



**Marine Protected Areas  
Sub-Committee Meeting**

**To be held at:**

**Trues Yard, North Street  
King's Lynn, PE30 1QW**

**6<sup>th</sup> December 2012  
1030 hours**

## Marine Protected Areas Sub-Committee

*"EIFCA will lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economical benefits to ensure healthy seas, sustainable fisheries and a viable industry".*



A meeting of the Marine Protected Areas Sub-Committee took place at Thoresby College, King's Lynn on Wednesday 23 May 2012 at 10.30 hours

### Members Present:

Cllr T Turner	Chair	Lincolnshire County Council
Mr R Spray	Vice-Chair	Marine Management Organisation
Mr S Bagley		Marine Management Organisation
Mr R Brewster		Marine Management Organisation
Mr R Handford		Environment Agency
Mr N Lake		Marine Management Organisation
Mr C Morgan		Marine Management Organisation
Mr T Pinborough		Marine Management Organisation

### Eastern IFCA Officers Present:

Eden Hannam	Acting Chief Executive Officer
Ron Jessop	Senior Research Officer
Judith Stoutt	Senior Marine Environment Officer
Luke Godwin	Marine Environment Officer (Data)

### Clerk

Mary Clancy

### MPA12/01 **Item 1: Welcome by the Chair**

Councillor Tony Turner welcomed members to the meeting.

### MPA12/02 **Item 2: Apologies for Absence**

Apologies were received from Koen Vanstaen and Councillors Ken Sale and Hilary Thompson.

### MPA12/03 **Item 3: Declaration of members' interests**

Shane Bagley, Roy Brewster and Neil Lake declared that they had an interest in Items 5 and 6 as WFO1992 entitlement and lay holders and they did not take part in the vote on these items.

### MPA12/04 **Item 4: Minutes of the Marine Protected Areas Sub-Committee meeting on 30 November 2011**

MPA11/22: Neil Lake considered that the wording in paragraph 5 on page 5 should be amended to say that management measures had been taken against the fishing industry's advice as Marine Management Organisation (MMO) appointees from the fishing industry had not been allowed to vote on the matter. However, the Acting Chief Executive clarified that only MMO appointees with a conflict of interest had been excluded from the vote.

Conor Donnelly pointed out an error in paragraph 4 as, in the case of the Wash mussel fishery, mytilicola was the cause of the die-off. It had been a coincidence in other fisheries. This correction was accepted.

**It was resolved:** that the minutes, as corrected; were a true record of the proceedings.

**Proposed:** Neil Lake

**Seconded:** Shane Bagley

**All Agreed**

**MPA12/05 Item 5: The WFO Cockle Fishery**

The Senior Research Officer (SRO) and the Marine Environment Officer (Data) presented the spring cockle surveys carried out in the Wash between 20 March 2012 and 24 April 2012, and the outcomes of consultation with Wash Fishery Order entitlement holders and of a meeting with representatives of local fishermen's associations on 22 May 2012. The officers illustrated their presentations with slides.

All sub-committee members had also received the following documents which been sent to entitlement holders as part of the consultation process:

- Letter to entitlement holders dated 14 May 2012
- Draft record of the Appropriate Assessment under Regulation 61 of The Conservation of Habitats and Species Regulations 2010
- Likely Significant Effect: Hand-worked cockle fishery in the Wash

In response to problems arising from the opening of the 2011/12 cockle fishery, the Eastern IFCA had drawn up a Cockle Charter and this had been followed in carrying out consultation and making recommendations to the Authority for the opening of the 2012/13 cockle fishery. As part of the consultation, entitlement holders had been asked to express a preference for the type of fishery (hand-worked or suction dredge) in 2012/13, the preferred opening date and the number of days the fishery should be open, and the beds to be opened. 40 entitlement holders representing 60 entitlements responded.

Total Available Catch (TAC)

The SRO presented the survey results. The surveys had sampled 1,382 stations from a total of 22 sands. In summary, the total stock of adult and juvenile cockles in the Wash had been calculated as follows:

Total adult stock (width greater than 14mm)	7,107 tonnes
Total juvenile stock (width less than 14mm)	14,001 tonnes
Total stock (both sizes)	21,108 tonnes

This was an increase on the overall stock level of 10,000 tonnes identified in the 2011 surveys, and was mainly due to the good growth of cockles from the 2010 year-class which, so far, had not been affected by die-offs caused by the atypical cockle mortality which had been affecting the Wash since 2008 and which continued during 2011. The SRO explained that this atypical mortality - defined as a greater reduction in stock levels than could be explained by fishing activities and normal, natural mortality - was thought to be the result of haplosporidian parasite infections affecting larger cockles, particularly on the faster-growing beds.

He identified the continuing need to manage the consequences of this mortality. He said that, because of it, the 2011 stock of larger cockles was low by comparison with previous years - before 2007, 56% of the cockle biomass consisted of adult cockles; now this figure had reduced to 41%.

On the basis of the survey results, officers recommended that the Total Available Catch (TAC) for 2012/13 should be 2,369 tonnes for the cockle fishery, calculated (as in previous years) as one third of the total adult stock of 7,107 tonnes.

**Members carefully considered the information and calculations provided by the officers and resolved that the overall Total Catch for the 2012/13 Wash cockle fishery should be 2,369 tonnes.**

**Proposed:** Ceri Morgan

**Seconded:** Conor Donnelly

**5 votes in favour**

**None against**

#### Type of fishery

Analysis of the consultation information indicated that a majority of entitlement holders preferred a hand-worked fishery. Officers also recommended that the 2012/13 fishery should be a hand-worked one. The SRO explained that the survey evidence indicated that the requirement for a minimum adult cockle density of 70% before a suction dredge fishery could be permitted was only clearly met on the Thief and Whiting Shoal beds, but the stocks on these beds were not sufficient to support a successful dredge fishery.

Neil Lake asked why Wrangle Sands was not eligible for suction dredge fishing and was advised by the SRO that this was because it did not support an adult cockle population of at least 70%. The SRO also said that the need for a contingency plan for Wrangle Sands (because of the risk caused by the atypical mortality) was the subject of a later agenda item.

Mr Lake wanted it on the record that, in his view, the suction dredge fishery was being short-changed again. He considered that the calculation of 70% of adult cockles should be based on a cockle width greater than 12mm, rather than 14mm, as the dredge fishery worked with a 12mm riddle and so would not take any smaller cockles. The Acting CEO advised him that 12mm was not appropriate as an operational measurement to identify adult cockles. Roy Brewster pointed out that there was no real distinction between hand-worked and suction dredge fisheries as fishermen like him and Shane Bagley had dredging gear as well as gear for hand-working. The method they used depended on the fishery available. He said he used to dredge in the Bombing Range as, in this location, it was easier to harvest cockles by dredging but as there were not enough cockles for this method of fishing in recent years, he had switched to hand-working.

Mr Lake also considered that the daily hand-working quota of 2 tonnes per vessel was not viable. Mr Brewster said he believed that there had originally been a quota of 4 tonnes - which the fishing industry had favoured - but this had been reduced to 2 tonnes as a result of representations by the processing industry. He was aware that bigger boats which were more expensive to run benefited more from a 4 tonne quota. Mr Lake thought that the 2 tonne quota had been introduced to prevent the practice of 'blowing out' cockles. He was concerned that economic conditions had changed since the quota was established; in particular the Spanish market for cockles had deteriorated and so the 2 tonne quota was no longer viable for big boats. He said that the processing industry wanted an increase in the quota and would be making representations to the EIFCA Chair, Councillor Ken Sale, about this.

Conor Donnelly said that the bottom line for Natural England was the environmental impact rather than the method of fishing; the environmental impact of a hand-worked or suction dredge fishery is a matter that can be assessed on the evidence. There are a range of management measures to ensure that a dredge fishery can operate in appropriate areas without an adverse impact, for example, not permitting it in areas where the density of adult cockles is less than 70%, or in finer sediment areas.

**Having considered the evidence, Members resolved that the 2012/13 Wash cockle fishery should be a hand-worked fishery.**

**Proposed:** Conor Donnelly

**Seconded:** Ceri Morgan

**5 votes in favour**

**None against**

#### Opening date

The consultation indicated that a majority of entitlement holders preferred an opening date of May/June. This was confirmed by Roy Brewster. Rob Spray asked whether this meant that the majority of fishermen with small businesses (one or two entitlements) preferred an early start and a longer fishery while those with larger businesses (multiple entitlements) preferred a later start and a shorter fishery. Mr Brewster said that this was the case. The CEO confirmed that officers were aiming for an opening date between 8 and 10 June 2012, subject to Natural England's response to the appropriate assessment. Mr Donnelly said that Natural England was still receiving correspondence in connection with the legal challenge to the Eastern IFCA's past management of the Wash fishery (discussed at the last Authority meeting) and would have to ensure that points relevant to the assessment were dealt with. However, he thought a decision could probably be made quickly and, following that, a further week's notice of the opening date would be required.

Mr Lake commented that an August start date would give the cockles time to grow which would be better for the processing industry as it was easier to sell large cockles. He also said that the fishery ended in mid-August last year and so an early start again this year could mean that it was finished before the cockles were at their prime. However, Mr Brewster commented that the fishing industry felt that it was better to start earlier in order to avoid the risk of losing adult cockles if die-offs occurred later in the year. The CEO added that officers were expecting a similar number of boats in the fishery as last year and the resulting rate of fishing should mean that the TAC would not be exhausted early.

**Having considered the evidence, Members resolved that the opening date for the 2012/13 Wash cockle fishery will be early June 2012, subject to advice from Natural England and giving at least 7 calendar days notice of the opening date.**

**Proposed:** Conor Donnelly

**Seconded:** Roy Brewster

**5 votes in favour**

**No votes against**

#### Number of days open

Concerning the number of days the fishery should be open, entitlement holders had not expressed a clear view during the consultation. Mr Lake pointed out that this was because the questionnaire they had received was

confusing as it was necessary to know the type of fishery that would be permitted in order to express a preference for the pattern of opening. The Acting CEO said that officers would take this into account in devising future consultations.

The SRO presented again the slide which showed the potential opening days for the fishery, based on a May/June start date, and including the neap tides. Tides of 6 metres, rather than 6.5 metres had been used as the consultation had indicated that 6 metre tides were more workable for entitlement holders. The calendar showed that opening in line with neap tides would result in relatively long periods of continuous working, and that a four or five day per week fishery based around neap tides offered a better working pattern. In response to a question from Ceri Morgan, the SRO confirmed that entitlement holders would be notified in advance of the days the fishery was to be open. Mr Brewster added that this approach worked satisfactorily last year.

Mr Lake considered that some flexibility in relation to the weather was necessary as fishermen could not take small boats onto the sands in bad weather. However, Tom Pinborough and Mr Brewster felt that the TAC was the key issue and this would not be affected if rough weather prevented boats from going out to collect cockles.

**Having considered the evidence Members resolved that the 2012/13 Wash cockle fishery will be open from Monday to Thursday inclusive, with any necessary adjustments to accommodate neap tides as indicated in the SRO's calendar.**

**Proposed:** Conor Donnelly

**Seconded:** Tom Pinborough

**5 votes in favour**

**No votes against**

#### Beds to be opened

Concerning the beds to be opened, the consultation indicated that most entitlement holders wanted minimal closures, if any. However, officers acknowledged that the survey question about this matter was not very clear.

The SRO explained that, given the atypical mortality, it was essential to protect the juvenile stock by closing areas as necessary. In order to do this, 'hands off boxes' would be identified from the survey data, within which no fishing would be permitted. These will be identified in charts which will be given to entitlement holders. This was supported by Mr Donnelly who emphasised the need to avoid collecting under-sized stock, and he was concerned that the whole stock on Wrangle Sands could have been taken last year if the opening of the area had not been managed. He said that, as for last year, Natural England was likely to recommend measures to protect the juvenile stock.

Shane Bagley said that slightly smaller cockles (for example, of 13mm width) which had been identified in the survey as next to greater than 14mm width cockles, were likely to have grown to adult size by the time the fishery opened. The Acting CEO said in response that closures this year would focus on the areas where the juvenile cockles would not reach 14mm during the period of the fishery.

**Having considered the evidenced, Members resolved that all beds within the regulated fishery of the Wash, except those with high**

**density areas of juvenile cockles (2011 year-class cohort), should be opened to the 2012/13 hand-worked cockle fishery.**

**Proposed:** Tom Pinborough

**Seconded:** Rob Spray

**5 votes in favour**

**No votes against**

*Tom Pinborough left the meeting after this vote was taken.*

Mr Lake raised a question about the catch returns data that fishermen were required to return to the Eastern IFCA office weekly and, in particular, the sanction that an entitlement could be suspended or cancelled for failing to make returns. He was concerned that fishermen might incur sanctions for late returns caused by postal delays. The CEO stated that, this year, fishermen would be able to make and keep copies of their returns which could be used as evidence that they had been submitted on time if there was a delivery delay by the postal service.

Mr Donnelly emphasised that regulation 1 of the Wash Fishery Order 1992 (set out on page 12 of the officers' report), which prohibits the use of equipment fixing a vessel to the seabed or slowing its movement while the engine is running, should continue to be rigorously enforced. He was concerned that the fishing industry should be aware that this fishery was subject to particular scrutiny because of the current legal challenge, and that bad practice put it at risk. The CEO said that officers were examining the options for policing the fishery and for intelligence-led enforcement.

**MPA12/06 Item 6: Contingency planning for the WFO Cockle Fishery (i.e. Wrangle Sands)**

The SRO presented the report, illustrated with a slide presentation. He explained that the atypical mortality affecting cockles in the Wash appeared to be related to the size of the cockle, not its age. For example, younger cockles on fast growing beds were dying as well as older ones on slow growing beds. Affected cockles tended to gape at the surface of the water but could also be buried in silt. The mortality also seemed to be linked to warmer weather (between May and October). The cause was thought to be haplosporidion parasites but, so far, Defra had not confirmed this. It was possible that the parasites weakened the cockles making them susceptible to other causes of death. Mass mortality of all the cockles in an area was not occurring but the accumulation of die-offs across the stock was significant and represented a very high proportion of the total stock. In addition, the management measures for the cockle fishery required that cockles should be available as a food supply for oyster-catchers. The die-offs were affecting this supply and only scavengers were benefiting from it.

From analysis of the stock composition and distribution this year and trends observed since 2008, officers concluded that Wrangle Sands would be particularly at risk of die-offs in 2012. Therefore, officers considered it necessary to have contingency management measures available for Wrangle Sands in order to minimise wastage.

The SRO explained that there were four key elements to the proposed contingency management measures. The first concerned the contribution to the overall TAC from Wrangle Sands; the second element was the proposed level of mortality of 1% per day that would trigger the need for contingency management measures; the third was a possible increased TAC for Wrangle Sands should contingency management measures be

triggered, and the fourth element was the most appropriate type of fishery should the mortality trigger be reached. The Acting CEO referred members to the management process set out in the report which would be adopted should the mortality trigger be reached. According to this process, officers would consult with the Chairs of the Authority and the Marine Protected Areas Sub-Committee, notify entitlement holders, Natural England and the Environment Agency, submit to Natural England Appropriate Assessment and Test of Likely Significance documents relating to the contingency management measures, and following Natural England's response, give entitlement holders notice of the intention to implement contingency management measures.

Roger Handford welcomed the proactive approach proposed by the officers but was concerned that abandoning the usual management criteria in one area and allowing the fishery to take more than the usual one third of the adult stock would damage the fishery in the future. Mr Donnelly acknowledged that there was a need for the fishery to respond to the mortality risk but he was concerned about the 1% per day trigger and how this compared with normal cockle mortality in summer. He said it was necessary to understand how cockles in Wrangle Sands were responding to the atypical mortality, particularly as they had been living with it for several years and may have developed some resistance. However, this would not be possible if the whole stock was taken.

The SRO responded that it was necessary to predict likely mortality in order to have a contingency plan. Without such a plan, a fishery worth £2 million at last year's prices could be lost which would benefit no-one. He said that if it turns out that the older cockles have developed resistance, the trigger mortality level will not be reached and the measures will not be implemented. Mr Brewster was concerned that, if there were no contingency arrangements and the die-offs occurred as in recent years, rotting dead cockles could poison the stock; he also considered that fishing a small proportion of the cockles while leaving the large proportion to die was not a good conservation strategy and he pointed out that the Dutch fishing industry had 'fished out' its mortality problem. Mr Morgan welcomed the officers' imaginative approach and noted that it was subject to appropriate assessments. He felt that mortality in the southern part of the Wash could be monitored to measure resistance even if contingency measures were applied in Wrangle Sands.

Mr Donnelly understood that it was pointless to lose a large amount of the stock through die-offs but emphasised the need to understand Wrangle Sands and find out whether it has particular characteristics that lead to mortality or to the development of resistance. In response, the SRO explained that slow growing cockles, in beds at the margins of the environment in which cockles can grow, seemed to cope better with the mortality threat, and the evidence suggested that this could be related to spawning behaviour which is later in slower growing cockles; the immune system of a cockle weakens after spawning and this may make it more vulnerable to the atypical mortality. He said Wrangle Sands was a fast growing bed which meant that cockles reached the spawning stage relatively quickly (on other beds, it could take 4 or 5 years for the cockles to reach this size) and so became vulnerable to die-offs more quickly.

Mr Spray agreed that it seemed sensible to harvest cockles rather than leaving them to die but felt the Authority had to be sure that the trigger level was correct.

Mr Lake wished to congratulate the Eastern IFCA on some imaginative thinking as, in his view, the choice was between harvesting cockles or watching them die as had happened in the past. The Acting CEO said that contingency management measures that would offer the Authority clear options should this be necessary, and would be subject to approval by Natural England before they were used.

**Having considered and thoroughly discussed the evidence presented and the options, Members resolved to agree the following contingency management measures for the 2012/13 Wash cockle fishery should atypical mortality rates in Wrangle Sands reach a trigger level of 1% per day:**

- a) officers will consult with the Chairs and Vice-chairs of the Authority and the Marine Protected Areas Sub-Committee;**
- b) officers will inform entitlement holders, Authority members and Natural England that the trigger level had occurred;**
- c) officers will carry out a Test of Likely Significance and an Appropriate Assessment and submit them to Natural England;**
- d) subject to Natural England's approval of the contingency management measures, entitlement holders will be given notice of the intention to implement these measures.**

**Proposed:** Ceri Morgan

**Seconded:** Roger Handford

**4 votes in favour**

**None against**

#### **MPA12/07 Item 7: Marine Planning: Vision/Objectives**

The Senior Marine Environment Officer presented the report which was for members' information only. It concerned the MMO's draft vision and objectives in developing marine plans for the East Inshore and Offshore areas. Eastern IFCA officers had responded to the MMO's consultation. Their main comments were that certain kinds of economic activity, particularly energy generation, had been over-emphasised and that there was a lack of concern for fishing industries. The Acting CEO said the MMO should focus on a vision that balanced all interests, rather than on specific issues.

Mr Handford said that the Environment Agency had been consulted also and he recognised the imbalance towards energy in the consultation document.

Mr Morgan raised the difficulty he had experienced in inputting data to the MMO website on several occasions this year as the data could be independently verified according to the MMO's requirements. He was concerned that, as a result, the MMO was missing an opportunity to collect information from the users of the coast and inshore waters about relevant activity and he wanted the MMO to look at this problem.

#### **MPA12/08 Item 8: Environment Agency consultation**

The Senior Marine Environment Officer presented the report which was for members' information only. It concerned the Environment Agency's consultation on the Wash East Coastal Management Strategy for sea defences between Hunstanton and Wolferton Creek, and outlined the

issues that the Eastern IFCA's officers intended to focus on when responding to the consultation.

Mr Hammond said that the Environment Agency was reviewing its management plans for the Wash with a view to republishing them in 2013. There would be more consultations and the Agency welcomed comments on the local impact of proposals and on local issues.

**MPA12/09 Item 9: Update on Angling 2012**

The Marine Environment Officer (Data) presented the report which updated members on the Sea Angling 2012 survey which would provide data about recreational sea angling in the district. Site visits and interviews began in April and were going well, and officers were now able to input survey forms to the Sea Angling 2012 database. Members were invited to join officers as they carried out the surveys. In response to a question from Mr Morgan, the Acting CEO said that the Eastern IFCA was under contract to CEFAS for one day's work per week on the survey and received some reimbursement of costs for this.

**MPA12/10 Item 10: Any other business**

Under this item, the Chair agreed that Mr Lake could raise matters for brief discussion that required no decision by the sub-committee.

Mr Lake said that the issues of cockle growth rates and wastage should be considered at the Planning & Communication Sub-Committee meeting that had been scheduled for the end of June, as the fishing industry representatives had raised these issues at the consultation meeting. He also thought there was inconsistency in the way that cockle catch limits were calculated. The TAC for the purpose of the management measures was based on a calculation of one third of the adult cockle biomass as defined in the annual cockle survey; however the daily vessel quota of 2 tonnes for the hand-worked fishery included wastage and so, in practical terms, was not 2 tonnes of the adult cockle biomass. Mr Brewster also thought that this was unfair. The Acting CEO said that officers would be consulting with the fishing industry on priorities for the research programme which could include these issues.

Mr Lake asked whether progress had been made on reviewing the use of larger dredgers. The Acting CEO said this would be considered as part of the investigation of VMS (vessel monitoring systems) but would need an appropriate assessment approved by Natural England. He said that bigger boats could cause more damage to cockle beds and he gave as an example the damage caused last year by a boat which was being used to clear mud off a lay. This led to a discussion about the approach to be used in clearing lays. Mr Lake and Mr Brewster thought that April/May was the best time to do this. The Acting CEO said he would pursue this with Natural England.

The meeting closed at 12.44 hours

## Marine Protected Areas Sub-Committee

*"EIFCA will lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economical benefits to ensure healthy seas, sustainable fisheries and a viable industry".*



An **Extraordinary Meeting** of the Marine Protected Areas Sub-Committee took place at Thoresby College, King's Lynn on Friday 29 June 2012 at 10.30 hours

### Members Present:

Cllr Tony Turner	Chair	Lincolnshire County Council
Mr Shane Bagley		Marine Management Organisation
Mr Roy Brewster		Marine Management Organisation
Mr Conor Donnelly		Natural England
Mr Neil Lake		Marine Management Organisation
Cllr Ken Sale		Suffolk County Council

### Eastern IFCA Officers Present:

Eden Hannam	Acting Chief Executive Officer (CEO)
Julian Gregory	Head of Marine Protection
Ron Jessop	Senior Research Officer
Judith Stoutt	Senior Marine Environment Officer

### Clerk

Mary Clancy

### MPA12/11 **Item 1: Welcome by the Chair**

The Chair welcomed members to the extraordinary meeting.

### MPA12/12 **Item 2: Apologies for Absence**

Apologies were received from Rob Spray, Roger Handford, Ceri Morgan, Tom Pinborough, Cllr Hilary Thompson and Koen Vanstaen

### MPA12/13 **Item 3: Declaration of members' interests**

Shane Bagley, Roy Brewster and Neil Lake declared that they had an interest in Item 4 as WFO1992 entitlement and lay holders and they did not take part in the vote on this item.

### MPA12/14 **Item 4: Damage to features of the Wash European Marine Site due to cockle fishing activities, and possible management options**

The Senior Research Officer presented the item using a Powerpoint presentation entitled 'Cockle fishing activities and possible management options'.

He told members that the letter sent to the fishing industry to open the 2012 Wash cockle fishery pointed out that the fishery was under continued scrutiny as a result of a legal challenge to the Eastern IFCA's management of it and reminded recipients of the restriction in the Wash Fishery Order 1992 preventing the use of equipment that fixed a vessel to the seabed or slowed its movement. He said also that a copy of the Code of Best Practice for the fishery had been included with the letter together with a warning

that the fishery could be closed if the Code was breached and the fishery was damaged. He reminded members that the Code of Best Practice had been developed jointly by the former Eastern Sea Fisheries Joint Committee, the fishing industry and Natural England.

This meeting had been called because Eastern IFCA officers inspecting of the fishery had found evidence of damage from vessels steaming off the sand before they were sufficiently afloat and from excessive prop-washing, in contravention of the Code. Officers also found that excessive numbers of cockles had been blown out and left uncollected on the sands.

The Senior Research Officer showed pictures taken on 22 June 2012 as examples of good practice in the fishery which contrasted with pictures taken elsewhere in the fishery on 20 and 22 June 2012 showing significant keel holes in the sand and excessive disturbance of cockles which had been left in heaps. He said that as cockles only survive one deep, there would be considerable morbidity in the heaps.

He said that inspections on 27 June 2012 showed fishers behaving much more responsibly and he showed pictures of good practice on that day. However, he also showed pictures taken on the same day showing holes in the sea bed in other areas, together with unspread cockles left when boats had moved on. The conclusion was that a minority of boats had uncovered an excessive amount of cockles and then left them uncollected and unspread.

The Senior Research Officer made it clear that it was not intended to recommend closure of the fishery at this meeting as this would not resolve the problem. However, officers wished to discuss with the Sub-Committee how to manage the minority of fishers who were behaving irresponsibly.

Roy Brewster referred to a letter to the Authority from the Boston Fishery Association about this matter. The Acting CEO said that he had received the letter on the morning of this meeting and he read the contents to the Sub-Committee.

The Boston Fishery Association said that the situation had been a consequence of the unexpected closure of the cockle fishery following the pollution incident in the River Nene and, had the fishery not been closed, the cockles left on the sands would have been cleared as part of the normal operation of the fishery. Following the re-opening of the fishery, boats had resumed work and found that many of the exposed cockles had survived and reburied themselves so that the Association assessed the damage to the cockles as minimal. The letter also confirmed that, since this issue had been raised, all boats had abided by the Code of Practice and would continue to do so in the future.

The Association pointed out that the fishing method used in the Wash had been successful for the last three years, with the cockle beds recovering well and many fishermen working successfully. This season, the fishery was providing a good living for nearly 40 boats – almost all the boats from Boston and King's Lynn - many carrying 3 men. This measured approach was preferable to a short dredge season where there was pressure to cut corners and take risks to be able to work every day and earn a year's money in a few weeks. The Association said that the four day working week with closures for small tides provided a safer fishery that also allowed the beds to recover during weekends and the closure periods. It also said that the 2000 tonne daily quota enabled processors to deal with catches and prevented the gluts of unprocessed cockles that occurred when too many were landed for the processors to manage. The

Association also confirmed that they shared the aims of the Eastern IFCA and Natural England for a sustainable, healthy fishery.

Mr Brewster said he understood that the Senior Research Officer was satisfied with the way the fishery had been operating this week. He also said he had asked for the fishery to be opened for an extra two days after the pollution closure so that fishers could catch up but was told this was not possible as there were insufficient fishery officers available for the extra days. The Senior Research Officer responded that he was satisfied with the way that most of the boats were operating but a minority were breaching the Code.

Mr Brewster also expressed the view that wind and bad weather contributed to sorting out the beds and spreading cockles that had been uncovered but Cllr Ken Sale was concerned that it should not be the normal practice of boats to uncover that volume of cockles and leave them unspread at the end of the day.

Conor Donnelly said that he agreed with Mr Brewster that the handworked cockle fishery had worked well for the last three years, and he also agreed with most of the sentiments expressed in the Boston Fishery Association's letter. However, he did not agree that it was acceptable to uncover more than the daily quota of 2000 tonnes of cockles and leave the excess on the sands, and he said that to do this was to breach the Code of Practice. Therefore, he could not agree with the Association's view that the Code was not being breached. He said the pictures of the large numbers of cockles that had been left to die were shocking. Mr Brewster responded that it was not in anyone's interest to waste cockles and he considered that there would not have been such an increase in the cockle population if the industry was wasting them.

The Head of Marine Protection pointed out that the decision to close the fishery after the incident in the Nene had been made by Defra on the advice of the Food Standards Agency, not by the Eastern IFCA. He had asked Eastern IFCA officers to tell as many fishers as possible that the fishery would be closed the following day so they would know that they would not be working. Neil Lake acknowledged that the closure was at short notice but he said they could have lost two days through bad weather, resulting in the same situation for the cockles. He agreed that the large volume of cockles should not have been left out at the end of the day but did not agree with the view that unspread cockles would re-bury themselves as there was research showing that they died if left in such conditions.

The Acting CEO said that the task of the Sub-Committee was to consider how to deal with a problem caused by a minority of fishers who were breaching the Code of Practice. Cllr Sale said that the fishing industry had to police itself as well as working with the Authority as people in the industry knew who the offending minority were. Both Cllr Sale and the Chair confirmed that the intention was not to close the fishery but to identify what could be done to prevent the problem occurring again.

Mr Donnelly said that the Code of Practice was not well understood by the industry; the practice of uncovering more than the daily tonnage of cockles and leaving the excess on the sands was a breach of the Code which clearly states that only the day's catch of cockles was to be uncovered and that if more were exposed, they were to be spread so that they could re-bury. He explained that, while cockles could survive if raked into wash circles, they would not survive in pits caused by boats moving off too soon, which was also a breach of the Code. Mr Lake said there was

research that indicated that cockles would not survive in the anoxic mud found in wash rings. Mr Donnelly said that this was not a problem in the Wash as the anoxic layers of mud were near the surface and did not build up as they were quickly moved away by the tide. Mr Brewster said that if spread cockles did not re-bury themselves, it would only be possible to fish each bed once and this was clearly not the case as the same sands were fished several times in a season.

The Senior Research Officer queried whether, given the density of the cockles this season, boats should be prop-washing for so long and whether fishers were shovelling the cockles rather than raking them. Shane Bagley said that the problem was caused by some fishers not spreading the cockles and he thought that Eastern IFCA officers should be dealing with this practice. He also felt that the high density of cockles led to more wastage than was the case when there were fewer; for example, the sea would cause some ridging of cockles if there was no fishing at all. Mr Bagley and Mr Brewster both thought that the Eastern IFCA should have more officers on the sands dealing directly with the minority of boats breaching the Code. The Head of Marine Protection said that the Eastern IFCA could not police the sands effectively without the fishers themselves helping by telling officers where to focus their attention.

Mr Donnelly said that prop-washing in sands with a high-density of cockles would result in heaps of cockles and he suggested that prop-washing should be restricted in these areas, in the same way that fishing in areas with a high juvenile population was restricted. However, Mr Brewster pointed out that restricting prop-washing would make hand-working uneconomical as fishers would be gathering sand with the cockles that would have been washed out by prop-washing. The Senior Research Officer added that this could also result in fishers not working the high density areas leading to high cockle mortality in these areas.

With the agreement of members, the Chair then opened the meeting to members of the public present and received the following comments:

- *John Lake Shellfish Ltd operated a successful dredge fishery in the Thames for many years and used to do the same in the Wash. Bigger boats are now being squeezed out of the Wash fishery as they cannot dredge. Bigger boats have more insurance and fuel costs and cannot make the 2000 tonne handworking quota pay. Would like to see 4000 tonne quotas as in the past, or independent quotas.*
- *Handworking allows sands to be fished year after year as the cockle beds recover. This would not be the case if the sands were dredged.*
- *Dredging does more damage than prop washing. Beds recover from prop washing but not from dredging.*
- *Darren Clark MEP: Rather than closing the fishery, there should be increased inspection to catch boats that are not abiding by the rules.* The Head of Marine Protection advised Mr Clark that the fishery had been reopened after the pollution incident and that Eastern IFCA officers were carrying out inspections but did not have the resources to be present on the sands at all times. He said that the fishers should tell the Authority if they knew who the culprits were.
- *The Wash is still one of the premier fisheries in England. The speaker would prefer to dredge but he did not think that this was an issue for this year's fishery. The die-offs were the issue to deal with and they were not caused by dredge fishing.*

The Sub-Committee then resumed its discussion. Mr Brewster said that the sands had changed completely over the last 30 years; in some areas, cockles had only appeared once. He had two of the biggest boats

registered and managed to make the handworked fishery pay last year and was doing so again this year. His boats were made for dredging and he would use this method of fishing if the Wash was a dredge fishery. Mr Lake said that the handworked fishery was more viable last year because the price of cockles was higher. Cllr Sale pointed out that this discussion was not about the method of fishing but about the damage to the fishery.

Mr Lake considered that the four day week for the fishery was a hindrance as boats should be able to go back the next day to collect any cockles that had been left out. Also, the long breaks made it difficult to predict the likely weather and when it would be possible for boats to go out again. He thought that the timetable for 2011 had been better.

The Acting CEO said more accuracy in recording which boat was on which buoy was required and marking the buoys with the relevant vessel number could achieve this. However, Mr Bagley said that boats do not always use the same buoys and reiterated his view that the key issue was the failure to spread the cockles. The Acting CEO that the holes in the sands caused by boats was a key issue as was the current legal scrutiny of the management of the Wash fishery. However, Mr Bagley said that pleasure boats could make holes in the sands and that he thought the Eastern IFCA should stand up more to the solicitors making the legal challenge.

Mr Donnelly said that the fishing industry should own the problem of keel damage caused by fishing boats. It should address this with the boats concerned and tell them that they are damaging the whole fishery. He thought they should also tell the Eastern IFCA so that it could take action. He reiterated that cockles left in heaps and pits in the sand are a problem as the pits do not recover quickly in the short term and it might be necessary to consider excluding the damaged sands from the fishery if they could not recover quickly. Mr Lake responded that a range of situations could result in unintended damage to the sands – in a heavy breeze, anchors can drag on the sands or boats can get caught by tides so that the only way to get off the sands was to use the propeller. The Head of Marine Protection pointed out that if 90% of fishers were complying with the Code of Practice and 10% were doing their best to do so, then further problems would be unlikely.

The Acting CEO proposed that the Eastern IFCA's enforcement focus would be changed to prevent further breaches of the Code and that officers should report the outcome to the next full Authority meeting on 25 July 2012. The Authority could then decide whether stronger action was required.

Mr Lake suggested that the fishery should be opened for more than four days per week to ensure that all the cockles uncovered were collected but the Acting CEO said that this would not deal with the breaches of the Code that had resulted in damage to the sands and more cockles being uncovered than could be collected or raked back in. Mr Donnelly emphasised the significance of the damage that had been caused to 30 hectares of sands and he was concerned about the ability of the deeply pitted areas to recover quickly from this damage. He suggested that the damaged areas could be excluded from the fishery but said he wished to get advice from marine experts at Natural England, as well as Eastern IFCA officers, about how best to deal with this problem.

Mr Lake was concerned that, in a previous year, 25,000 tonnes of cockles had died when only 5,000 tonnes had been fished and he felt that this wastage had been the result of the inability of the industry to collect more than the quotas when the density of the cockle population meant that

cockles were pushing each other out of the sands. However, Mr Donnelly reiterated that the damage caused to the sands by keel holes was a problem that had to be managed. The Head of Marine Protection asked whether Mr Donnelly was reassured by the improvement in behaviour of fishers since the damage was discovered. Mr Donnelly said that he was reassured, and he accepted that there would always be a rogue element. However, he thought the fishing industry needed to deal with non-compliance with the Code and not tolerate it. He said that he would consult with officers at Natural England to establish whether more fishing would affect the recovery of the damaged sands and would advise Eastern IFCA officers of the outcome. It would then be up to the Authority to decide what action to take.

Mr Brewster was concerned that, as Wrangle Sands was the area most vulnerable to the atypical mortality, there would be more die-off if the cockles were not fished and he thought the question was whether to fish the cockles or let them die. Mr Lake thought that the industry was being put in an impossible position if fishers were being told that the fishery will be shut if they need to use propellers. The Acting CEO made it clear that the meeting had not been called to shut the fishery, but that bad practice by a minority of fishers that caused damage to the sands could also cause the closure of the fishery if it continued. As it was, it might be necessary to separate out the damaged areas but officers would wait for the advice of Natural England about this.

It was resolved that:

- a) officers would closely monitor behaviour in the Wash fishery and focus enforcement on preventing further damage to the sands and identifying the culprits;
- b) subject to the need for earlier action, officers would report the outcome of monitoring and enforcement activity to the next full Authority meeting on 25 July 2012 and make recommendations for further action as required.

**MPA12/15 Item 5: Any other business**

There was no other business.

The meeting closed at 12.05 hours

## Marine Protected Areas Sub-Committee

*"EIFCA will lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economical benefits to ensure healthy seas, sustainable fisheries and a viable industry".*



An **Extraordinary Meeting** of the Marine Protected Areas Sub-Committee took place at the Eastern IFCA office, King's Lynn on Tuesday 2 October 2012 at 10.00 hours

### Members Present:

Cllr Tony Turner	Chair	Lincolnshire County Council
Mr Rob Spray	Vice-Chair	Marine Management Organisation
Mr Shane Bagley		Marine Management Organisation
Mr Roy Brewster		Marine Management Organisation
Mr Roger Handford		Environment Agency
Mr Neil Lake		Marine Management Organisation
Mr Ceri Morgan		Marine Management Organisation
Cllr Ken Sale		Suffolk County Council

### Eastern IFCA Officers Present:

Phil Haslam	Chief Executive Officer
Julian Gregory	Head of Marine Protection
Eden Hannam	Head of Marine Conservation
Ron Jessop	Senior Research Officer
Judith Stoutt	Senior Marine Environment Officer

### Also Present:

Emma Thorpe	Natural England
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### Clerk

Mary Clancy

### MPA12/16 **Item 1: Welcome by the Chair**

The Chair welcomed members to the extraordinary meeting, and he welcomed the CEO to his first meeting of the Sub-Committee.

### MPA12/17 **Item 2: Apologies for Absence**

Apologies were received from Conor Donnelly, Koen Vanstaen and Cllr Hilary Thompson.

### MPA12/18 **Item 3: Declaration of members' interests**

Shane Bagley, Roy Brewster and Neil Lake declared a pecuniary interest in item 4 as they are commercial fishermen working in the Wash and also entitlement and lay holders under the Wash Fisheries Order 1992. They did not take part in the vote on this item.

### MPA12/19 **Item 4: Management options regarding ridging out on the Roger Sands**

The Senior Research Officer tabled a map showing the exact location under discussion and made an oral report to the meeting. He said that the area is on Roger Sands and is 5.5 hectares in size. It was outside the area

covered by the spring cockle surveys but officers inspected it last week following a request to do so. They found 2010 and 2011 year class cockles in high densities of 2,580 per square metre, comparable with the densities on Wrangle Sands at the beginning of the season. There were also low densities of spat.

There was evidence of atypical mortality at a rate similar to that on Wrangle Sands – about one third of the adult population – but the rate of atypical mortality had dropped off. When officers went to Wrangle Sands a few days later they found that the mortality rate there had also dropped to about 0.5% per day.

The Senior Research Officer said that the cockles found in Roger Sands had reached 18mm in size and, at that size, would start to ridge out. Winter storms would also cause ridging out and, in addition, the growing spats will start to push the adult cockles out in the spring. He pointed out that younger cockles were better able to re-bury themselves than the older ones. Therefore, it was proposed to open an autumn handworked cockle fishery in this area of Roger Sands to prevent wastage of adult cockle stocks due to competition and the effects of ridging out.

The Senior Marine Environment Officer explained that an appropriate assessment for approval by Natural England would be required before the fishery could be opened. The area concerned was made up of intertidal mud flats and sand flats and was not appropriate for a suction dredge fishery. The assessment would look at the physical impact of fishing activity, the impact on juvenile cockles, the effect on the supply of food for over-wintering birds and the potential for disturbing feeding birds, causing them to scare or fly away at a time when their energy levels were low. This was important as Roger and Toft Sands are two of the core areas for overwintering birds. The impact on juvenile cockle stocks would be assessed taking into account the management needs of the Wash cockle fishery and the need to ensure an adequate supply of smaller cockles for feeding birds. The assessment would also look at the potential for disturbing common seals which are protected in the Wash. However, this was likely to be less of a concern as the seals' breeding season had passed, whereas overwintering birds started arriving in the Wash in September.

In response to a question from Tom Pinborough, the Senior Research Officer said there were 317 tonnes of adult cockles in the area under consideration. Mr Pinborough also asked when the adults would get pushed out and what was likely to be the rate of natural wastage. Members were told that, while cooling seawater would slow the rate of growth, the high densities of cockles in this area meant that there was little room in the beds and any growth would have the effect of pushing adult cockles out. This effect would be exacerbated by winter storms which also cause ridging. The Head of Marine Conservation said that 75%-90% of first year cockles can die off in winter but the main problem in this area would be juveniles ridging and pushing the adults out in the competition for space. A handworked fishery which used prop-washing would also wash juveniles out, given the densities, so prop-washing was unlikely to be permitted.

Roy Brewster said that the Boston fishermen were looking for a handworked, raked fishery that would not use prop-washing. He considered that taking the big cockles would allow the brood to spread and survive to next year. With a tonnage of 300-odd, the fishery would be finished by early December.

Mr Pinborough was concerned about the impact on other Eastern IFCA priorities of a new cockle fishery, particularly if it tied up research and enforcement resources. The Head of Marine Protection said that officers had planned for additional enforcement needs resulting from the reopening of the Wrangle cockle fishery and so the impact of this additional fishery could be absorbed. The CEO said that there was flexibility to accommodate the additional fishery without hazarding any of the Authority's priorities.

The Head of Marine Conservation said that the TAC was likely to be about 300 tonnes. It would take into account the need to leave a proportion of the adult cockles that had survived the atypical mortality as they might have developed resistance which should be preserved in the gene pool for the future. It would also be possible to define the limits of the area to be fished as had been done for the Wrangle Sands fishery. Officers would monitor the area vigorously for evidence of holes, prop-washing or any other damage which would lead to the immediate closure of the fishery.

Roger Handford asked whether there was a precedent for opening a fishery at this time of year in a protected site as he was concerned about disturbance to birds. The Senior Marine Environment Officer said that the handworked cockle fishery had been extended through the autumn months in the past. While birds arrive in numbers from September, Roger and Toft Sands were not the only core feeding areas in the Wash and the supply of cockles and mussels tended to determine where the birds fed. However, Natural England and Eastern IFCA officers will look at the overall impact on birds in the Wash as part of the appropriate assessment.

Neil Lake said there were no ridged out cockles on Roger Sands at the moment but, while he agreed that some adults would be pushed out next spring, he did not agree that there was any significant cockle growth during the autumn and winter. Mr Brewster said that cockle growth slowed when the water temperature reduced, generally during September and October; in the winter, dormant cockles survived by feeding on their own fat.

Shane Bagley was concerned that, at five hectares, the area to be fished was quite small and there would not be room for all the boats to moor within the area. The Head of Marine Conservation said that, as the area was next to the Wrangle Sands fishery, officers hoped that boats would work across both sites. The Senior Research Officer said that boats required less space when they were not prop-washing. Mr Bagley asked whether boats would be penalised for being outside the defined fishing area and the CEO said that officers would use a common sense approach if the area proved too small for the number of boats. Officers would expect boats to position themselves as close as possible to where they were working but would take into account their ability to do this.

Mr Handford asked about the timescale for opening the fishery. The Head of Marine Conservation said officers were in the process of drafting the appropriate assessment and it would take Natural England between three days and one week to deal with it. Officers would write to the fishing industry next week explaining that a fishery on the Roger Sands was being considered and, when the assessment had been approved, the industry would receive a further letter setting out the terms of the fishery and giving seven days notice of the opening date.

**Members resolved that:**

- a) The CEO should proceed as necessary to open a cockle fishery in the area set out in the tabled map, subject to an Appropriate Assessment including the advice of Natural England.**
- b) The CEO should manage the fishery to ensure a viable balance between the interests of marine conservation and those of the fishing industry, taking any steps necessary to maintain that balance.**

**Proposed:** Cllr Ken Sale

**Seconded:** Rob Spray

**MPA12/20 Item 5: Any other urgent business**

There was no other business.

The meeting closed at 10.45 hours

**Vision**

Inshore Fisheries and Conservation Authorities will lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry.

**Item Number: 6**

**6<sup>th</sup> December 2012**

### **Management of the Wash inter-tidal mussel fishery**

**Proposal:** This paper describes the results of the inter-tidal mussel surveys recently conducted by the Authority and Officers' recommendations for the 2012-2013 mussel fishery based on those results. Authority Members are asked to consider the recommendations and to agree on the management measures for the forthcoming fishery.

#### **Issue Statement:**

The inter-tidal mussel stocks within the regulated beds of the Wash provide a valuable resource for local fishermen, particularly as a source of seed for relaying onto the several fishery lays. These beds are also of environmental importance, providing an essential food source for over-wintering bird populations. In 2007 the Authority's predecessor, ESFJC, introduced a suite of fisheries management policies that would enable the Wash shellfisheries to operate whilst achieving and sustaining favourable condition status of the SSSI. The Officers' proposals in this paper take into account these policies, providing a source of seed for the fishermen while not have a detrimental impact on the environmental features of the SSSI.

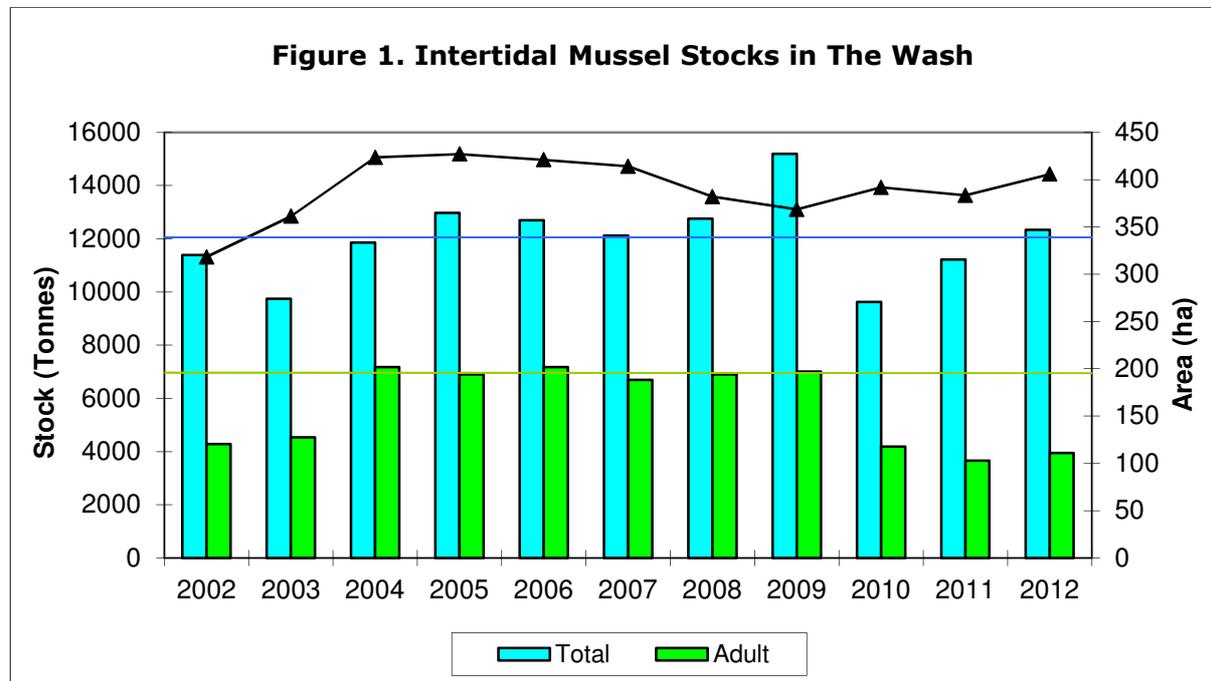
#### **Background:**

The Authority conducts annual surveys on the inter-tidal mussel beds within the regulated fishery of the Wash. The results of these surveys are used to inform the management process that determines the measures for the forthcoming mussel fisheries.

Following a crash of the stocks in the 1990s, draconian management measures were implemented that helped the stocks recover during the 2000s. This recovery was greatly facilitated by an exceptional settlement of mussel spat in 2001 that rejuvenated the existing beds and colonised several new areas. In 2009 the surveys found the stocks had recovered to a recent peak of 15,188 tonnes. When surveyed in 2010 the stocks were found to have declined dramatically to 9,626 tonnes, most likely the result of infection by the parasite, *Mytilicola intestinalis*. A good settlement of new seed within the beds during 2011 helped the stocks to increase to 11,204 tonnes. Although this was not sufficient to satisfy Natural England's Conservation Objective target of 12,000 tonnes for the site, officers felt that growth of the abundant spat on the beds would enable this target to be achieved by 2012. This enabled the Authority to open some of the beds to the relaying fishery during the autumn.

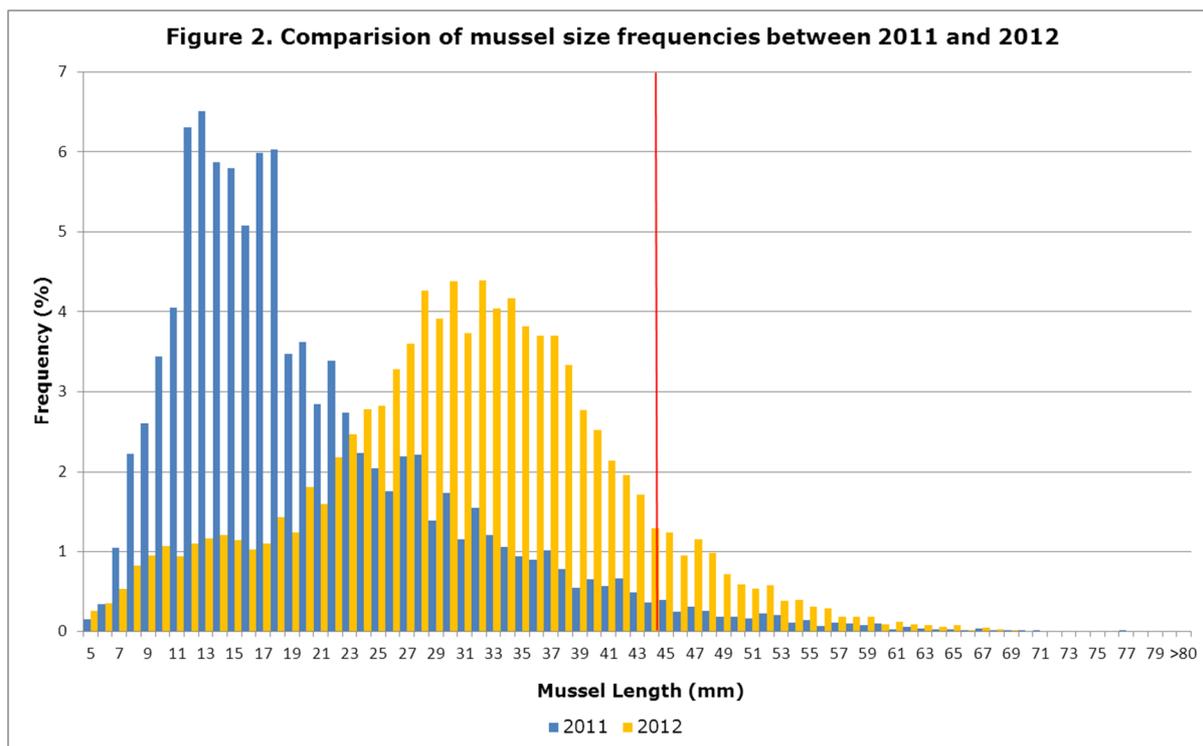
The 2012 surveys were conducted between September 19<sup>th</sup> and November 17<sup>th</sup>. During this period, 19 areas of mussel bed, plus the Welland Bank, were surveyed. A chart showing the location of the surveyed beds (Figure 3) and a summary table (Figure 4) of the stocks have been included in this correspondence. These surveys found the anticipated growth of the 2011 year-class juveniles had helped the stocks increase to 12,338 tonnes. Of these, 3,942 tonnes were found to have attained the Minimum

Landing Size (MLS) of 45mm length. This figure, while an improvement to the 3,664 tonnes recorded in 2011, is well below the Conservation Objective target of 7,000 tonnes for mussels of this size. Figure 1 shows the stock levels on the inter-tidal beds in the regulated fishery since 2002 and how they compare to the Conservation Objective targets.



Although overall the stocks have increased by 1,134 tonnes during the past year, this recovery has not been universal across all of the beds. On those beds that had benefited from good recruitment in either 2010 or 2011, the beds appeared healthy and rejuvenated. By contrast, beds that had not benefited from recent settlements were found to be in poor condition, with mortality exceeding recruitment and growth. This was particularly noticeable on beds that had been dominated in the past with larger, older mussels. On some of these, such as Pandora, Shellridge, East Mare Tail, Roger and Main End, where recruitment has been poor for several years, the beds now only support scattered mussel clumps amid old scars of dead shell. Without fresh recruitment soon, these beds are highly vulnerable to being lost. Worryingly, the Gat beds have been found to have suffered steep declines, too, in recent years, declining from a combined stock of 5,604 tonnes in 2009 to a present stock of 1,413 tonnes. The Trial Bank bed, which had supported the majority of the fishing effort during the autumn dredge fishery, showed signs of heavy disturbance with large bare patches now present within the bed. The stocks on this bed were found to have declined from 1,352 tonnes in 2011 to 585 tonnes. This 767 tonnes reduction greatly exceeded the 334 tonnes reported in fisheries data returns as having been harvested from this bed.

Whereas there had been a good settlement of seed during 2011, recruitment was found to have been poor on most of the beds during 2012. This can be seen in figure 2, which compares the mussel size frequencies on the regulated beds in 2011 and 2012. Although the current population size structure indicates there should be some increase to the overall mussel biomass over the coming year, this is not expected to be as high as during the past year.



**Comment and recommendations**

Exploitation level

The Conservation Objectives set by Natural England for the Wash stipulate that the total mussel stocks on the intertidal beds should not fall below 12,000 tonnes and the adult stocks (mussels  $\geq 45$ mm length) below 7,000 tonnes. The Management Policies introduced in 2007 by ESFJC to help achieve the Conservation Objectives only allow fisheries to proceed below the Conservation Objective targets in specific circumstances. Such fisheries are only permissible when it can be demonstrated that the growth of juvenile mussels on the beds will enable the Conservation Objective targets to be achieved by the following year's survey. Table 1 shows how the current levels of stock compare to the Conservation Objective and Management Policy targets.

**Table 1 – Current mussel stocks compared to Conservation Objective and Management Policy targets (figures in tonnes)**

	Current stock	Conservation Objective	Management Policy
Total mussel stock	12,338	12,000	10,000
Adult Stock ( $\geq 45$ mm)	3,942	7,000	5,000
Juvenile stock (<45mm)	8,396		5,000

These figures show the stock of adult ( $\geq 45$ mm length) mussels are currently well below the Conservation Objective target of 7,000 tonnes. Although smaller mussels will recruit into this population during the course of the coming year, this is unlikely to offset natural mortality sufficiently for the Conservation Objective target to be achieved. As such, the officers recommend that no adult mussels should be harvested from the regulated beds this year.

With the juvenile stocks above the Management Policy target of 5,000 tonnes, and the total mussel stock above the 12,000 tonnes Conservation Objective target, there is an

opportunity to support a relaying fishery of juvenile mussels. The policies allow for a maximum Total Allowable Catch (TAC) of 20% of the juvenile population for the dredge fishery and an additional 2% of the juvenile population for the hand-worked fishery. This would potentially allow fisheries as high as 1,679 tonnes for the dredge fishery and 168 tonnes for the hand-worked fishery. This level of exploitation, however, would reduce the total mussel stock to 10,491 tonnes. With only low levels of rapid-growing year-0 mussels in the population, the stocks would be unlikely to recover sufficiently from this level of exploitation to achieve the Conservation Objective target in 2013. In order to achieve the Conservation Objective target in 2013, the officers recommend that any agreed fisheries for 2013 should be conservative and not reduce the total mussel stocks below 11,250 tonnes. This would sustain a dredge fishery of 878 tonnes and a hand-worked fishery of 88 tonnes.

When determining the size of the 2012-2013 mussel fishery, consideration should also be given to the impact it could have on the 2013 cockle fishery. When determining the size of the cockle fishery, sufficient combined stocks of cockles and mussels must be present to support the over-wintering bird populations. Because in those calculations the energy the birds gain from each tonne of mussels is approximately double the amount they gain from 1 tonne of cockles, reducing the mussel biomass can have a significant impact on the cockle TAC when stocks are low.

#### Beds to be opened

In order to protect the structure of the existing beds, Management Policies prevent exploitation of individual beds below an average stock density of 25 tonnes/hectare. Having studied stock densities on the intertidal beds over a number of years, this figure appears to be the level below which recovery is very slow, leaving the bed vulnerable to complete loss. Table 2 shows which beds currently have densities that exceed 25 tonnes/hectare.

**Table 2 – Details of the beds that currently exceed a mean mussel density of 25 tonnes/hectare.**

Bed	Area	Total Stock (tonnes)	Mean Density (tonnes/ha)	% Biomass Juveniles	Maximum Exploitation (tonnes)
Toft	44.5	2,234	50.5	28.4	
Roger	1.3	41	31.5	22.0	
Mare Tail North	63.3	2,644	41.8	76.8	1,063
Holbeach	11.8	741	62.8	93.3	446
West Breast	17.5	585	33.4	91.3	147
East Breast	27.4	1,066	38.9	90.7	381
Blackshore	23.2	852	36.7	82.4	271
Pandora	7.2	279	38.8	6.8	

It can be seen from table 2 that eight beds have mean densities exceeding 25 tonnes/hectare. In order to minimise disturbance to the adult mussel stocks, any potential relaying fishery should be restricted to beds that have a minimum juvenile biomass of at least 70%. This would restrict the fishery to the North Mare Tail, Holbeach, West Breast, East Breast and Blackshore beds (highlighted). The maximum exploitation column in the table shows how many mussels could potentially be removed from each bed before their mean density fell below 25 tonnes/hectare. Together, these beds could theoretically contribute 2,308 tonnes towards a potential fishery, more than enough to support a fishery of 966 tonnes.

### Opening/Closing dates

The Officers recommend that the opening date for the fishery should be determined following consultation/feedback from the industry. Natural England will be formally notified of the Authority's intentions through the submission of an Appropriate Assessment detailing the proposed mussel fishery activities. The opening date for the fishery may depend on the time taken for Natural England to provide a response to the Authority's proposals and whether Natural England agrees that the proposal would not have an adverse effect on the integrity of the European Marine Site.

The fishery would close on the exhaustion of the quota, or on 31<sup>st</sup> August 2013 whichever was soonest, or when otherwise directed by the CEO.

### Opening Times

Officers recommend that the dredged fishery should open on a five days a week basis, 00:01 hours on Monday to 23:59 hours on Friday. The handwork fishery would open on a seven days a week basis.

### Maximum Daily Quota

The daily quota of mussels any vessel may take from the regulated beds as part of the Relaying Mussel Fishery is restricted by Regulation No.2 of the Wash Fishery Order 1992 to 8,000 kg/day. Accordingly, the maximum daily vessel quota is set at 8,000 kg.

### **Consultation:**

It is proposed to consult with the Wash Fishery Order 1992 entitlement holders and local Fishermen's Associations regarding their opinions of the proposed dredged and hand-worked relaying fisheries. The information will also be forwarded to other significant stakeholders and placed on our website.

### **Financial implications:**

The Authority has already planned for its resources to include an annual mussel survey and fishery. No additional change is foreseen at this time.

### **Regulatory implications:**

There is no proposed regulatory change. Authority staff members will be involved in enforcing the management measures.

**Publicity:** All Wash Fishery Order 1992 entitlement holders and local Fishermen's Associations will be informed in writing of the decision. These will also be published on the Authority's website.

### **Resolutions:**

#### **Members are asked to:**

##### **a) Note:**

- **The results of the 2012 autumn surveys described above and shown in attached summary table (Figure 3).**
- **That the survey results show the total mussel biomass has achieved the SSSI Conservation Objective target but the adult mussel biomass is below the SSSI Conservation Objective target.**
- **That although Shellfish Management Policies would allow for a Relaying Fishery with a maximum TAC of 1,679 tonnes for the dredge fishery and 168 tonnes for the hand-worked fishery, this level of exploitation would reduce the total mussel stock to 10,491 tonnes.**

- That this figure is below the threshold of 12,000 tonnes as set out in the SSSI Conservation Objectives.

**b) Agree:**

- That there are insufficient adult mussel stocks to support a harvestable fishery, but sufficient juvenile mussel stocks to support a seed mussel relaying fishery.
- With the officers' recommendation that, provided the total mussel biomass is not fished below 11,250 tonnes, it is possible to go slightly below the 12,000 tonnes threshold and still recover sufficiently to achieve the SSSI Conservation Objective target in 2013.
- To open a Relaying Fishery for the 2012/2013 season with a maximum TAC of 878 tonnes for the dredge fishery and 88 tonnes for the hand-worked fishery.
- To open the following beds to the 2012/2013 relaying fishery with the following maximum exploitation rates for each bed:

Bed	Maximum Exploitation (tonnes)
Mare Tail North	1,063
Holbeach	446
West Breast	147
East Breast	381
Blackshore	271

- Devolve to the CEO the authority to open the dredge and hand-worked fisheries at appropriate dates following consultation with the industry.
- That the CEO can close the dredge and hand-worked relaying fisheries on:
  - either August 31<sup>st</sup> 2013;
  - when their respective quotas are exhausted; or
  - disturbance to the beds is determined to be excessive.
- The dredge mussel fishery should be opened on a five days a week basis, 00:01 hours on Monday to 23:59 hours on Friday and the handwork fishery would open on a seven days a week basis.
- The daily vessel quota should be 8,000 kg/day.

Ron Jessop  
Senior Research Officer  
26 November 2012

**List of Back ground papers**

1. Chart showing the mussel beds surveyed during 2012 (figure 3) *enclosed*
2. Table summarising the survey results (figure 4) *enclosed*
3. Charts showing the beds proposed to be opened to the 2012/2013 fisheries (figures 5-8) *enclosed*

**Figure 3. Distribution of Intertidal Mussel Beds Surveyed in 2012**

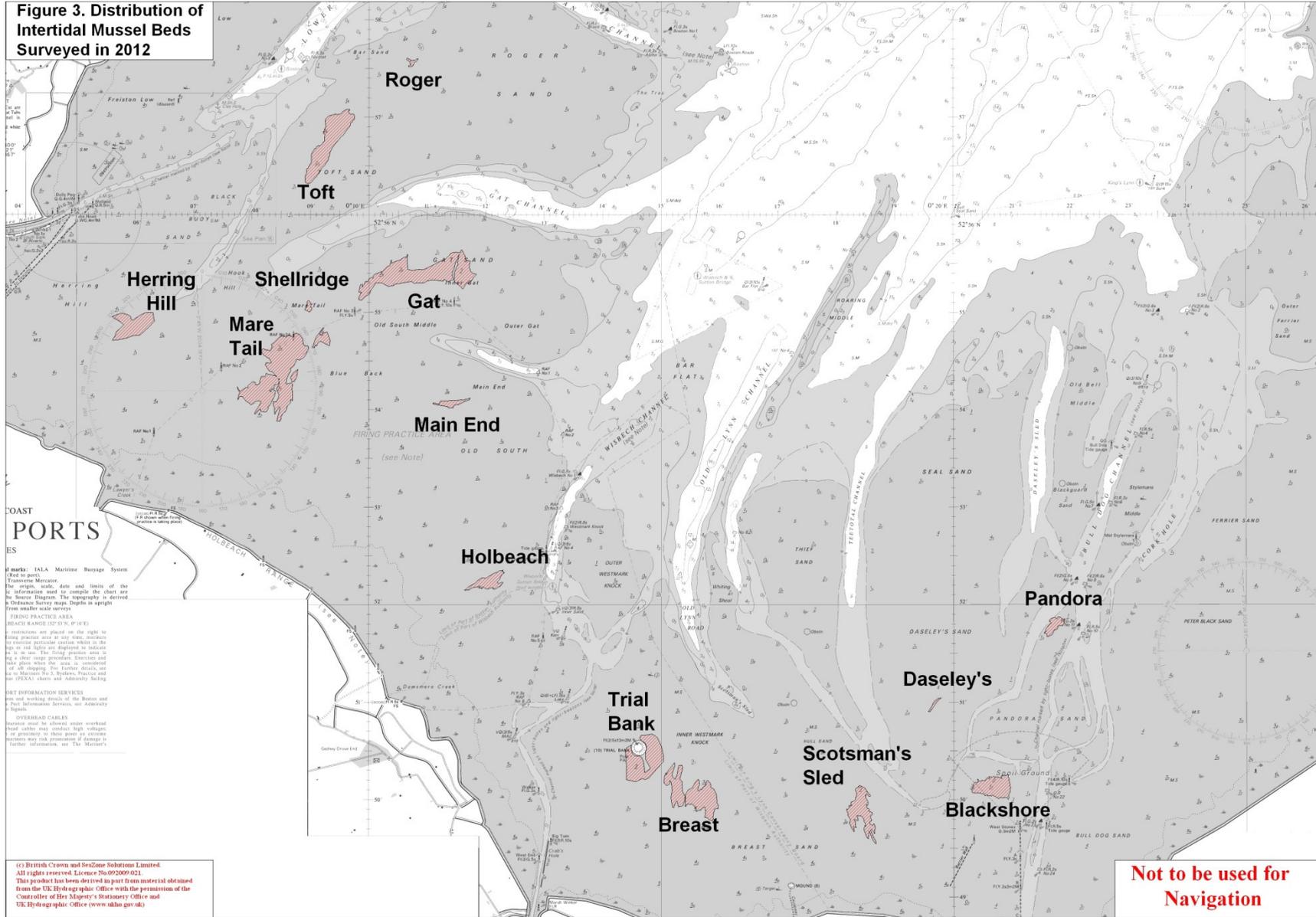
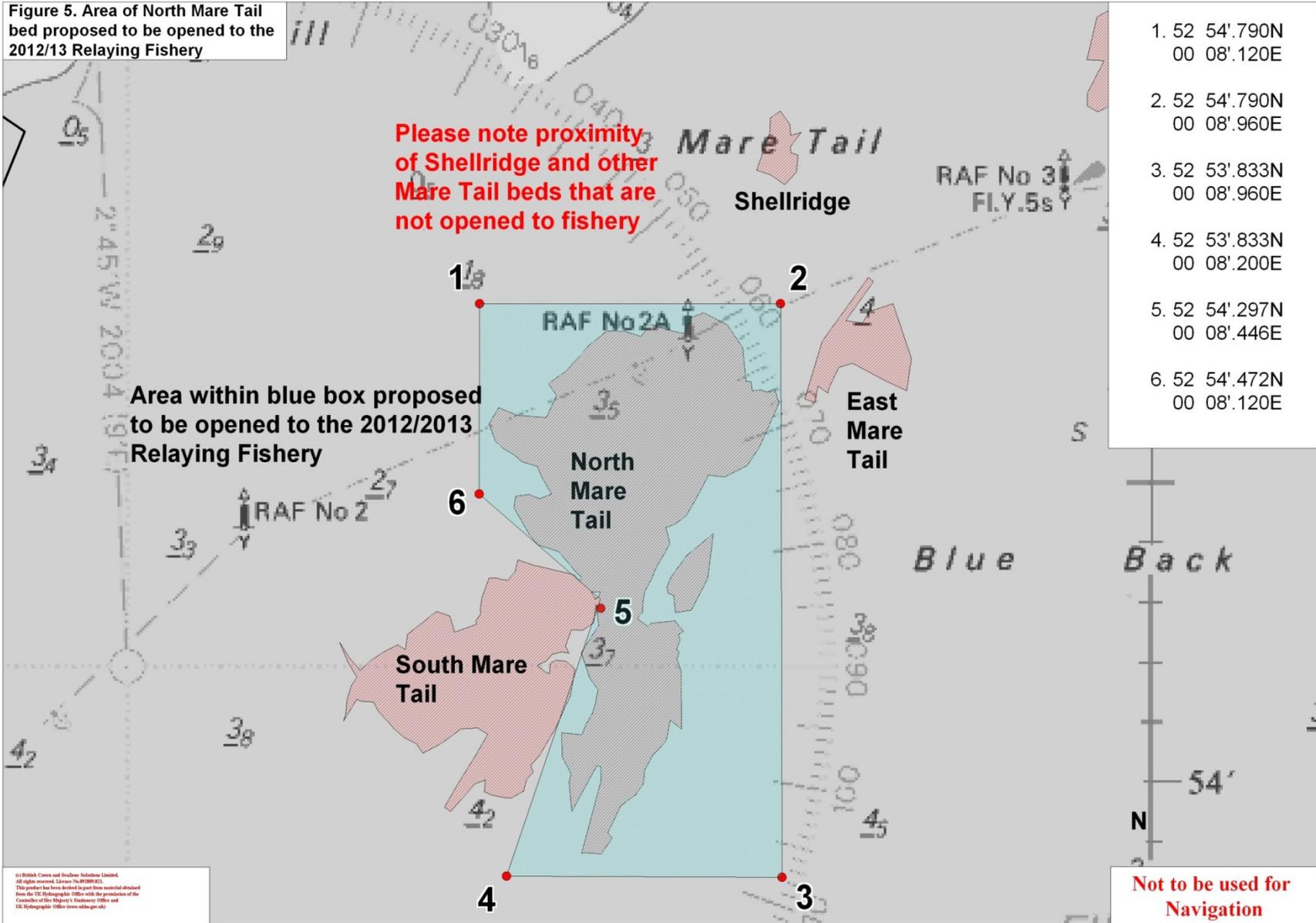


Figure 4 - Summary of the Wash inter-tidal mussel stocks - 2012

BED	2012							2011	
	AREA	COVERAGE	DENSITY	TOTAL STOCK	STOCK >45MM	% >45MM	Tonnes/ha	TOTAL STOCK	% CHANGE
Mare Tail North	63.3	38	1.1	2644	613	23.2	41.8	1701	55.4
Mare Tail South	29.8	27	0.76	615	37	6.0	20.6	716	-14.1
Mare Tail East	5.5	29	0.64	102	43	42.2	18.5	44	131.8
Shellridge	1.7	12	0.045	8	5	62.5	4.7	13	-38.5
Toft	44.5	33	1.582	2234	1600	71.6	50.2	2106	6.1
Roger	1.3	37	0.83	41	32	78.0	31.5	32	28.1
Gat, West	34.5	30	0.52	539	203	37.7	15.6	1088	-50.5
Gat, Mid	25.4	27	0.84	566	333	58.8	22.3	737	-23.2
Gat, East	16.1	34	0.56	308	206	66.9	19.1	152	102.6
Main End	5.2	29	0.58	88	75	85.2	16.9	36	144.4
Holbeach	11.8	47	1.34	741	50	6.7	62.8	584	26.9
Herring Hill	25.4	38	0.71	693	5	0.7	27.3	293	136.5
Trial Bank	39.3	12	1.21	585	81	13.8	14.9	1352	-56.7
Breast, West	17.5	32	1.03	585	51	8.7	33.4	282	107.4
Breast, East	27.4	29	1.33	1066	99	9.3	38.9	815	30.8
Scotsman's Sled, East	25.44	16	0.91	369	95	25.7	14.5	294	25.5
Daseley's	1.3	24	0.76	23	4	17.4	17.7	42	-45.2
Blackshore	23.2	30	1.21	852	150	17.6	36.7	759	12.3
Pandora	7.2	36	1.08	279	260	93.2	38.8	158	76.6
<b>TOTAL</b>	<b>405.84</b>			<b>12338</b>	<b>3942</b>	<b>32.0</b>	<b>30.4</b>	<b>11204</b>	<b>10.1</b>
Welland Bank	2.2	83	2.19	369	232	62.9	264.2	418	-11.7

Figure 5. Area of North Mare Tail bed proposed to be opened to the 2012/13 Relaying Fishery



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Figure 6. Area of Holbeach bed proposed to be opened to the 2012/13 Relaying Fishery

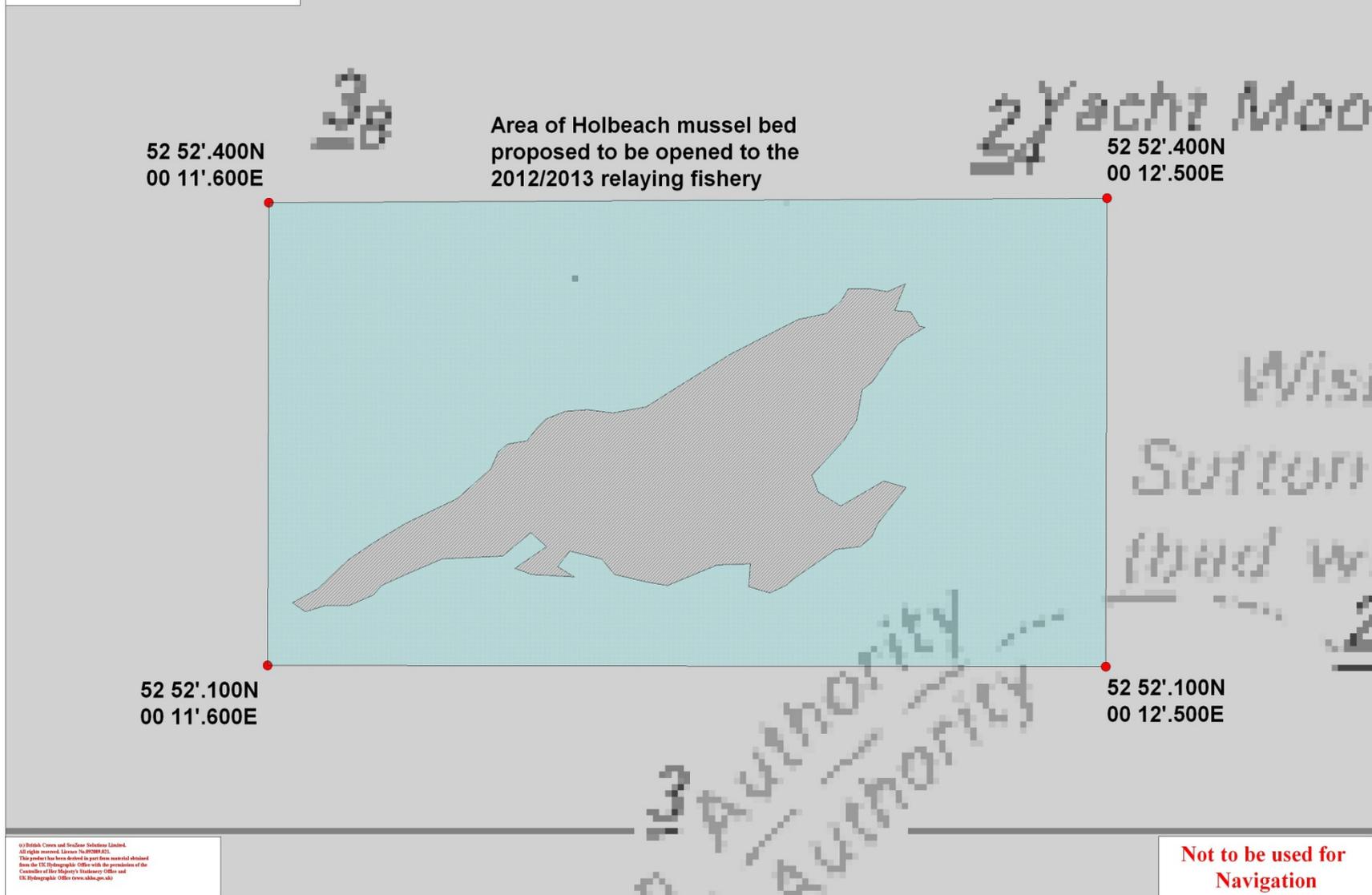
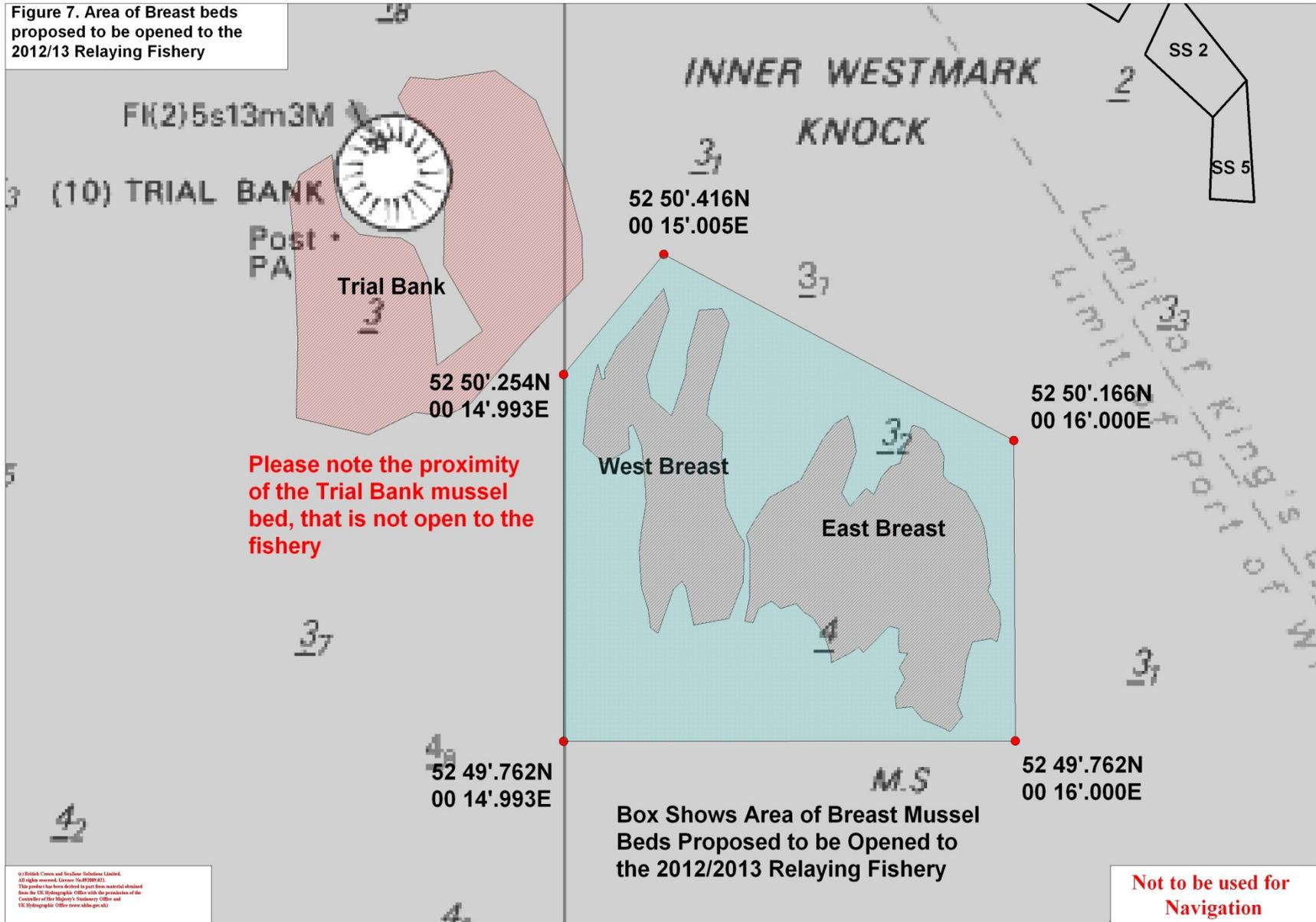


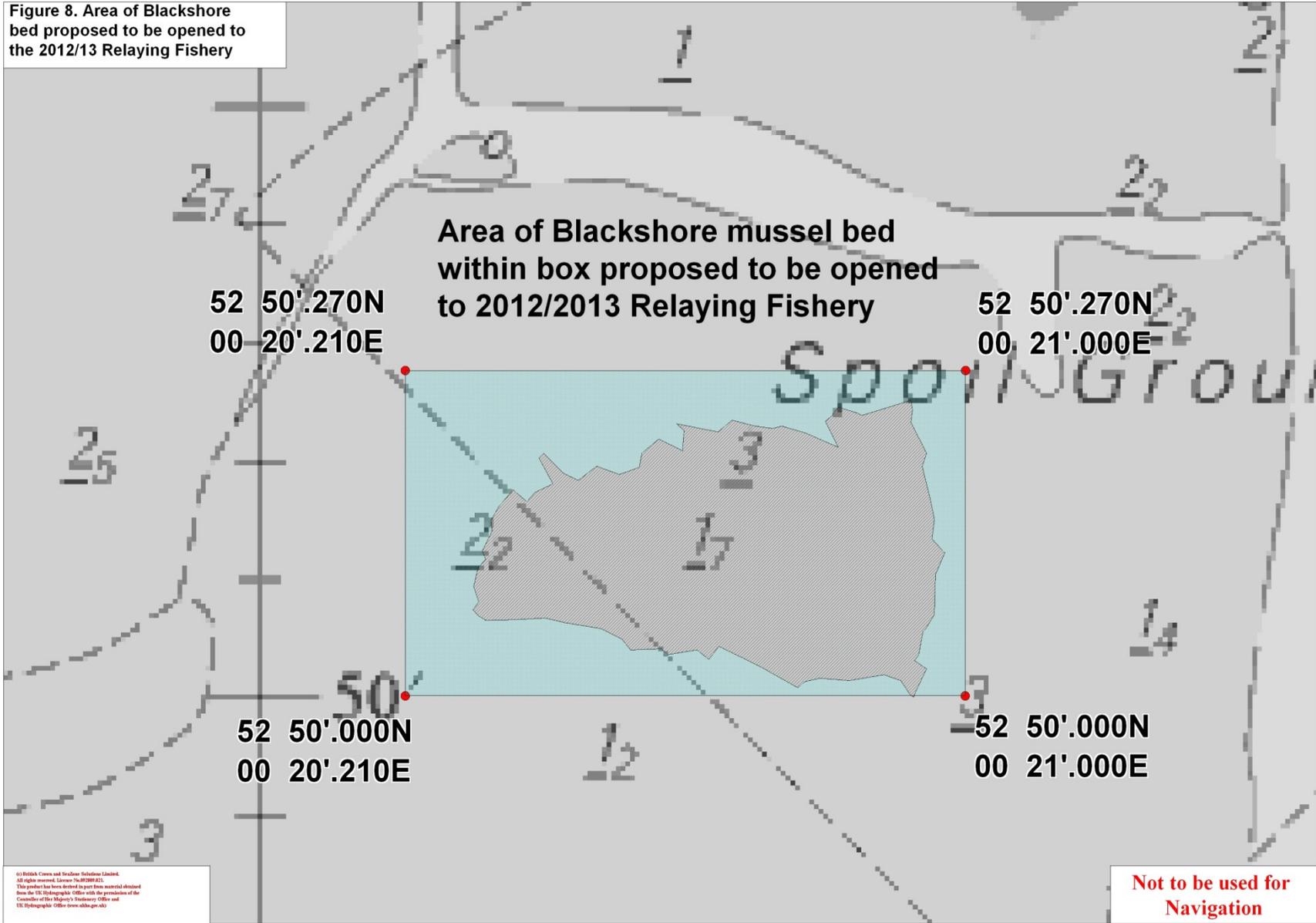
Figure 7. Area of Breast beds proposed to be opened to the 2012/13 Relaying Fishery



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Figure 8. Area of Blackshore bed proposed to be opened to the 2012/13 Relaying Fishery



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Navigation



**Vision**

Inshore Fisheries and Conservation Authorities will lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry.

**6 December 2012**

**Review of Wash Fishery Order lay consents**

**Proposal:** It is proposed that members of the Sub-Committee note progress made towards the review of Wash Fishery Order lay consents.

**Problem/Issue Statement:** The Authority has suspended the issue or renewal of Wash Fishery Order leases to enable officers to undertake a Habitats Regulations review of these consents. The review needs to be completed before the Authority starts a restraints study to identify additional areas for lays. The Authority is not accepting new applications until this is completed.

**Back ground:** Wash Fishery Order leases are issued by the Authority on behalf of the Crown Estate, for the purpose of shellfish cultivation. The majority of leases were due for renewal in 2011. The act of granting a WFO lease, and the renewal of such a lease, is regarded as consenting a plan or project under the Habitats Regulations 2010. The Authority therefore has a duty to assess the impact of shellfish cultivation on the protected habitats and species of the Wash and North Norfolk Coast Special Area of Conservation, and The Wash Special Protection Area, before renewing the leases. The Authority's predecessor organisation, Eastern Sea Fisheries Joint Committee, undertook a comprehensive review of leases in 2008 – a retrospective assessment of the initial granting of leases. The current review considers issues highlighted by Natural England as needing re-visiting or further consideration.

**Comment and recommendations:** The Authority's marine environment team are continuing to progress the review of consents. Following Natural England's scoping advice, the review has considered the following categories:

- Background information on mussel cultivation practice in the Wash;
- Location of leased areas (lays) in relation to natural mussel beds;
- Phytoplankton and nutrient levels;
- Atypical cockle mortality;
- Changes to sediment types and biotopes;
- Introduction of non-native species;
- In-combination effects with wind farm cable laying, port dredging and disposal, and Regulated fishing activities.

Officers are finalising the first draft of the review for submission to Natural England. Officers are aiming to submit the review by the end of November 2012, and anticipate receiving advice from Natural England in late December 2012/early January 2013, for consideration by the full Authority in late January 2013.

**Financial implications:** Depending on the outcome of the review, the Authority will renew, modify or revoke the existing lay leases. An annual fee is taken from leaseholders and held in the Wash Fishery Order fund, managed by the Authority. The

Authority is currently not accepting new applications for lay consents to allow this work and the restraints study to be completed.

**Publicity:** Wash fishermen have been informed of progress on the current review at the community engagement meetings. Further updates will be provided when Natural England's advice on the review is received.

### **Recommendations**

It is recommended that the Authority;

- 1. Note the progress made towards the review of Wash Fishery Order lease consents;**
- 2. Agree that the next step of the review is for the document to be presented to Natural England;**
- 3. Request that the Senior Marine Officer report back at the Authority meeting in January 2013 with the outcomes of the final review, including any comments by Natural England or the wider stakeholders.**

Judith Stoutt  
Senior Marine Environment Officer

28<sup>th</sup> November 2012

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**Marine Protected Areas Sub-Committee**

**6 December 2012**

**Item Number: 8**

**Review of 2012 Cockle Fishery**

**Proposal:** That the Marine Protected Areas (MPA) Sub-Committee review the 2012 Cockle fishery and note the breaches of good practice that have occurred and that the detail is passed to the Regulatory and Compliance Sub-Committee for consideration.

**Problem/Issue Statement:** The management of the Wash fishery has been the subject of on-going scrutiny as a consequence of a legal challenge based upon alleged damage to the environment caused by a hand-worked cockle fishery. During the 2012 season there have been two instances where the behaviour of a small minority of fishers has precipitated action from Eastern IFCA. The ability of the industry to comply with management measures and the Code of Best Practice is likely to be a consideration for both the Marine Protected Areas and the Regulatory and Compliance Sub-Committees.

**Background:** The management of the Wash cockle fishery has been under scrutiny as a consequence of correspondence from a solicitor acting upon behalf of an un-named client. The correspondence concerned allegations about the management of the Wash cockle fisheries over the past three years and alleged that the hand-worked cockle fishing industry in the Wash is damaging the marine environment and that, by allowing this industry to continue, the Eastern IFCA is in breach of its legal obligation to protect the area. Eastern IFCA officers have carefully examined the evidence provided by the solicitors but do not find it to have any substance. Natural England has supported the Eastern IFCA's approach to managing the cockle fishery over the past three years and has informed the solicitors of this. However, the solicitors continued to make the same allegations. The matter was considered at the Eastern IFCA statutory meeting of 25<sup>th</sup> April 2012 (EIFCA 12/38 Item 17 refers).

The Wash cockle fishery was opened on 7<sup>th</sup> June 2012 and was a hand worked fishery. During the season there were two occasions when the behaviour of a minority of fishers resulted in action by Eastern IFCA officers. The first issue arose following inspection of the Wrangle sand by Eastern IFCA officers on 20<sup>th</sup> June when evidence of excessive 'prop washing', causing mounds of excessive quantities of cockle, and deep keel marks were discovered. Such was the level of concern about the environmental damage that an emergency meeting of the MPA Sub-Committee was convened on 29<sup>th</sup> June 2012, where it was acknowledged that a minority of fishers were responsible for the damage. It was resolved to monitor behaviour in the Wash fishery and to focus enforcement on preventing further damage to the sands and to identifying who was responsible. It was also resolved to report back to the next statutory meeting on 25<sup>th</sup> July 2012 (MPA 21/14 refers).

At the Eastern IFCA statutory meeting on 25<sup>th</sup> July 2012 it was noted that the situation had improved and that there had been no lasting damage to the sands. Natural England advised that it did not consider that the disturbance observed in June had caused an adverse impact on the sands or had resulted in a level of cockle wastage that would affect the supply available for birds in the Wash Special Protection Area. It was resolved that the Wash hand worked cockle fishery should continue and to ask officers to continue to explore and develop enhanced management measures for the Wash cockle fishery (EIFCA 12/67 refers).

The second issue relates to the fishery on the Roger Sand, which was opened on 16<sup>th</sup> October 2012 on the basis that it was to be a hand-worked fishery only with no 'prop washing' or 'blowing out' being allowed. The fishery was closed on 20<sup>th</sup> November 2012 as a consequence of evidence of 'prop washing' and non-compliance with the Cockle Charter (keel marks) being discovered by Eastern IFCA officers during an inspection of the sand. It was again judged that a minority of fishers were responsible for the inappropriate activity.

**Comment and recommendations:** Whilst it was concluded that the first instance of inappropriate behaviour did not result in permanent damage to the sands or to the availability of food for birds it still represents a failure, on the part of some elements of the industry, to fish responsibly and to recognise the potential consequences of their actions. Furthermore, it represents a disregard for the management measures proposed and unanimously agreed to at the MPA sub-committee of 2 October 2012.

It is acknowledged that it is probable that it is only a small minority of fishers that are liable for the inappropriate behaviour in both cases. However, the ability of the industry to work with Eastern IFCA and to comply with management measures and the voluntary Code of Best Practice for Hand-worked Cockle Fisheries is an important factor when taking decisions that affect the fishery. It is also relevant when undertaking the review of Eastern IFCA byelaws and considering any aspect of the regulatory framework. As a consequence it is recommended that the MPA Sub-Committee note the content of this paper and pass it to the Regulatory and Compliance Sub-Committee for their consideration.

**Regulatory Implications:** The inappropriate activity described in this paper does not constitute an offence under existing byelaws or the current provisions of the Wash Fishery Order. As a result any consequences are applied to all engaged in a fishery (e.g. closure of the Roger Sands) and individuals are not held to account for their actions. This is a relevant consideration for the byelaw review and any review of the Wash Fishery Order.

**Recommendation:**

**Members are asked to note the content of this report and to pass it to the Regulatory and Compliance Sub-Committee for their consideration as part of the byelaw review process.**

Julian Gregory  
Head of Marine Protection

**List of Background papers**

5<sup>th</sup> Eastern IFCA 25<sup>th</sup> April 2012: Minute EIFCA 12/38 Item 17  
MPA sub-committee 29<sup>th</sup> June 2012: Unconfirmed minute MPA 21/14  
6<sup>th</sup> Eastern IFCA 25<sup>th</sup> July 2011: Minute EIFCA12/67 Item 13