

THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES

2010

Appendix F to the Relevant and Written Representations of Natural England

Benthic Compensation

For:

Planning Inspectorate Reference

13 August 2024

Appendix F Compensation Case - Benthic

1.Introduction

As the derogations materially differ in content/structure to a standard Environmental Statement chapter, our comments are provided in a different format to the other Appendices. We have provided a summary table for each compensation measure (**Tables 1 – 4**)) and detailed comments on the compensation plans and supporting documents (**Table 5**). The summary RAG table is used to highlight areas of agreement and outstanding concern. The following criteria used to assess each category in the summaries:

| Natural England has confidence in this aspect of the measure. |
|--|
| There are some concerns/uncertainties regarding this aspect of the measure, but they are likely resolvable. |
| Considerable uncertainties remain with this aspect of the measure, which if not resolved would make compensation undeliverable. Natural England cannot be confident at this stage that the measure is deliverable. |

Table 1 Summary position of compensation measure

| Compensation mea | sure: Stra | ategic Co | mpensation - New site designation or Extension for Annex I Sandbank | (S |
|--|------------|-----------|---|---|
| | NE Ref | RAG | Natural England Comment | Recommendation |
| Theoretical merit to deliver compensation. | F1 | | Natural England refers the Examining Authority (ExA) to the published 'Offshore Wind Leasing Round 4 Dogger Bank Strategic Compensation Plan' (April 2024). In Section 7.1.1 it is stated that 'It is agreed by the Steering Group that new site designation or site extension (new areas or features added to existing sites) is the recommended compensation measure of in this DBSCP and this follows advice received from Defra that this is an available strategic compensation measure that can be used to compensate for habitat loss and damage caused by the Round 4 Plan. It states that any new site/ site extensions will be determined by Defra and be designated as a strategic compensation measure which will benefit multiple projects. This DBSCP recognises that a team in Defra will work to identify potential areas for designating new sites, or extending existing sites, working closely with Natural England and JNCC. The information presented in this report is included as supporting evidence that the measure is appropriate for the specific purposes of the DBSCP, but without prejudice to the future outcome of the Defra-led process.' | If and when further information becomes available during examination, Natural England will update accordingly. However, any assurances in the security of this measure should be sought directly from DEFRA. |
| | | | Subsequently, delivery discussions have commenced between DEFRA, JNCC and Natural England. It has been agreed that the scope of the strategic compensation should include all OWF projects in English waters within the pipeline contributing to the Government 2030 target, where benthic compensation is deemed necessary. Due to multiple projects, designated sites, and interest features, it will not be limited to provision of Annex I sandbank compensation. This measure is therefore also the recommended compensation measure for the Five Estuaries Offshore Windfarm project for both Annex I Sandbank and Reef feature. It is the SNCB's view that this measure has the greatest likelihood from an ecological perspective, of | |

| Technical feasibility | F2 | It is Natural England's view that with the Secretary of States support for the compensation measure, it is now technically feasible. The evidence included within the Applicant's documentation and within the Dogger Bank Strategic Compensation Plan supports the SNCBs position that there are areas of seabed not currently protected which if protected and appropriately managed could provide similar ecological function to those Annex I features which are likely to be subject to lasting loss/change and/or disturbance. | No further comment |
|----------------------------------|----|--|---|
| Agreed compensation level. | F3 | Natural England is currently not in agreement with the Applicant on the presented Worse Case Scenario (WCS) of lasting habitat loss/change of Annex I Sandbanks within Margate and Long Sands (MLS) SAC. In addition, due to potential uncertainties with the delivery mechanisms and timeframes for successful delivery of the measure, further discussions are required in relation to individual project contributions and compensatory ratios which may be required. | Natural England advises that the points raised in Appendix E of our Relevant Representations/Written Representations (RR/WR) are addressed. Further feedback on the development of this measure should be sought from DEFRA. |
| Scale/extent of measure. | F4 | Natural England has outstanding concerns in relation to the outcomes of the Impact Assessment and evidence used to support conclusions on scale and significance of potential impacts from cable installation activities and the placement of cable protection from Five Estuaries. Until these issues are resolved we do not agree with the Applicant on the scale and extent of the compensation measures required. As set out in the R4 plan level compensation document, the designation of a new site or existing site extension will be led on by a team in DEFRA in collaboration with interested parties therefore delivery mechanisms, costs and timeframes presented by the Applicant cannot and should not be relied upon. | Natural England advises that the points raised in Appendix E of our RR/WR are addressed. |

| Timing: Deliverable before impact | F5 | Please see above points, where Natural England recognises that there are likely to be time lags between impact occurring and compensation achieving the desired outcomes. In this scenario, Natural England would wish to see the project contribution to the measure to be such that it ensures an overall environmental net positive outcome for the impacted feature over the lifetime of the project. | If and when further information becomes available during examination Natural England will update accordingly. However, any assurances in the security of this measure should be sought directly from DEFRA. |
|--|----|--|--|
| Location of measure | F6 | This is still under consideration by DEFRA, Natural England and JNCC and yet nothing has been agreed and/or secured. | If and when further information becomes available during examination Natural England will update accordingly. However, any assurances in the security of this measure should be sought directly from DEFRA. |
| Long term implementation | F7 | This is still under consideration by DEFRA, Natural England and JNCC and yet nothing has been agreed and/or secured. | If and when further information becomes available during examination Natural England will update accordingly. However, any assurances in the security of this measure should be sought directly from DEFRA. |
| Success criteria/Ability to prove additionality. | F8 | This is still under consideration by DEFRA, Natural England and JNCC and yet nothing has been agreed and/or secured. | If and when further information becomes available during examination Natural England will update |

| Suitable as sole measure for target species | F9 | | It is the SNCB's view that this measure has the greatest likelihood from an ecological perspective of maintaining the coherence of the National Site Network and even with uncertainties surrounding the project impacts, we believe that sufficient capacity can be built into the design of the measure to compensate for the impacts of this project as a sole measure. | accordingly. However, any assurances in the security of this measure should be sought directly from DEFRA. Natural England advises that the points raised in Appendix E of our RR/WR are addressed so that the realistic WCS can be included within the compensation measure. |
|---|-------------|------------|---|---|
| Key uncertainties | in additior | n to those | raised above | |
| Uncertainty | | | Description | |
| Ability to bury cables | F10 | | Natural England notes that limited geotechnical and geophysical survey data has been presented with the Cable Burial Risk Assessment [APP-238] and the Cable Specification and Installation plan [APP-239] to have confidence that the cables can be buried to optimum cable burial depth. In addition, there is limited consideration of the highly dynamic sediment transport/marine processes within MLS SAC which may have implications for cable burial over the lifetime of the project. Therefore, we are concerned that the WCS presented for cable protection within MLS SAC may not be realistic. | Natural England advises that the points raised in Appendix E of our RR/WR |

Table 2 Summary position of compensation measure.

| Compensation measu | re: Anthro | pogeni | c Pressure Removal – Redundant Infrastructure for Annex I Sandbanks | |
|---|------------|--------|---|--|
| | NE Ref | RAG | Natural England Comment | Recommendation |
| Theoretical merit to deliver compensation | F11 | | Whilst Natural England is supportive of the removal of redundant surface laid/exposed infrastructure being progressed as a benthic compensation measure for Annex I sandbanks; we note Five Estuaries focus is on the removal of disused telecommunications 'telecom' cables. | Natural England advises that the applicant provide more detail to address Natural England concerns. |
| | | | Natural England advises that currently there is no evidence that redundant telecoms cables are causing a significant impact on the Annex I Sandbank feature of the MLS SAC or other benthic designated sites. Unless further supportive detailed evidence is provided, Natural England does not consider their removal to constitute suitable compensation as a primary measure. | |
| Technical feasibility | F12 | | The Applicant has shown that there are redundant telecom cables within the National Site Network, but currently there is limited evidence to demonstrate that the cables are sufficiently present on the surface of Annex I sandbanks at both a spatial and temporal scale to be hindering the conservation objectives of the designated sites and the attributes of Annex I sandbanks. Once this can be demonstrated then commitments with the cable owners will need to be secured. | Natural England advises that the applicant provide more detail to address Natural England concerns. |
| Agreed compensation level | F13 | | Natural England is not in agreement with the Applicant on the presented Worse Case Scenario (WCS) of lasting habitat loss/change of Annex I Sandbanks from the placement of cable protection within MLS SAC. | Please see our comments in Appendix E. |
| Scale/extent of measure | F14 | | Natural England has outstanding concerns in relation the outcomes of the Impact Assessment and evidence used to support conclusions on scale and significance of potential impacts from cable installation activities and the placement of cable protection from Five Estuaries. Until these issues are resolved we do not agree with the Applicant on the scale and extent of the compensation measures required. | Please see out comments in Appendix E. |

| F15 | Unlike other proposed measures the delivery of this measure is less reliant on other parties, therefore Natural England believes that the compensation could and should be delivered before the impact occurs. | No Comment. |
|------------|---|--|
| F16 | The location of the measure has not been presented in detail and/or agreed with the SNCBs. | Natural England advises that the Applicant provides more detail to address our concerns. |
| F17 | Natural England notes in 5.5.2 Outline Benthic Implementation and Monitoring Plan that there is an intention for monitoring and adaptive management to be progressed if this mechanism is taken forward. Ideally, in order to provide the Secretary of State with the necessary comfort that this measure is sufficiently progressed during the consenting phase, this should be set out in more detail. However, we would anticipate as the examination progresses that this measure is either more thoroughly progress or removed as an option if not. | Natural England advises that the Applicant provide more detail to address Natural England concerns. |
| F18 | Please see comments regarding the technical feasibility of this proposed measure. Until this is resolved, success criteria and additionality would be hard to determine. | Natural England advises that the Applicant provide more detail to address Natural England concerns. |
| F19 | While Natural England considers that the removal of redundant infrastructure could be progressed as a sole measure it remains unclear if there are sufficient surface laid/exposed telecom cables on Annex I sandbanks to fully mitigated the potential project impacts. We would be supportive of this proposal being progressed as part of package if not. | Natural England advises that the Applicant provide more detail to address Natural England concerns. |
| Idition to | those raised above | |
| NE Ref | Description | |
| F20 | Information on amount and location of surface laid/exposed cables and the spatial and temporal extent of those are required. | Natural England advises that the Applicant provide more detail to address Natural England concerns. |
| | F16 F17 F18 F19 Idition to | on other parties, therefore Natural England believes that the compensation could and should be delivered before the impact occurs. F16 The location of the measure has not been presented in detail and/or agreed with the SNCBs. F17 Natural England notes in 5.5.2 Outline Benthic Implementation and Monitoring Plan that there is an intention for monitoring and adaptive management to be progressed if this mechanism is taken forward. Ideally, in order to provide the Secretary of State with the necessary comfort that this measure is sufficiently progressed during the consenting phase, this should be set out in more detail. However, we would anticipate as the examination progresses that this measure is either more thoroughly progress or removed as an option if not. F18 Please see comments regarding the technical feasibility of this proposed measure. Until this is resolved, success criteria and additionality would be hard to determine. F19 While Natural England considers that the removal of redundant infrastructure could be progressed as a sole measure it remains unclear if there are sufficient surface laid/exposed telecom cables on Annex I sandbanks to fully mitigated the potential project impacts. We would be supportive of this proposal being progressed as part of package if not. Idition to those raised above Information on amount and location of surface laid/exposed cables and the |

Table 3 Summary position of compensation measure.

| Compensation measu | re: Ant | hropog | genic Pressure Removal of Aggregates industry Pressures for Annex I | Sandbanks |
|---|-----------|--------|--|---|
| | NE Ref | RAG | Natural England Comment | Recommendation |
| Theoretical merit to deliver compensation | F21 | | Natural England is supportive of the option for a percentage buyout of aggregate licence(s) as a compensation measure for Annex I sandbank because reduction of existing pressures on Annex I sandbanks would help restore Annex I sandbanks, prior to any licence renewal. We therefore encourage further detail to be included within the Application of any agreements with Aggregates industry where this measure has potential. | Natural England advises that the Applicant provides more detail to address our concerns. |
| Technical feasibility | F22 | | Natural England believes this is technically feasible as there are active Aggregate licences within the National Site Network which interact with Annex I sandbanks. However, there is currently no certainty that this measure can be secured. | Natural England advises that the Applicant provides more detail to address our concerns. |
| Agreed compensation level | F23 | | Natural England is not in agreement with the Applicant on the presented Worse Case Scenario (WCS) of lasting habitat loss/change of Annex I Sandbanks from the placement of cable protection within MLS SAC. | Please see our comments on Appendix E. |
| Scale/extent of measure | F24 | | The scale/extent of the measure has not been presented in detail and/or agreed with the SNCBs. | Please see our comments on Appendix E. |
| Timing: Deliverable before impact | F25 | | It is unclear if this measure can be delivered prior to the impacts occurring. | Natural England advises that the Applicant provides more detail to address our concerns. |
| Location of measure | F26 | | The location of the measure has not been presented in detail and/or agreed with the SNCBs | Natural England advises that the Applicant provides more detail to address our concerns. |
| Long term implementation | F27 | | Natural England notes in 5.5.2 Outline Benthic Implementation and Monitoring Plan [APP-048] that there is an intention for monitoring and adaptive management to be progressed if this mechanism is taken forward. Ideally, in order to provide the Secretary of State with the necessary comfort that this measure is sufficiently progressed during the | Natural England advises that the Applicant provides more detail to address our concerns. |

| | | consenting phase this should be set out in more detail. We would anticipate as the examination progresses that this measure is either | |
|---|-----------|--|---|
| Success criteria/Ability to prove additionality | F28 | more thoroughly progress or removed as an option if not. As per long term implementation for this measure, this is yet to be considered in detail and agreed with the SNCBs. | Natural England advises that the Applicant provides more detail to address our concerns. |
| Suitable as sole measure for target species | F29 | While Natural England considers that the buyout of Aggregate licences could be progressed, it remains unclear if there are any options open to the Applicant to deliver this measure either as a sole measure or as part of a package. | Natural England advises that the Applicant provides more detail to address our concerns. |
| Key uncertainties in a | ddition | to those raised above | |
| Uncertainty | NE Ref | Description | |
| Active licence areas willing to be bought out | F30 | Information on amount and location of available active licence locations open to being bought is required. | Natural England advises that the Applicant provides more detail to address our concerns. |
| Please also see | e those | included in Table 1 | |

 Table 4 Summary position of compensation measure.

| | NE Ref | RAG | NE Comment | Recommendation |
|--|--------|-----|--|--|
| Theoretical merit to deliver compensation. | F31 | | Natural England refers the ExA to the published ' <u>Offshore Wind</u> <u>Leasing Round 4 Dogger Bank Strategic Compensation Plan'</u> (April 2024). | Natural England currently has no further recommendation. |
| | | | In section 3.4.2 it is stated that 'Although lower on the compensation hierarchy than the other measures, seagrass meadows do occur on some sandbanks within coastal subtidal and intertidal zones and seagrass is a sub-feature of other designated Annex I sandbanks, such as those within Fal and Helford SAC and Plymouth Sound and Estuaries SAC (Natural England, 2023a; Natural England, 2023b). Suitability as compensation for sandbank is supported by the listing of seagrass as a flora associated with sandbank in Natura 2000 (now National Sites Network) guidance habitat guidance (European Commission, 2013). Nonetheless, seagrass restoration is a lower preference measure compared to those supporting the same ecological function of the habitat being compensated for. We advise the same is true for compensation for impacts to Annex I | |
| | | | Sandbank Features of MLS SAC where subtidal seagrass has not been found within the site. | |
| Technical feasibility | F32 | | Natural England refers the ExA to the published ' <u>Offshore Wind</u> <u>Leasing Round 4 Dogger Bank Strategic Compensation Plan'</u> (April 2024). | Natural England will provide further comment on the technical feasibilit on this measure at |
| | | | In section 3.4.3 it is stated that 'The Steering Group had significant concerns about the deliverability of seagrass restoration, even on a small scale as there have been no long term successes with seagrass restoration in the UK. Seagrass restoration is included as a potential measure only where it would be a minor part of a wider package in terms of the required compensation. Given the intention to | Deadline 1. |

| | | compensate for Annex I sandbank habitat, which is, by definition, a subtidal habitat, seagrass restoration for the purpose of compensation for DBSW and DBSE projects shall be limited to subtidal seagrass. The measure is retained in the DBSCP as an additional option which could potentially be employed if the Steering Group considered that it was necessary to supplement other measures, or potentially as an adaptive management response.'. This is also applicable to Five Estuaries compensation. Natural England is in the process of drafting a paper on the current seagrass restoration projects. | |
|--------------------------------------|-----|--|---|
| Agreed compensation level. | F33 | Natural England is not in agreement with the Applicant on the presented Worse Case Scenario (WCS) of lasting habitat loss/change of Annex I Sandbanks within MLS SAC. | Please see our comments on Appendix E. |
| Scale/extent of measure. | F34 | The scale/extent of the measure has not been presented in detail and/or agreed with the SNCBs. | Please see our comments on Appendix E. |
| Timing: Deliverable before impact | F35 | It is unclear if this measure can be delivered prior to the impacts occurring. | Natural England advises that the Applicant would need to provide more detail to address our concerns. |
| Location of measure | F36 | The location of the measure has not been presented in detail and/or agreed with the SNCBs. | Natural England advises that the Applicant would need to provide more detail to address our concerns. |
| Long term implementation | F37 | Natural England notes in 5.5.2 Outline Benthic Implementation and Monitoring Plan [APP-048] that there is an intention for monitoring and adaptive management to be progressed if this mechanism is taken forward. Ideally, in order to provide the Secretary of State with the necessary comfort that this measure is sufficiently progressed during the consenting phase this should be set out in more detail. However, we anticipate as the examination progresses that this measure is either more thoroughly progressed or removed as an option if not. | Natural England advises that the Applicant would need to provide more detail to address our concerns. |

| Success criteria/Ability to prove additionality | F38 | As per long term implementation for this measure, this is yet to be considered in detail and agreed with the SNCBs. | Natural England advises that the Applicant would need to provide more detail to address our concerns. |
|---|------------|---|--|
| Suitable as sole measure for target species | F39 | Natural England advises that this measure could only be considered as part of a package providing <10% of the required compensation and/or potential adaptive management for part delivered compensation. There would also be a requirement for the provision of subtidal seagrass, not intertidal. | Natural England advises that other measures are progressed first. If other projects are being progressed, then there is an expectation this compensation will not be taken forward. |
| | | | |
| Key uncertainties in a Uncertainty | ddition to | those raised above Description | |
| - | | | Further details to be provided into examination should this option be progressed. |

Table 5 Natural England's Detailed Advice (not incorporated above) on specific compensation documents/plans which have been submitted.

| Doc Ref. | NE Ref | Natural England Comment | Recommendation | Risk | | |
|---|--------|--|--|------|--|--|
| Document(s) Used: As Listed in table below. | | | | | | |
| APP- 046 EN010115 5.5 HRA Derogations Case | F41 | Natural England advises that a more substantive consideration of 'Alternatives' is required to ensure that the Alternatives Test can be met. | An updated Derogations case should be provided with a more substantive consideration of 'Alternatives'. | | | |
| APP-047 5.5.1 Benthic compensation Strategy Road Map Table 1.1 (1) | F42 | Natural England advises that there needs to be more transparency over the project lifetime impacts and not just a focus on the Application and Examination. | Natural England advises that there is still a lot to secure and agree on the checklist and would welcome further updates being submitted during examination | | | |
| APP-047 5.5.1 Benthic compensation Strategy Road Map | F43 | Natural England advises that the conservation advice package for Margate and Long Sands SAC is in the process of being updated. With draft updates being published in Autumn 2024 and finalisation in March 2025. Within these updates there is relevant context on existing impacts to the site to help inform the in-combination assessments. | Natural England advises that the RIAA and subsequent derogation case documents are updated to take account of the new conservation advice package. In particular, Table 2.1 on page 17. | | | |
| Paras 2.2.2, 2.2.4, 2.2.7 and 2.2.8 | | | In addition, the Favourable Condition Status of UK sandbanks is likely to be published during the VE Examination and similarly this will need to be taken into account by the Applicant in any updated derogations case documents | | | |
| APP-047 5.5.1 Benthic compensation | F44 | Natural England is unsure how the Applicant has determined that sandbank recovery is a few months following sandwave levelling. Please see Annex 1 to this Appendix for further | Natural England advises that all statements are adequately referenced and where that is not | | | |

| Doc Ref. | NE Ref | Natural England Comment | Recommendation | Risk |
|--|--------|---|---|------|
| Strategy Road Map Paras 2.3.1 and 2.3.2 | | advice | possible a more precautionary approach it taken in relation to sandwave/bank recovery and derogation case documents updated accordingly | |
| APP-047 5.5.1 Benthic compensation Strategy Road Map Para 2.3.6 | F45 | Natural England advises that further geotechnical data is require pre-determination to inform the likelihood of cables being buried and thus the need for cable protections and therefore compensation. This is consent with Hornsea Project Three, Norfolk Vanguard, Norfolk Boreas and Dudgeon and Sheringham Extensions | Natural England advises that the Applicant collects this data and then updates the assessment pre- determination. | |
| APP-047 5.5.1 Benthic compensation Strategy Road Map Paras 2.3.8 and 2.3.10 | F46 | Cable Protection: Natural England advises across all documents that further detail is required on cable protection parameters during installation and project lifetime, before we can have any certainty on the proposed 5,400m ² . | Natural England advises that the Applicant provide the updated assessments requested here and in Appendix E | |
| APP-047 5.5.1 Benthic compensation Strategy Road Map Paras 2.3.11 and 2.3.12 | F47 | Compensation Requirements. Natural England disagrees with the applicant that compensation should not be agreed until it is determined post installation that it is definitely required. | Natural England highlights that a similar argument was raise by the Applicant for Norfolk Vanguard and Norfolk Boreas and both Secretary of State decisions letters required compensation to be being delivered prior to impacts occurring. | |
| APP-047 5.5.1 Benthic compensation Strategy Road Map Table 3.1 | F48 | Mitigation: Natural England provides the following advice (1) Why hasn't combined/coordinated approach been taken forward? (2) Avoidance of sensitive habitats: - could cable route around sandbank features in SAC? | Natural England refers the Applicant to Appendix D where more detail is provided to help improve confidence in the mitigation measures. | |

| Doc Ref. | NE Ref | Natural England Comment | Recommendation | Risk |
|---|--------|---|--|------|
| | | (3) A Cable Burial Risk Assessment from an ecological perspective is key to determining mitigation. (4) Expectation that from an ecological perspective some cable protections will be ruled out pre-determination. (5) Natural England requests further information as to why the use of a jack up barge cannot be excluded from MLS SAC when other developers have adopted this as mitigation. (6) Natural England queries if low ordnance detonation can be used in MLS SAC to minimise the seabed impacts. | | |
| APP-047 5.5.1 Benthic compensation Strategy Road Map Paras 4.6.3- 4.6.7 | F49 | Natural England highlights that the information taken from other projects examination document often refers to mitigation not necessarily compensation. And does not align with final positions. | Natural England draws the ExA attention to the recent Secretary of Decisions where the actual benthic compensation required for each project is set out. | |
| APP-048 Outline BIMP | F50 | Natural England notes that this document is a skeleton document of what will be included post consent. Therefore, we are unable to provide comment at this time on its content. It is not clear if this is the most appropriate approach if Strategic Compensation is taken forward. | | |

Annex F1: Sandwave Recovery

1.1 We consider that the Larsen *et al.* 2019 paper provides useful evidence from the Race Bank Offshore Windfarm (OWF) to indicate that complete natural regeneration of different types of dynamic sandbanks may be achieved within 3 years after levelling.

1.2 However, Natural England highlights that there remains a gap in the evidence to demonstrate that this has fully occurred, due to the lack of further monitoring of the recovery trajectory at Race Bank OWF after the 303 days of monitoring. Even though there remains some uncertainty as to the exact timeframes for sandbank regeneration, Natural England's experience suggests that complete regeneration is likely to occur on <u>dynamic sandbank</u> systems. Natural England highlights that there is a lack of evidence to suggest that this would be the case in more static sandbank systems e.g. Dogger Bank.

1.3 Therefore, we believe that there is a low risk of adverse effects arising due to the proposed sandwave levelling/sweeping by the ODOW projects. But this is not the case if additional external cable protection be progressed in swept area.

1.4 Given the need for evidence to improve our understanding of the timescales for recovery and address this outstanding uncertainty, Natural England advises that monitoring similar in scope to the Larsen et al. 2019 surveys is undertaken of all areas where sandwave sweeping/levelling occurs within IDRBNR SAC and is secured in the In Principle Monitoring Plan. The initial survey of the impacts should be repeated until such time that the sandbanks are considered by the regulator (in consultation with Natural England) to have satisfactorily regenerated and are providing the same structure and function as to the surrounding sandbanks.