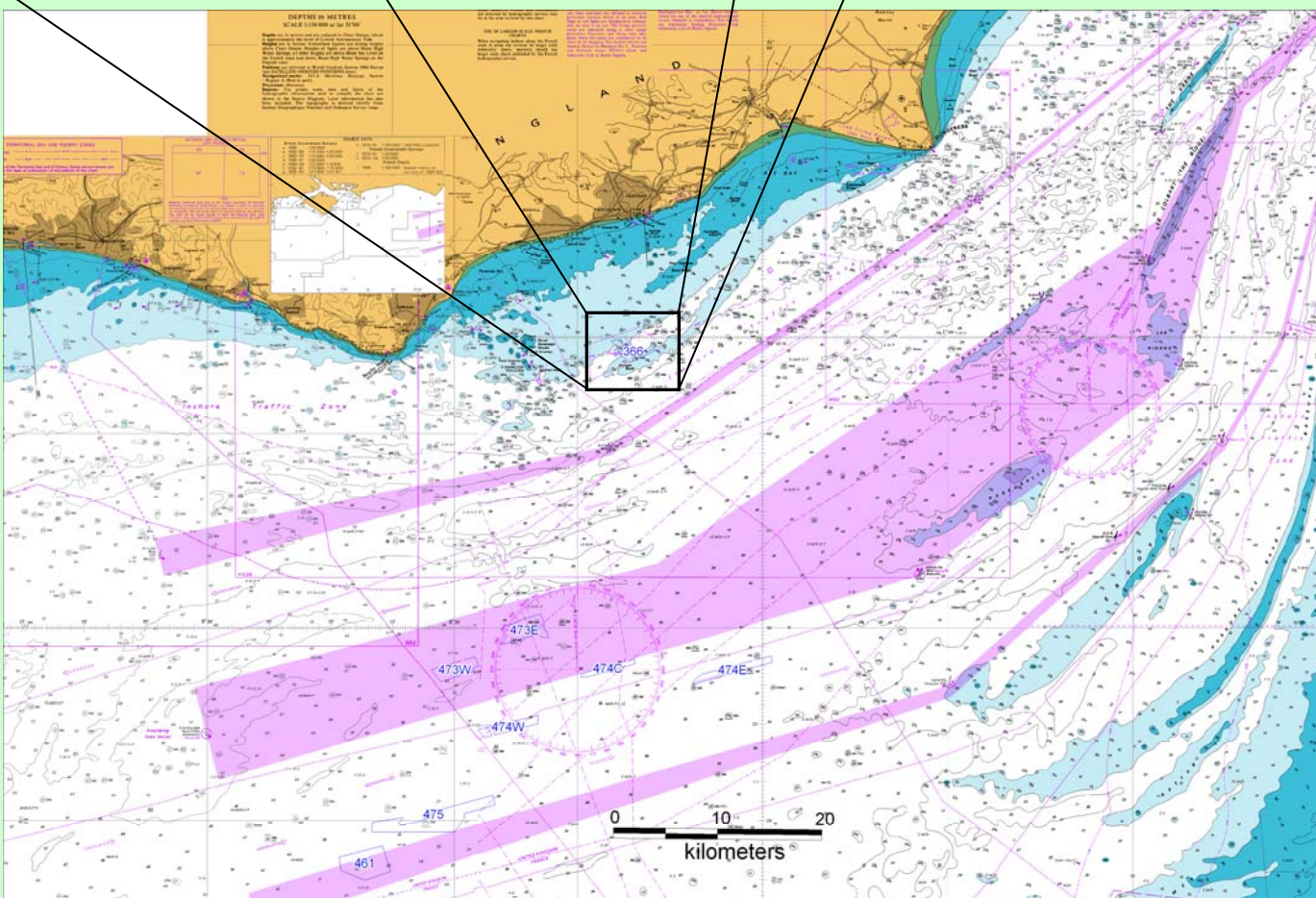


Area 366/367 Site Plan



Area 366/367 is located as shown below. The coordinates of points that define the licence area are provided in the table on the left.

Other licence areas in the region include the recently permitted East Channel Region licences Areas 473, 474, 475 and 461 which are located approximately 30-40km to the south of Area 366/367.



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Area 366/367 Related Biodiversity Information

The chart below is derived from interpretation of acoustic, drop-camera and sediment sample data and describes the seabed conditions within and surrounding Area 366/367.

Features of biodiversity interest have been identified within the area of the survey. *S. spinulosa* communities have been detected (dark brown areas on the chart) and in some cases these communities have been identified in reef forms. Also of biodiversity interest are rock outcrops to the south of the area. Whilst not extensive, these outcrops may support reef communities.

The remainder of the seabed within the area of the survey is described as either mixed sand and gravel or mobile sand with evidence of bedforms.

