

East Channel association

**Regional Environmental
Monitoring & Management
Reporting Programme**

Extraction Management Reporting

Biodiversity Action Plan Report Series: Volume 1, Issue 3

The East Channel Association (ECA)

The ECA is an association of marine aggregate companies who are permitted, or have applied for permission, to extract sand and gravel from the East Channel Region (ECR). Read more about their plans and operations at www.eastchannel.info

The companies of the ECA are:



Britannia Aggregates Ltd



CEMEX UK Marine Ltd



DEME Building Materials Ltd



Hanson Aggregates Marine Ltd
(now part of the Heidelberg Cement Group)



United Marine Dredging Ltd



Volker Dredging Ltd

The ECA Charter

The companies of the ECA have committed to operate under the terms of a 'code of practice' known as the ECA Charter.

The ECA Charter

The ECA have developed a code of practice to assist management of their activities. The ECA are committed to managing their activities cooperatively in the ECR in order to:

- Implement the results and recommendations of the REA and ensuing studies as appropriate to individual applications.
- Co-operate with and fund future regional environmental studies and research.
- Recognise the results of further environmental studies and respond to recommendations.
- Monitor, mitigate and manage environmental impacts and operational activity on a regional basis.
- Carefully manage dredge areas, with an aim of reducing the dredged area to a minimum.
- Restrict operational dredging areas through zoning of permission areas.
- Only target resources >2m thick.
- Minimise screening.
- Ensure transparency – make all relevant dredging data publicly available through regular company reporting.
- Enable Audit – all relevant data will be made available for analysis by independent experts.

Document Information

This document forms a component of the East Channel Region (ECR) Biodiversity Action Plan (BAP) Report Series. ECR BAP reporting, in turn forms part of the overall ECA Regional Environmental Monitoring and Management (REMM) Reporting Programme. A full description of the ECA REMM Reporting Programme can be viewed online at www.eastchannel.info.

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1. Introduction

The ECR Biodiversity Action Plan (BAP) provides the basis for management of the ECA's activities in the ECR with reference to the biodiversity and conservation interests in the region.

The Blueprint v0.3 (ECA and Emu, 2005) provides the following statement regarding the rationale for application of this method of management:

ECA Biodiversity Statement

In accordance with the advice of the JNCC, the ECA wishes to ensure that the habitats and species listed in the Statutory Nature Conservation Advice (JNCC, 2004) are not significantly impacted by aggregate extraction operations.

In agreement with Defra's Framework (Defra, 2004) for Aggregate Dredging in the ECR, the ECA will at all times employ a precautionary approach to nature conservation issues.

The ECA acknowledge that while understanding of the habitats and species that exist in the ECR is better than the majority of the UK continental shelf, it is relatively limited in detail.

The ECA concur that whilst survey data from individual application contribute to the regional understanding of habitats and species in the ECR, further regionally planned surveying and mapping of the region is necessary to allow the significance of the effects of dredging to be assessed.

The original ECR BAP (in Blueprint v0.3) provided a review of habitats and species of conservation significance and presented a set of aims and objectives designed to ensure that dredging management accounted for the sensitivity of these features.

Periodic review of the ECR BAP and revision of the aims and objectives is required to ensure that monitoring and management remains focused and fit-for purpose.

This document provides the third update of the ECR BAP and revision of the aims and objectives.

1.1. Species and Habitats of Conservation/Biodiversity Significance Identified in the ECR BAP

The following species and habitats were identified as being of conservation/biodiversity significance in the ECR (Blueprint v0.3). Priorities ascribed to the various habitats and species are those presented in the initial ECR BAP.

Key ECR Habitats

Habitat	Priority
Sublittoral sands and gravels	High
Stony (cobble/boulder dominated) reef	High
Biogenic (including Sabellaria and Modiolus) reef	High
Sandbanks	Medium
Brittlestar Beds	Medium
Bedrock (subcrop or outcrop) reef	Medium

Key ECR Species

Species	Priority
Grouped Commercial Fish	High
Cetaceans	Medium
Grouped Sharks and Rays	Medium

Development of monitoring methods for the region account for the sensitivities of the species and habitats identified and also aim to generate data regarding their health/status.

2. Review of ECR Biodiversity Action Plan in the Context of Regional Monitoring Results

2.1. The Aims of the ECR BAP

The ECA Regional Monitoring Blueprint v0.3 describes the aims of the ECR BAP as:

- To provide a description of the habitats and species with the ECR dredging area against which the significance of the impacts of dredging can be assessed.
- To guide work that seeks to improve understanding of the specific biotopes that exist in the ECR and where necessary initiate dredging management practices that seek to preserve rare or unusual areas.
- To formalise the reporting of changes in the extent and quality of habitats and the existence of species within the ECR dredging areas and surrounding region.
- To ensure dissemination of information on the ECR environment to a wider audience in order to assist management of regional activities and improve public awareness.
- Where applicable, to ensure that regional management is informed in order to conserve and enhance habitats, species diversity and local distinctiveness.
- To ensure that monitoring data is provided to statutory nature conservation bodies in support of their remit to comply with relevant nature conservation legislation and commitments.

2.2. Objectives and Targets of the ECR BAP

The ECR BAP provides a number of objectives and targets that are being pursued during the life of extraction activities in the ECR. To fulfill the aims of the ECR BAP the following objectives are being pursued.

Objective 1 – Provide a baseline description of key species and habitats that exist within the ECR against which the significance of the impacts of dredging can be assessed.

Objective 2 – Produce ECR specific Habitat and Species Action Plans, in support of relevant UKBAP plans, and report and review annually the status of habitats and species in the ECR.

Objective 3 – Initiate, maintain and improve working practices and reporting to account for the requirements of the UKBAP, Habitats Directive and marine nature conservation in general. Seek to develop links with groups undertaking similar monitoring survey work in the region for information exchange and collaboration where appropriate.

Objective 4 – Work to improve understanding of the specific biotopes that exist in the ECR and increase understanding of the nature and extent of expanded MNCR biotope classifications. Where necessary initiate dredging management practices that seek to preserve rare or unusual areas.

Objective 5 – Identify areas where no impact from dredging will occur and monitor to assess health of such representative areas. Monitor the health of species identified during baseline benthic monitoring surveys in areas surrounding licence areas where secondary impacts may occur. Monitor the effect of extraction on species identified during baseline benthic monitoring surveys within the licence areas.

Objective 6 – Provide a comparison of baseline description of habitat with habitat status at cessation of dredging.

Objective 7 – Monitor the recovery of biotopes and associated species within licence areas following cessation of extraction activities.

Objective 8 – Provide environmental data to stakeholders, wider public and regional management frameworks for review and comment. Raise awareness of the characteristic habitats and species of the ECR, their status and the nature of threats to their health.

3. Objectives, Actions and Targets of the ECR BAP for 2008

Modification of the objectives of the ECR BAP was undertaken in the first and second BAP Reviews (ECR BAP Report Series: Volume 1, Issues 1 and 2, ECA and MarineSpace, 2008). Further modification will be necessary as understanding of the impacts of aggregate extraction in the ECR improves.

The objectives actions and targets for 2008 were as follows (changes were made to Objectives 1 and 2 compared with those presented in the Blueprint v0.3 and first review):

Objective 1 – Continue to develop an understanding of the baseline and repeat monitoring data to improve the habitat description for the region and determine suitable comparative measures to inform assessment of aggregate extraction impact.

Action	Target
QC review and statistical analysis of faunal data to ensure comparability between 2005, 2006 and 2007 data.	Completion by May/June 2008
First report describing comparative measures for habitat and faunal community monitoring.	Completion by May 2008

Objective 2 – Maintain ECR specific Habitat and Species Action Plans, in support of relevant UKBAP plans, and report and review annually the status of habitats and species in the ECR.

Action	Target
Annual review of habitat and species status in the region and necessary modification of HAP and SAP documentation.	Completion by May/June 2008

Objective 3 – Initiate, maintain and improve working practices and reporting to account for the requirements of the UKBAP, Habitats Directive and marine nature conservation in general. Seek to develop links with groups undertaking similar monitoring survey work in the region for information exchange and collaboration where appropriate.

Action	Target
Maintain links with ALSF programmes to integrate ECR and wider regional data sets.	Ongoing to August 2008
Review conservation management in the ECR in general and provide update.	Ongoing to December 2008

Objective 4 – Work to improve understanding of the specific biotopes that exist in the ECR and increase understanding of the nature and extent of expanded MNCR biotope classifications. Where necessary initiate dredging management practices that seek to preserve rare or unusual areas.

Action	Target
Maintain dialogue with key conservation stakeholders to ensure that biotope descriptions used in the ECR are relevant to national classification systems.	Ongoing until August 2008

Objective 5 – Identify areas where no impact from dredging will occur and monitor to assess health of such representative areas. Monitor the health of species identified during baseline benthic monitoring surveys in areas surrounding licence areas where secondary impacts may occur. Monitor the effect of extraction on species identified during baseline benthic monitoring surveys within the licence areas.

Action	Target
Complete comparative analysis of 2005, 2006 and 2007 survey data to develop understanding of the natural and dredging related variability in seabed composition and associated faunal communities.	Completion by May/June 2008

Objective 6 – Provide a comparison of baseline description of habitat with habitat status at cessation of dredging.

Action	Target
Continue dredging activity reporting in concert with regional environmental monitoring to inform descriptions of habitat change to the point of cessation.	Ongoing to December 2008

Objective 7 – Monitor the recovery of biotopes and associated species within licence areas following cessation of extraction activities.

Action	Target
Continue to develop understanding of the distribution of regionally characteristic biotopes and species to assist in determination of recovery towards pre-dredge status.	Ongoing to August 2008

Objective 8 – Provide environmental data to stakeholders, wider public and regional management frameworks for review and comment. Raise awareness of the characteristic habitats and species of the ECR, their status and the nature of threats to their health.

Action	Target
Continue to develop the ECA website and GIS as tools for provision of information to stakeholders.	Ongoing to June 2008
ECEN meeting to present latest information to stakeholders.	

4. Progress Towards Fulfillment of the Objectives of the ECR BAP in the Context of 2008 Regional Monitoring Activities

4.1. ECR BAP Objectives

Since the issue of the second BAP Review (ECR BAP Report Series: Volume 1, Issue 2), progress towards fulfillment of the modified ECR BAP objectives is summarised below:

Objective 1	Continue to develop an understanding of the baseline and repeat monitoring data to improve the habitat description for the region and determine suitable comparative measures to inform assessment of aggregate extraction impact.
Actions	Recent Activity
QC review and statistical analysis of faunal data to ensure comparability between 2005, 2006 and 2007 data. First report describing comparative measures for habitat and faunal community monitoring.	QC, comparison and rationalisation of 2005, 2006 and 2007 data sets complete to ensure comparability - issues raised regarding the nature of this comparison and future comparison. Comparison of 2005 and 2007 faunal component of Hamon grab samples completed - first comparative report due for issue March/April 2009. Work to complete further comparative reports (fish, shellfish, and epifauna from trawl and dredge surveys) ongoing.
Objective 2	Maintain ECR specific Habitat and Species Action Plans, in support of relevant UKBAP plans, and report and review annually the status of habitats and species in the ECR.
Actions	Recent Activity
Annual review of habitat and species status in the region and necessary modification of HAP and SAP documentation.	Implications of the review of UK BAP for the ECR being investigated - significant issues to be identified and addressed in 2009 ECR BAP update. Update of HAPs and SAPs to be completed and reported in the subsequent monitoring reports and Blueprint updates as required.
Objective 3	Initiate, maintain and improve working practices and reporting to account for the requirements of the UKBAP, Habitats Directive and marine nature conservation in general. Seek to develop links with groups undertaking similar monitoring survey work in the region for information exchange and collaboration where appropriate.
Actions	Recent Activity
Maintain links with ALSF programmes to integrate ECR and wider regional data sets. Review conservation management in the ECR in general and provide update.	EECMHM data to be used in substantive review of dredging to provide context. Links forged with project team investigating the effects of fishing in the Eastern English Channel with a view to provision of relevant ECA monitoring data. Close links maintained with ALSF programme.

Objective 4

Work to improve understanding of the specific biotopes that exist in the ECR and increase understanding of the nature and extent of expanded MNCR biotope classifications. Where necessary initiate dredging management practices that seek to preserve rare or unusual areas.

Actions

Maintain dialogue with key conservation stakeholders to ensure that biotope descriptions used in the ECR are relevant to national classification systems.

Recent Activity

Monitoring data continues to develop understanding of the location, quality and extent of habitats and biotopes in the region.

Baseline description completed including analysis of seabed video data.

Objective 5

Identify areas where no impact from dredging will occur and monitor to assess health of such representative areas. Monitor the health of species identified during baseline benthic monitoring surveys in areas surrounding licence areas where secondary impacts may occur. Monitor the effect of extraction on species identified during baseline benthic monitoring surveys within the licence areas.

Actions

Complete comparative analysis of 2005, 2006 and 2007 survey data to develop understanding of the natural and dredging related variability in seabed composition and associated faunal communities.

Recent Activity

Individual licence compliance reports provide details of local scale impacts of dredging.

Comparison of data sets complete for some elements of the regional data set and results related to dredging activity.

Objective 6

Provide a comparison of baseline description of habitat with habitat status at cessation of dredging.

Actions

Continue dredging activity reporting in concert with regional environmental monitoring to inform descriptions of habitat change to the point of cessation.

Recent Activity

Baseline surveys completed to provide basis for comparison with future monitoring surveys.

2006, 2007 and 2008 repeat surveys completed to provide data for investigation of dredging impacts.

Dredging activity data collated annually to provide context data for investigation of impacts.

Objective 7

Monitor the recovery of biotopes and associated species within licence areas following cessation of extraction activities.

Actions

Continue to develop understanding of the distribution of regionally characteristic biotopes and species to assist in determination of recovery towards pre-dredge status.

Recent Activity

Pre-dredge monitoring surveys complete.

Development of understanding of the effects of dredging in order to direct investigation of recovery of seabed habitats.

Objective 8

Provide environmental data to stakeholders, wider public and regional management frameworks for review and comment. Raise awareness of the characteristic habitats and species of the ECR, their status and the nature of threats to their health.

Actions	Recent Activity
Continue to develop the ECA website and GIS as tools for provision of information to stakeholders.	Annual update of activities issued in December 2008. Website and GIS developed to provide dissemination mechanism for regional monitoring data.
ECEN meeting to present latest information to stakeholders.	Annual East Channel Environmental Network meeting planned to enable wider dissemination of information to stakeholders.

4.2. ECR Habitat and Species Action Plans

Part of the requirement of the ECR BAP is provision of habitat and species action plans (HAPs and SAPs) relevant to the environmental conditions of the region and significant species. The first set of HAPs and SAPs were developed during 2005-6 and issued with the draft regional report in May 2006 (Emu and MarineSpace, 2006).

The HAPs issued related to:

- Stony and Bedrock Reef
- Sublittoral Sand and Gravel
- Biogenic Reef
- Sandbanks
- Brittlestar Beds

The SAPs issued related to:

- Cetaceans
- Grouped Commercial Fish
- Sharks and Rays

Specific actions and targets were presented for each of the habitats and species highlighted above. A review of the targets and progress made towards achieving them is provided below.

NB Actions noted as complete in the previous BAP review (BAP Report Series: Volume 1, Issue 2) have been removed from the following progress tables.

It is understood that a review of the UK BAP is ongoing. A report on the species and habitat review (HM Government, 2006) has been reviewed in order to determine whether the current ECR Habitat and Species Action Plans are still relevant. The findings of the UK BAP review and implications for the ECR BAP are described following sections 4.2.1-4.2.8.

Review of information related to changes to the UK BAP did highlight one additional habitat that, whilst not considered significant in the ECR, has not been included in the ECR BAP. The inclusion in the ECR BAP of this habitat, known as ‘Fragile sponge and anthozoan communities on subtidal rocky habitats’, will be considered over the next 12 months.

4.2.1. Stony and Bedrock Reef

Target	Action	Progress
1	Undertake monitoring of dredging to determine the nature of impacts and the recovery of habitats after dredging has ceased.	Ongoing - complete in 2008 through acquisition of licence specific acoustic data/seabed samples and completion of first (2006), second (2007) and third (2008) repeat regional surveys.
2	Employ responsible and transparent operating practices that are precautionary and that can be influenced by the outcomes of monitoring.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
3	Employ monitoring and management practices capable of identifying, and preventing damage to, regionally important examples of stony and bedrock reef habitats and communities in the ECR.	Ongoing - complete for companies that have begun extraction through pre-dredge reporting and identification of sensitive sites.
4	Provide monitoring data to the wider stakeholder community related to the significance, health and status of regionally important rock reef habitats and communities in the ECR and provide information to Nature Conservation bodies in support of MNCR activities.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
5	Seek to raise awareness of the ECR's habitats and species, improve understanding of wider MNCR designations for offshore sediment habitats and encourage development of sustainable practices in the region accounting for its environmental, social and economic importance.	Ongoing - awareness raised in 2006, 2007 and 2008 through stakeholder engagement and annual meetings.
6	Work with nature conservation and fisheries stakeholders to better understand the combined effects of activities that impact stony and bedrock reef habitat.	Ongoing - all monitoring data regularly provided to nature conservation and fishing organisations.

4.2.2. Subtidal (Note: previously Sublittoral) Sands and Gravels

Target	Action	Progress
1	Undertake monitoring of dredging to determine the nature of impacts and the recovery of habitats after dredging has ceased.	Ongoing - complete in 2008 through acquisition of licence specific acoustic data/seabed samples and completion of first (2006), second (2007) and third (2008) repeat regional surveys.
2	Employ responsible and transparent operating practices that are precautionary and that can be influenced by the outcomes of monitoring.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
3	Employ monitoring and management practices capable of identifying, and preventing damage to, regionally important examples of SSG habitats and communities in the ECR.	Ongoing - complete for companies that have begun extraction through pre-dredge reporting and identification of sensitive sites.
4	Provide monitoring data to the wider stakeholder community related to the significance, health and status of regionally important SSG habitats and communities in the ECR and provide information to Nature Conservation bodies in support of MNCR activities.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
5	Seek to raise awareness of the ECR's habitats and species, improve understanding of wider MNCR designations for offshore sediment habitats and encourage development of sustainable practices in the region accounting for its environmental, social and economic importance.	Ongoing - awareness raised in 2006, 2007 and 2008 through stakeholder engagement and annual meetings.
6	Work with nature conservation and fisheries stakeholders to better understand the combined impacts of activities that impact SSG habitats.	Ongoing - all monitoring data regularly provided to nature conservation and fishing organisations.

4.2.3. Biogenic Reef

Target	Action	Progress
3	The results of habitat surveys will be disseminated to JNCC and other key stakeholders for full review.	Ongoing - all baseline and repeat monitoring survey reports provided to JNCC and key stakeholders.
4	An operational dredge management plan will be developed based upon the findings of this survey. The plan will include appropriate mitigation measures to reduce the risk of any adverse effects arising upon known or potential areas of biogenic reef.	Ongoing - complete for companies that have begun extraction through pre-dredge reporting and identification of sensitive sites.
5	Undertake monitoring of dredging to determine the nature of impacts and the recovery of habitats after dredging has ceased.	Ongoing - complete in 2008 through acquisition of licence specific acoustic data/seabed samples and completion of first (2006), second (2007) and third (2008) repeat regional surveys.
6	Employ responsible and transparent operating practices that are precautionary and that can be influenced by the outcomes of monitoring.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
7	Employ monitoring and management practices capable of identifying, and preventing damage to, regionally important examples of biogenic reef habitats and communities in the ECR.	Ongoing - complete for companies that have begun extraction through pre-dredge reporting and identification of sensitive sites.
8	Provide monitoring data to the wider stakeholder community related to the significance, health and status of regionally important biogenic reef habitats and communities in the ECR and provide information to Nature Conservation bodies in support of MNCR activities.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
9	Seek to raise awareness of the ECR's habitats and species, improve understanding of wider MNCR designations for offshore sediment habitats and encourage development of sustainable practices in the region accounting for its environmental, social and economic importance.	Ongoing - awareness raised in 2006, 2007 and 2008 through stakeholder engagement and annual meetings.
10	Work with nature conservation and fisheries stakeholders to better understand the combined impacts of activities that impact biogenic reef habitat.	Ongoing - all monitoring data regularly provided to nature conservation and fishing organisations.

4.2.4. Sandbanks

Target	Action	Progress
1	Undertake monitoring of dredging to determine the nature of impacts and the recovery of habitats after dredging has ceased.	Ongoing - complete in 2008 through acquisition of licence specific acoustic data/seabed samples and completion of first (2006), second (2007) and third (2008) repeat regional surveys.
2	Employ responsible and transparent operating practices that are precautionary and that can be influenced by the outcomes of monitoring.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
3	Employ monitoring and management practices capable of identifying, and preventing damage to, regionally important examples of Sandbank habitats and communities in the ECR.	Ongoing - complete for companies that have begun extraction through pre-dredge reporting and identification of sensitive sites.
4	Provide monitoring data to the wider stakeholder community related to the significance, health and status of regionally important Sandbank habitats and communities in the ECR and provide information to Nature Conservation bodies in support of MNCR activities.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
5	Seek to raise awareness of the ECR's habitats and species, improve understanding of wider MNCR designations for offshore sediment habitats and encourage development of sustainable practices in the region accounting for its environmental, social and economic importance.	Ongoing - awareness raised in 2006, 2007 and 2008 through stakeholder engagement and annual meetings.
6	Work with nature conservation and fisheries stakeholders to better understand the combined impacts of activities that impact Sandbank habitats.	Ongoing - all monitoring data regularly provided to nature conservation and fishing organisations.

4.2.5. Brittlestar Beds

Target	Action	Progress
1	During the operational stage of the dredging licence, monitoring will be undertaken to determine the nature of any impacts upon this habitat.	Ongoing - results of 2005, 2006 and 2007 benthic monitoring to be analysed and compared to determine changes in the spatial extent of brittlestar beds.
2	Undertake monitoring of dredging to determine the recovery of habitats after dredging has ceased.	Ongoing - complete in 2007 through acquisition of licence specific acoustic data/seabed samples and completion of first (2006), second (2007) and third (2008) repeat regional surveys.
3	Employ responsible and transparent operating practices that are precautionary and can be influenced by the outcomes of monitoring.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
4	Employ monitoring and management practices capable of identifying and preventing damage to, regionally important examples of brittlestar beds and communities in the ECR.	Ongoing - complete for companies that have begun extraction through pre-dredge reporting and identification of sensitive sites.
5	The ECA will disseminate the results of all surveys to key stakeholders, including JNCC, so the nature conservation importance of this site can be fully described.	Ongoing - results of all surveys sent to JNCC and results of first comparative studies to be forwarded to all stakeholders for comment in 2009.
6	Work with nature conservation and fisheries stakeholders to better understand the combined impacts of activities that impact brittlestar bed habitat.	Ongoing - all monitoring data regularly provided to nature conservation and fishing organisations.

4.2.6. Cetaceans

Target	Action	Progress
1	The Applicants will initiate and maintain working practices and reporting to account for the requirements of the BAP.	Ongoing - review of monitoring techniques, reporting format/scope and stakeholder meetings undertaken to ensure best use of resources and clarity of purpose.
2	The Applicant will seek to develop links with groups undertaking similar monitoring work in the region for information exchange and collaboration where appropriate.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
3	The Applicant will feedback data to the JNCC to develop the understanding of the species within the SAC.	Ongoing - complete for companies that have begun extraction through pre-dredge reporting and identification of sensitive sites.
4	The Applicant will agree operational management practices that minimise any adverse impact on the nature conservation value of the site, in relation to these two species this will relate directly to sighting and recording of all individuals and groups.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
5	The Applicant will follow the standard industry reporting methodology that is used to record sightings of animals when at sea. Sightings data is recorded during transit voyages as well as operation on site. All data will be forwarded to an agreed partner - Seawatch Foundation.	Ongoing
The applicant will contribute monitoring data and interpretive reports where relevant in order to promote improved management of conservation and biodiversity interests within the ECR and contribute to the knowledge and understanding of the potential presence of Annex II species within the ECR in order to:		
6	Maintain the current geographic range.	Ongoing
7	Maintain the current abundance.	Ongoing
8	In the long term ensure that no anthropogenic factors inhibit a return to waters that it previously occupied.	Ongoing

4.2.7. Grouped Commercial Fish

Target	Action	Progress
1	Undertake monitoring of dredging to determine the nature of impacts and the recovery of fish stocks after dredging has ceased.	Ongoing - monitoring of demersal fish species undertaken in 2005, 2006, 2007 and 2008 and collation of fishing activity data continued.
2	Employ responsible and transparent operating practices that are precautionary and that can be influenced by the outcomes of monitoring.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
3	Employ monitoring and management practices capable of identifying, and preventing damage to, regionally important fish stocks in the ECR.	Ongoing - complete for companies that have begun extraction through pre-dredge reporting and identification of sensitive sites.
4	Provide monitoring data to the wider stakeholder community related to the significance, health and status of fish stocks in the ECR and provide information to Nature Conservation bodies in support of their activities.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
5	Seek to raise awareness of the ECR's species and encourage development of sustainable practices in the region accounting for its environmental, social and economic importance.	Ongoing - awareness raised in 2006, 2007 and 2008 through stakeholder engagement and annual meetings.
6	Work with nature conservation and fisheries stakeholders to better understand the combined impacts of activities that impact fish stocks.	Ongoing - all monitoring data regularly provided to nature conservation and fishing organisations.

4.2.8. Sharks and Rays

Target	Action	Progress
1	Undertake monitoring of dredging to determine the nature of impacts and the recovery of sharks and rays stocks after dredging has ceased.	Ongoing
2	Employ responsible and transparent operating practices that are precautionary and that can be influenced by the outcomes of monitoring.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
3	Employ monitoring and management practices capable of identifying, and preventing damage to, regionally important sharks & rays stocks in the ECR.	Ongoing - complete for companies that have begun extraction through pre-dredge reporting and identification of sensitive sites.
4	Provide monitoring data to the wider stakeholder community related to the significance, health and status of sharks & rays stocks in the ECR and provide information to Nature Conservation bodies in support of their activities.	Ongoing - complete in 2006, 2007 and 2008 through provision of monitoring data to regulators and wider stakeholder community.
5	Seek to raise awareness of the ECR's species and encourage development of sustainable practices in the region accounting for its environmental, social and economic importance.	Ongoing - awareness raised in 2006, 2007 and 2008 through stakeholder engagement and annual meetings.

4.2.9. Revision of the ECR BAP in Response to the Review of the UK BAP

As noted a review of the UK BAP has been undertaken and this one minor implication for the ECR BAP. This minor revision to the ECR BAP is that the habitat formerly referred to as Sublittoral Sand and Gravel will now be referred to as Subtidal Sands and Gravels. This is reflected in the amended table of key ECR habitats on the right.

Other than this revision the HAPs and SAPs issued for the ECR BAP remain valid for a further 12 months. Monitoring of the actions will continue through 2009.

Key ECR Habitats

(amended – now refers to Subtidal sands and gravels)

Habitat	Priority
Subtidal sands and gravels	High
Stony (cobble/boulder dominated) reef	High
Biogenic (including Sabellaria and Modiolus) reef	High
Sandbanks	Medium
Brittlestar beds	Medium
Bedrock (subcrop and outcrop) reef	Medium

5. Modification and Amendment of the Objectives, Actions and Targets of the ECR BAP for 2009

Some modification of the objectives of the ECR BAP has been necessary as extraction has and monitoring has progressed. Further modification will be necessary as understanding of the impacts of aggregate extraction in the ECR improves.

The objectives, actions and targets for 2009 are as follows and mirror those for 2008 presented in the ECR BAP Report Series: Volume 1, Issue 2 (ECA and MarineSpace, 2008):

Objective 1 – Continue to develop an understanding of the baseline and repeat monitoring data to improve the habitat description for the region and determine suitable comparative measures to inform assessment of aggregate extraction impact.

Action	Target
QC review and statistical analysis of faunal data to ensure comparability between 2005, 2006, 2007 and 2008 data.	Completion by May/June 2009
Further reports describing comparative measures for habitat and faunal community monitoring.	Completion by May 2009

Objective 2 – Maintain ECR specific Habitat and Species Action Plans, in support of relevant UKBAP plans, and report and review annually the status of habitats and species in the ECR.

Action	Target
Annual review of habitat and species status in the region and necessary modification of HAP and SAP documentation.	Completion by May/June 2009

Objective 3 – Initiate, maintain and improve working practices and reporting to account for the requirements of the UKBAP, Habitats Directive and marine nature conservation in general. Seek to develop links with groups undertaking similar monitoring survey work in the region for information exchange and collaboration where appropriate.

Action	Target
Maintain links with ALSF programmes to integrate ECR and wider regional data sets.	Ongoing to August 2009
Review conservation management in the ECR in general and provide update.	Ongoing to December 2009

Objective 4 – Work to improve understanding of the specific biotopes that exist in the ECR and increase understanding of the nature and extent of expanded MNCR biotope classifications. Where necessary initiate dredging management practices that seek to preserve rare or unusual areas.

Action	Target
Maintain dialogue with key conservation stakeholders to ensure that biotope descriptions used in the ECR are relevant to national classification systems.	Ongoing until December 2009

Objective 5 – Identify areas where no impact from dredging will occur and monitor to assess health of such representative areas. Monitor the health of species identified during baseline benthic monitoring surveys in areas surrounding licence areas where secondary impacts may occur. Monitor the effect of extraction on species identified during baseline benthic monitoring surveys within the licence areas.

Action	Target
Report comparative analysis of 2005, 2006 and 2007 survey data to describe the natural and dredging related variability in seabed composition and associated faunal communities.	Completion by April/May 2009

Objective 6 – Provide a comparison of baseline description of habitat with habitat status at cessation of dredging.

Action	Target
Continue dredging activity reporting in concert with regional environmental monitoring to inform descriptions of habitat change to the point of cessation.	Ongoing to December 2009

Objective 7 – Monitor the recovery of biotopes and associated species within licence areas following cessation of extraction activities.

Action	Target
Continue to develop understanding of the distribution of regionally characteristic biotopes and species to assist in determination of recovery towards pre-dredge status.	Ongoing to August 2009

Objective 8 – Provide environmental data to stakeholders, wider public and regional management frameworks for review and comment. Raise awareness of the characteristic habitats and species of the ECR, their status and the nature of threats to their health.

Action	Target
Continue to develop the ECA website and GIS as tools for provision of information to stakeholders.	Ongoing to June 2009
ECEN meeting to present latest information to stakeholders.	

6. Future Development of the ECR BAP

Baseline surveys in 2005 and repeat regional monitoring activities in 2006, 2007 and 2008 have been completed and will yield data that is capable of providing the information required for gauging progress towards the objectives of the ECR BAP. Analysis of monitoring data is now focused on inter-annual comparison of data sets to determine variability in the structure of benthic communities. Analysis of data will also be focused on determining the environmental effects of dredging in the ECR and developing suitable indicators of change.

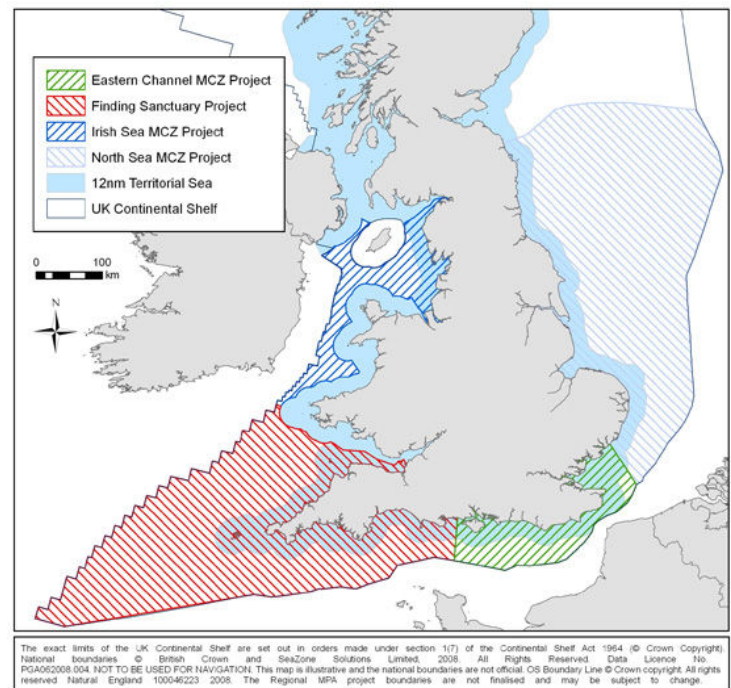
The description of seabed habitats and communities presented in regional monitoring reports will form the basis for determination of the significance of impacts of aggregate extraction in the future. The influence of aggregate extraction on the biodiversity of the region will be determined over the next 2 years up to the initiation and completion of the first substantive review of dredging in year 5 of operations (to be completed in 2011).

The objectives of the ECR BAP have been reviewed and amended where required to ensure that sufficient consideration is given to incorporating the results of monitoring and wide-scale contextual information. To ensure that the ECR BAP remains current, the review of the UK BAP has been investigated and implications for the ECR BAP addressed accordingly.

The ECR BAP will be reviewed and revised over the following twelve months in light of the habitat descriptions, preliminary dredging impact assessments and comparative data analysis resulting from the baseline regional biological monitoring and 2006/2007/2008 repeat biological monitoring. The objectives and targets for the following year (2009) have been revised. The revised objectives and targets presented above will now be monitored in light of extraction activity induced and natural change of habitats and associated faunal communities.

Incorporation of habitat data from national and regional studies such as the MESH project, the CHARM project and relevant ALSF projects will be an important aspect of monitoring in the coming months. Also the application of the findings of the recently completed regional plume and tracer studies will help inform assessments of dredging impact and inform the management of aggregate extraction in the region. All the activities in the coming months will be facilitated by the ECR WebGIS that will help manage and display data to provide a wider regional context.

One final issue that is worthy of note are the recently initiated projects that are seeking to identify, assess and designate marine conservation zones around the UK. Natural England (2009), in partnership with the Joint Nature Conservation Committee and Defra, is working to establish four regional Marine Conservation Zone projects. The projects aim to recommend a representative network of Marine Conservation Zones to the UK Government that will deliver England's contribution to the UK's Marine Protected Areas target by 2012. Several broad search regions have been defined (see below) and work to identify significant conservation features or areas that might be considered for designation as marine conservation zones has been initiated. The ECA are committed to assisting such projects and will seek to work closely with the project leaders in order to achieve, as far as possible, equitable outcomes for all stakeholders.



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