

## **MSC Surveillance Report**

**For The**

**Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery  
and the linked  
Northern Ireland Grown Bottom Mussel (*Mytilus edulis*) Fishery**

**Facilitated By The**

**The Cross Border Aquaculture Initiative (CBAIT)  
And  
The Department of Rural Development Northern Ireland (DARD),  
and Bord Iascaigh Mhara (BIM)**

Assessors: **Géraldine Criquet, Lead Assessor  
Fergal Guilfoyle, Assessor  
Dave Garforth, Assessor**

Report Code: MSC 07-08/SUR01  
Date of Submission: 29<sup>th</sup> August 2014

**SAI Global Assurance Services**  
3rd Floor, Block 3  
Quayside Business Park  
Mill Street  
Dundalk  
Co.Louth  
Ireland.  
T + 353 42 932 0912  
F + 353 42 938 6864  
[www.saiglobal.com/assurance](http://www.saiglobal.com/assurance)

**When harvesting from cultivation sites within ROI**

<b>Client Name</b>	Bord Iascaigh Mhara (BIM) and the Cross Border Aquaculture Initiative (CBAIT)	
<b>Fishery Units</b>	<ul style="list-style-type: none"> <li>• <u>Species</u>: <i>Mytilus edulis</i></li> <li>• <u>Geographical Area</u> Seed location: Coastal waters (FAO 27) within ROI's 12nm Fishing Limit and NI 12nm Fishing Limit in VIa, VIIa, VIIg, VIIj and VIIb Harvest location: Permitted harvest areas within identified bays of Lough Swilly, (Cromane) Castlemaine, Youghal harbour, Waterford harbour, Wexford harbour, Lough Foyle and Carlingford Lough South Shore</li> <li>• <u>Method of Capture</u>: Modified Dutch Bottom Dredge (with limited hand raking)</li> </ul>	
<b>Date of Report</b>	29 <sup>th</sup> August 2014	
<b>Certification Date</b>	30 <sup>th</sup> July 2013	
<b>Assessment Team</b>	(Lead Assessor) <b>Géraldine Criquet</b> (Assessor) <b>Fergal Guilfoyle</b> (Assessor) <b>Dave Garforth</b>	
<b>On-site audit</b>	8 <sup>th</sup> and 9 <sup>th</sup> July 2014	
<b>Surveillance Audit Completion</b>	X	<b>Surveillance Audit 1:</b>
		Surveillance Audit 2:
		Surveillance Audit 3:
		Surveillance Audit 4:
		Re-certification Audit:
<b>Certificate Holder</b>	Bord Iascaigh Mhara (BIM) P.O. Box 12 Dun Laoghaire, Co. Dublin Ireland	

**When harvesting from cultivation sites within Northern Ireland**

<b>Client Name</b>	Cross Border Aquaculture Initiative and Bord Iascaigh Mhara	
<b>Fishery Units</b>	<ul style="list-style-type: none"> <li>• <u>Species</u>: <i>Mytilus edulis</i></li> <li>• <u>Geographical Area</u> Seed location: Coastal waters (FAO 27) within ROI's 12nm Fishing Limit and NI 12nm Fishing Limit in VIa, VIIa, VIIg, VIIj and VIIb Harvest location: Belfast Lough, Lough Foyle, Carlingford Lough North Shore, Dundrum and Lough Larne</li> <li>• <u>Method of Capture</u>: Modified Dutch Bottom Dredge (with limited hand raking)</li> </ul>	
<b>Date of Report</b>	29 <sup>th</sup> August 2014	
<b>Certification Date</b>	30 <sup>th</sup> July 2013	
<b>Assessment Team</b>	(Lead Assessor) <b>Géraldine Criquet</b> (Assessor) <b>Fergal Guilfoyle</b> (Assessor) <b>Dave Garforth</b>	
<b>On-site audit</b>	8 <sup>th</sup> and 9 <sup>th</sup> July 2014	
<b>Surveillance Audit Completion</b>	X	<b>Surveillance Audit 1:</b>
		Surveillance Audit 2:
		Surveillance Audit 3:
		Surveillance Audit 4:
		Re-certification Audit:
<b>Certificate Holder</b>	Bord Iascaigh Mhara (BIM) P.O. Box 12 Dun Laoghaire, Co. Dublin Ireland	

## Contents

Summary .....	5
1. Introduction .....	6
2. The Surveillance Process.....	7
3. Summary of Stakeholder and Client Meetings .....	9
4. Fishery Observations.....	10
5. Relevant Changes to Legislation and Regulations .....	10
6. Relevant Changes to Management Regime.....	12
7. The General Conditions of Certification .....	12
8. The Specific Conditions of Certification .....	14
9. Harmonization of Certificates.....	35
10. Conclusions and Recommendations.....	36
11. Outcome of SAI Global Assurance Services Decision .....	36
12. Information Sources.....	36
APPENDIX 1: Stakeholder Comments .....	39
APPENDIX 2: SAI Global’s response to stakeholder’s comments .....	44

## Summary

This report contains the findings of the first surveillance audit in relation to the Bord Iascaigh Mhara (BIM) certificate of the Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery and the linked Northern Ireland Grown Bottom Mussel (*Mytilus edulis*) Fishery.

The first surveillance audit focused on the stock status and any changes in the management regime or regulations and legislation since the initial certification, and monitoring continued compliance with the MSC Principles and Criteria. Also, the assessment team evaluated progress against the 8 conditions (PIs 1.2.2. Harvest Control Rules and Tools, 2.2.3 Bycatch Species Information/Monitoring, 2.4.2 Habitats Management Strategy, 2.4.3 Habitats Information/Monitoring, 2.5.2 Ecosystem Management Strategy, 2.5.3 Ecosystem Information/Monitoring, 3.2.2 Decision Making Processes, and 3.2.4 Research Plan).

### SAI Global determines that:

- **The Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery and the linked Northern Ireland Grown Bottom Mussel (*Mytilus edulis*) Fishery continues to operate a well-managed and sustainable fishery and therefore, continued certification to the MSC Principles and Criteria for Sustainable Fishing is awarded.**

On behalf of the MSC client, Bord Iascaigh Mhara (BIM) and the Cross Border Aquaculture Initiative (CBAIT), SAI Global would like to extend thanks to the management organizations and stakeholders of the the Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery and the linked Northern Ireland Grown Bottom Mussel (*Mytilus edulis*) Fishery who took part in this surveillance audit.

- Lead Assessor: Dr. Géraldine Criquet manages technical functions of SAI Global's MSC Fishery Program and is an approved MSC Fishery Team Leader.
- Assessor: Fergal Guilfoyle is a contractor for SAI Global with an extensive experience in the shellfish aquaculture sector in Ireland.
- Assessor: Dave Garforth is the Seafood Business Manager for SAI Global and is a lead IRCA approved auditor with an extensive knowledge of the Irish fishery industry.

## 1. Introduction

This report sets out the results of the first annual surveillance assessment of:

- The Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery and the linked Northern Ireland Grown Bottom Mussel (*Mytilus edulis*) Fishery.

To be awarded an MSC certificate for the fishery, the applicant agreed in a written contract to develop an action plan for meeting the required 'Conditions' against the performance indicators that scored below 80% in the initial assessment. An Action Plan for each Condition was submitted by the fishery client and it was approved by the CAB of record.

The applicant also agreed in a written contract to be financially and technically responsible for surveillance visits by an MSC accredited certification body, which would occur at a minimum of once a year, or more often at the discretion of the certification body (based on the applicant's action plan or by previous findings by the certification body from annual surveillance audits or other sources of information).

### Announcement of Surveillance Audit

An announcement of the surveillance site visit was published on the MSC website on 26<sup>th</sup> June 2014 to provide an opportunity to stakeholders to meet with or submit information on the fishery to the assessment team. Additionally, written notification was sent to the list of stakeholders representing the consultation plan during the initial assessment of this fishery and, in many cases, follow up emails were also sent to ensure that stakeholders had been provided with sufficient opportunity to participate in consultation.

Table 1 provides a list of the stakeholders and management organizations engaged in the process either through meetings, conference calls or submissions of information. These consultations focused on the questions and evidence related to the status of the seed collection and the mussel harvesting, and measures that supported the fulfilment of the conditions of certification placed upon the Bord Iascaigh Mhara (BIM) and the Cross Border Aquaculture Initiative (CBAIT) at the initial certification decision.

Meetings were held with the following management and scientific organizations responsible for the Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery and the linked Northern Ireland Grown Bottom Mussel (*Mytilus edulis*) Fishery:

- **BIM, CBAIT, DARD.**

A number of scientific and meeting reports were also examined by the surveillance team in producing this report, as detailed in the Information Sources Section.

## 2. The Surveillance Process

The Surveillance Audit followed the current version of MSC procedures and methodologies and implemented by SAI Global accredited MSC Procedures (QP).

MSC Scheme Document	Issue Date
<a href="#">MSC Certification Requirements V1.3</a>	January 14, 2013
Surveillance report Template	March 2013, Issue No: 6

The determination of the surveillance level based on Tables C3 and C4 was as follows:  
The score was calculated by adding scores from sections 1-4 in Table C3.

Default Assessment tree used?	
Yes	0
No	2
2. Number of conditions	
Zero conditions	0
Between 1-5 conditions	1
More than 5	2
3. Principle Level Scores	
≥85	0
<85	2
4. Conditions on outcome Pls?	
Yes	2
No	0

The surveillance score of 6 was used to identify the surveillance level appropriate to the fishery;

Table C4: Surveillance Level Years after certification or recertification						
Surveillance score (from Table C3)	Surveillance level		Year 1	Year 2	Year 3	Year 4
2 or more	Normal Surveillance		On-site surveillance audit	On-site surveillance audit	On-site surveillance audit	On-site surveillance audit & recertification site visit
1	Remote Surveillance	Option 1	Off-site surveillance audit	On-site surveillance audit	Off-site surveillance audit	On-site surveillance audit & recertification site visit
		Option 2	On-site surveillance audit	Off-site surveillance audit	On-site surveillance audit	On-site surveillance audit & recertification site visit
0	Reduced Surveillance		Review of new information	On-site surveillance audit	Review of new information	On-site surveillance audit & recertification site

					visit
--	--	--	--	--	-------

The surveillance audit was conducted as a normal on-site audit based on the score of 6.

The surveillance audit was comprised in general of:

1. A review and evaluation of the fishery status, scientific evaluation and changes to the management regime and regulation since the initial assessment with respect to confirming that the fishery continues to meet the MSC Principles and Criteria for certification.
2. A review and evaluation of the client activities and evidence that supports the implementation of the Action Plan agreed at the original certification of each fishery.

The surveillance audit consisted of the announcement to stakeholders and interested parties as required through the MSC website and more direct stakeholder contact with the original stakeholders that took part in the initial assessment and management organizations that comprise the management system and regime for the Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery and the linked Northern Ireland Grown Bottom Mussel (*Mytilus edulis*) Fishery. Through this process, a stakeholder consultation plan was developed as part of the on-site assessment.

Emails and information on the objectives of the surveillance audit were sent to stakeholders and management agencies. From this, a surveillance on-site meeting plan was organized and appointments for each individual meeting set. Due to the nature of the management of the Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery and the linked Northern Ireland Grown Bottom Mussel (*Mytilus edulis*) Fishery, and the geographic location of the respective clients and stakeholders, the on-site assessment meeting was proposed to be in Dublin.

- On-site Surveillance Audit date – 8<sup>th</sup> and 9<sup>th</sup> June 2014.
- On-site audit was performed by Dr Géraldine Criquet (Lead Assessor), Dave Garforth (Auditor) and Mr. Fergal Guilfoyle (Auditor).

The surveillance audit meeting was informed by a pre-determined agenda that was prepared in consultation with interested parties. The agenda was set out so as to allow specific stakeholder interests and concerns to be covered through a structured approach.

In addition to the site visit, two separate calls were held with the Sea Fisheries Protection Agency and the Marine Institute of Ireland who could not attend the meetings.

### 3. Summary of Stakeholder and Client Meetings

Arising out of the stakeholder consultation plan preparation a considerable number of stakeholders were contacted directly by surface mail and email. Arising out of this process a final direct consultation plan for the audit was undertaken. Table 1 details the date, meeting location and organizations that participated in the surveillance assessment.

- The meeting was conducted by the Surveillance Team Assessors: Dr Géraldine Criquet (Lead Assessor), Dave Garforth (Auditor) and Mr. Fergal Guilfoyle (Auditor).

**Table 1.** Consultation Meetings During on Site Surveillance Assessment of the Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery and the linked Northern Ireland Grown Bottom Mussel (*Mytilus edulis*) Fishery.

Name of Organization	Participants	Location	Meeting	Date
<b>Bottom Grown Mussel Consultative Forum (BGMCF) AI – Northern Ireland client representative BIM- Ireland client representative</b>	Donald Maguire Joanne Gaffney Nicolas Chopin Michael O’Driscoll William Dingemane Bryan Hylano George Golden N. Hoffmem Arthur McCarthy Greg Griffiths Kenny Parker Michael Murphy	BIM Head Office, Dun Laoghaire, Co. Dublin.	Physical meeting (9.30-15.30 hrs)	8 <sup>th</sup> July, 2014
<b>Coast Watch Europe</b>	Karin Dubsy Meghan Taylor Isaac Varela Victoria Bergabield Joanne Gaffney	BIM Head Office, Dun Laoghaire, Co. Dublin.	Physical meeting (16.30-18.30)	8 <sup>th</sup> July 2014
<b>BIM/AI Client representatives</b>	Joanne Gaffney Donald Maguire	BIM Head Office, Dun Laoghaire, Co. Dublin	Physical meeting (11.30-12.30)	9 <sup>th</sup> July 2014
<b>Sea Fisheries Protection Agency, (SFPA)</b>	Declan Quigley, Sea Fisheries Officer	Howth Pier, Co. Dublin	Telephone call	16 <sup>th</sup> July 2014
<b>Marine Institute of Ireland, (MI)</b>	Dr. Oliver Tully Dr. Francis O’Byrne	Oranmore, Co. Galway	Conference call (0930-11.30)	18 <sup>th</sup> July 2014

#### 4. Fishery Observations

The total seed fished was 1761 t in 2013. Table 2 details the Northern Ireland and Republic of Ireland catches.

**Table 2.** Seed fished (t) by Northern Ireland (NI) and Republic of Ireland (ROI) boats in 2013.

	Relay NI	Relay ROI	Total
NI Boats	40	230	270
ROI Boats	620	871	1491

The 2013 total mussel production from harvesting sites was 5288 t, 2506 t for Northern Ireland and 2782 t for Republic of Ireland.

#### 5. Relevant Changes to Legislation and Regulations

There were no changes to the legislation that governs the Irish mussel fisheries. Similarly, no changes have occurred to the legislation that governs N. Ireland mussel fisheries.

##### Seed Fishery Locations

However, over the last 12 months since the full assessment, there has been significant progression with the implementation of Natura 2000 legislation for these fisheries. The Natura 2000 suite of legislation provides for the protection of designated features for identified flora and fauna in Europe. Over the last 12 months there have been new designations in the Irish Sea that directly affect mussel fisheries.

The areas now falling within or adjacent to designated areas are quite extensive and include all previous mussel seed fishery areas. According to Natura designations, no activity can take place, including seed fisheries until the activity has proven not to cause impact on the designation status.

These require that Appropriate Assessments (AA) are conducted on all activities within or adjacent to these new designations to assess if the activity has a negative impact on the conservation features that have been identified. Natura 2000 falls under the remit of the National Parks and Wildlife Service of the Irish Department of the Environment. In Northern Ireland, the same responsibilities fall under DARD where the same requirements apply and designations are in place requiring that AA is undertaken before any fishery can open.

For the designated Irish sea sites, AA has been undertaken by the Marine Institute of Ireland and the report published in 2014. The AA report has identified potential risks to features of the various designations within the Irish sea and mitigation has been implemented by way of closures of areas to mussel fishing. These are listed in the Conditions section of this report under 2.3.2.

As a consequence of the AA's conducted in the Irish sea, there has been further application of regulations by the management regime that govern the opening of fisheries and also the closure of areas to mussel fishing because of the conservation status of designated features which include:

- For Wicklow Bank: Designated reef resulting in closures to mussel fishing (refer to evidence)
- Saltee, Hook Head and Consore Exclusion areas (refer to evidence)

### Seed Relaying and Grow Out Areas

In much the same way and already identified in the full assessment report, the bays and Loughs that are used for relaying and grow out of were already designated at the time of full assessment although not all AA's had progressed and were completed. Progress of AA's at the time of the 1<sup>st</sup> surveillance audit is itemized below:

<b>IRELAND</b>	<b>Progress/status of AA process</b>
Wexford Harbour	AA not been completed.
Waterford Harbour	AA not been completed.
Youghal Harbour	AA not been completed.
Cromane Harbour	AA completed and mitigation implemented
Lough Swilly	AA completed although findings are not yet implemented
<b>CROSS BORDER</b>	
Lough Foyle	AA has not been completed.
Carlingford Lough	AA has not been completed.
<b>N. IRELAND</b>	
Lough Larne	AA completed
Belfast Lough	AA completed.
Dundrum Bay	AA completed.

The significance of designations and AA's to the surveillance report is twofold. One, since AA's are required by legislation, they confirm compliance of the Ireland/Northern Ireland management regimes to EU legislation and two; they provide important information that confirms (or not) the compatibility of the mussel fisheries/on-growing activities with respect to the conservation status of the designated features of these areas. Whilst, these may not always coincide with the action plans of the conditions raised during the full assessment of the fisheries, they do have bearing on some of the performance indicators of the MSC Standard.

### Other regulatory developments:

Currently, the fishing and transfer of seed to re-laying areas is recorded by the vessel using both the EU log book model and also a Mussel Harvesting Form. This provides traceability and effective recording of fishing location, activity and quantity transferred (each vessel is required to have a calibrated measure in the holds). Additionally, VMS is applied to Irish registered vessels (check on N. Ireland) and also black boxes and blue boxes which aid vessel monitoring by the various agencies. For seed that is transferred from one location to another, the current applicable legislation refers to the Health Status of the product prior to transfer under the Fish Health Regulations. This falls under the remit of the Marine Institute of Ireland and whilst it does consider the impact of invasive species risks on fish health and by default reviews risks of invasive species introduction, it does not require an evaluation of the wider ecological aspects of re-locating quantities of mussel. This aspect may fall under the European Communities (Birds and Habitats) Regulations, 2011 (SI 477/20) under the responsibility of the National Parks and Wildlife Service (NPWS). Section 49 and 50 of Part 6 consider the introduction of flora and fauna into Ireland and vector species such as mussels. Additionally, the initial permitting process for both jurisdictions requires that an environmental impact assessment is conducted which would look at the environmental factors that may be affected by location of mussel on-growing beds in that region. The BGMCF has also progressed an audit of all existing areas as part of meeting the requirements of Conditions 2.5.3 and 3.2.2 (refer to tables on conditions).

## 6. Relevant Changes to Management Regime

There were no changes to the management regimes of Ireland or Northern Ireland since full assessment that has bearing on the performance of the fisheries against the MSC Standard.

## 7. The General Conditions of Certification

The general 'Conditions' set out for the BIM as the certificate holder at initial full assessment were as follows:

- The Client must recognize that MSC standards require regular monitoring inspections at least once a year, focusing on compliance with the 'Conditions' set forth in this report (as outlined below) and continued conformity with the standards of certification;
- The Client must agree by contract to be responsible financially and technically for compliance with required surveillance audits by an accredited MSC certification body, and a contract must be signed and verified by SAI Global prior to certification being awarded;
- The Client must recognize that MSC standards require a full re-evaluation for certification (as opposed to yearly monitoring for update purposes) every five years;
- Prior to receiving final certification, the Clients fulfilled the requirement to document an 'Action Plan' (in this case, one for each of the client groups) for Meeting the Conditions for Continued Certification' and have these approved by SAI Global.
- The Client must provide a list of all the mussel companies operating under either or both jurisdictions (Ireland and N. Ireland) and a list of active vessels that are fishing for seed under one or both of the certificates. This list must be updated annually prior to each annual surveillance audit activity.
- The Client must inform the Conformity Assessment Body, SAI Global of any seed mussel transfers from outside the scope of the Unit of Certification to the sites that are within the scope of the Unit of Certification by any client group member. The client group member must be able to demonstrate traceability of the full quantity of seed mussel from transfer to harvest.

### Fulfilment of General Conditions- Surveillance Audit 1.

- An Action Plan was submitted and accepted prior to the initial certification of the Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery and the linked Northern Ireland Grown Bottom Mussel (*Mytilus edulis*) Fishery and the actions that have been undertaken against the milestones of each Condition in the intervening period are reported upon in the next section.
- An up-dated list of members of the client group has been provided and a list of active vessels during the 2013 fishery.

- Seed has been obtained from Morecombe Bay for relaying into Belfast Lough. This seed is currently outside the scope of the Certificate for N. Ireland and Ireland although is covered under a separate MSC certificate from April 2012. (NORTH MENAI STRAIT MUSSEL (MYTILUS EDULIS) FISHERY (Certificate MEP-F-002) (Mussels from bottom culture (wild caught seed) from the northern Menai Strait, Wales, UK, grown by members of the Bangor Mussel Producers Ltd. (BMP Ltd.) with seed fished by mussel dredge from i) Morecambe Bay or ii) Caernarfon Bay) and extended in 2013 (to include As above, but also including seed fished from the estuary of the River Dee (Cheshire / N. Wales). The client group is the Bangor Mussel Producers Ltd. - Myti Mussels Ltd., Extramussel Ltd., Ogwen Mussel Ltd and Deep Dock Ltd. Members of the N. Ireland/Ireland MSC certificate are pursuing access to this certificate under the sharing mechanism or may investigate an alternative route to extend their own certificate.
- The vessels fishing for this seed are permitted to fish under UK fishing license regulations and are included in the client group of the N. Ireland certificate.

## 8. The Specific Conditions of Certification

During the initial assessment of the Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery and the linked Northern Ireland Grown Bottom Mussel (*Mytilus edulis*) Fishery, a conditional score was allocated for PIs 1.2.2. Harvest Control Rules and Tools, 2.2.3 Bycatch Species Information/Monitoring, 2.4.2 Habitats Management Strategy, 2.4.3 Habitats Information/Monitoring, 2.5.2 Ecosystem Management Strategy, 2.5.3 Ecosystem Information/Monitoring, 3.2.2 Decision Making Processes, and 3.2.4 Research Plan.

**Table of Performance Indicators and Conditional Scores**

	<b>Condition 1 (of 8)</b>	
<i>Performance Indicator &amp; Guidepost Issue</i>	<b>PI 1.2.2: There are well defined and effective harvest control rules in place.</b>	<p><b>Guidepost 80 (SI a and b).</b></p> <p>Well defined harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.</p> <p>The selection of the harvest control rules takes into account the main uncertainties.</p>
<i>Condition 1</i>	There is a need for explicit harvest control rules relating to the timing of harvesting, the viability of harvested seed, and the process by which the fishery may be open or closed. Ideally such explicit harvest control rules should form part of a wider fishery management plan which explicitly states the rationale and assumptions underlying the harvest strategy and the harvest control rules.	
<i>Milestones</i>	<p>By the first surveillance audit or earlier, the assessment team shall be provided with documentary evidence that suitable harvest control rules consistent with the harvest strategy are defined by the management organizations.</p> <p>By the second surveillance audit or earlier, the assessment team shall be provided with documentary evidence that the defined harvest control rules have been implemented on a trial basis and the main uncertainties are considered.</p> <p>By the third surveillance audit or earlier, the assessment team shall be provided with documentary evidence that harvest control rules are explicitly defined by the management system, implemented and align harvests to provide for optimum sustainability and productivity of the resource.</p>	
<i>Evidence Year 1</i>	<p>The audit team was provided with a document that itemizes the regulatory measures that are in place for the control and reporting of mussel seed harvests. The main items noted were:</p> <p><i>General (Ireland):</i>  <i>All fishing boats within the meaning of the Merchant Shipping (Registry, Lettering and Numbering of Fishing Boats) Regulations, 2005 are required to be entered on the Register of Fishing Boats maintained by the Registrar General in accordance with those Regulations. Only fishing boats licensed in accordance with the Fisheries Amendment</i></p>	

*Act 2003 (as inserted by Section 97 of the Sea-Fisheries Jurisdiction Act 2006) may be entered on the Register.*

*Specific:*

*All fishing vessels engaging in seed fishing must have a valid authorisation. The application for which includes a requirement to provide:*

- *Details of aquaculture site(s) where mussel seed is to be re-laid*
- *Information on intention to engage in seed survey work, all seed surveys conducted by industry members in ROI waters must be subject to prior approval by the SFPA.*
- *Confirmation that the Marine Institute have been notified of the intention to move mussels within/from Ireland*
- *Certified confirmation that a fully operational black box vessel monitoring system is installed on the vessel. In addition to this requirement, vessels over 15m in overall length will also be required to have a 'blue box' fully functional satellite-based position monitoring terminal in accordance with EU Regulations 1224/2009 and 404/2011.*
- *Certified confirmation that a capacity model of the hold of the vessel has been submitted to the relevant authority.*
- *That the hold of the vessel is marked as required -All vessels must have each side of the stowage hold marked in 0.5m segments from the bottom to the top; 0 being the floor of the hold*
- *Confirmation that the skipper of the vessel is aware of the requirement to supply seed fishing information for seed fished in ROI waters via text message (SMS) to a stock tracking database. All seed fished in Republic of Ireland waters must be notified via SMS to 00353 87 9885116 as part of a stock tracking system prior to boats leaving the seed fishing areas.*

*The Minister under powers vested in him by Section 13 of the Sea Fisheries and Maritime Jurisdiction Act 2006 authorises the fishing for mussel seed each year.*

- *The Authorisation is specific to a vessel, owner of vessel, authorisation holder, tonnage of seed fishable, transplant site/s and licensee of site/s.*
- *The specific date the Authorisation comes into operation is stated. Specific suitable tides when fishing may be allowed are stated. Fishing can take place between 06.00hrs and 18.00 hrs only.*
- *It is an offence to fish for seed mussels without a valid seed fishing authorisation, it is also an offence to breach any conditions of that seed fishing authorization.*
- *An authorised vessel fishing for mussel seed in Irish waters shall not fish on behalf of more than one holder of an authorisation at any one time.*
- *Must retain on board the fishing vessel the relevant authorization.*
- *In accordance with Council Regulation (EEC) No 2847/93, the owner and/or master of a licensed mussel dredger must complete an accurate EU logsheet*

*record of seed mussel fished.*

- *Must comply with designated ports of landing as directed by an officer of the SFPA for inspection purposes.- Such landings may only take place between 16.00 and 24.00*
- *"The master of an authorised vessel must inform an SFPA officer at least 4 hours in advance of his /her intention to go fish for mussel seed. The Fish Monitoring Centre (FMC), Haulbowline, can be also used for this purpose.*
- *The master of an authorised vessel must inform the SFPA officer of the name of the holder of the authorisation on whose behalf h/she intends to fish*
- *The skipper shall keep a record of the transplantation to a place or waters specified in an aquaculture licence as specified on the authorisation. Such a record includes the reference number of the aquaculture site.*

*Seed fishing in Natura 2000 areas is subject to additional control measures, specific to the relevant Natura 2000 site (See Castlemaine and East Coast assessments provided as evidence). The regulatory closure of mussel seed fishing in the Natura 2000 areas listed in the Schedule attached to Statutory Instrument 347 of 2008 (as amended) remains in place until such time as otherwise notified. Any developments on this issue will be notified through the BGMCF Forum. It should be noted that fishing for seed mussel in Castlemaine Harbour, Co. Kerry, is restricted to persons holding a Natura Permit for that area, and authorisations will restrict fishing to Dingle Bay only. Seed beds in Natura 2000 areas will only be opened once an assessment has been completed and no significant negative impact on protected features and species has been identified.*

- *Minutes from the BGMCF May 15<sup>th</sup> 2014*

Key points of discussion and decision taking at the meeting as follows:

### **Report on the Seed Mussel Fishery 2013**

The 2013 season had been a very disappointing one and that surveys had started for the 2014 season. Note that sandy substrate in traditional settlement areas was almost completely removed by winter storms.

### **Consideration of early 2014 Seed Mussel Surveys**

Noted that surveys in both jurisdictions had so far not found significant quantities of seed. It was agreed by the Forum members that an early opening of the season would be counterproductive and thus officials would not be recommending an early opening of the fishery.

Noted that a minimum biomass must be identified in the Irish Sea in advance of an opening being permitted which was agreed at 1500t (across NI and IRL waters) for the 2014 fishery. Forum noted that this was an economic rather than a biological criterion.

Additionally, further surveys by industry would be initiated and these should be more coordinated.

Following recommendation to Ministers agreed:

*Unless a force majeure situation arises, the seed fishery will not open before the 17th August and the fishery will only open at that time if evidence of a reasonably quantity of seed resources has been identified by prior survey (1,500 tonnes estimate). It is extremely important that all industry members engage in as much surveying of the IRL Irish Sea as possible in 2014 and that they report their findings to the relevant Department quickly if seed is found. As in previous years DARD will facilitate an industry survey if requested in NI waters. **If seed resources are not found and reported, then the fishery may not open at all in 2014.** The BIM inshore survey vessel will operate as usual but its capability is limited as a consequence of its modest size and additional survey effort from the sector would be important.*

Force Majeure defined as: As in previous years in cases where a seed bed, which has been found, is subject to heavy predation during the closed period, and it is clear that the seed will be lost to the industry unless fished, then the opening of such an area outside the dates agreed above could be an option as a force majeure type situation.

- **Draft Fishery Natura Plan for 2013-18;** Long Bank SAC, Blackwater Bank SAC, Wicklow Reef SAC, Wicklow Head SPA, Rockabill to Dalkey Island SAC, Rockabill SPA (Date of submission of the FNP: 24-05-14)

Other items that have an associated with the performance of the fishery wrt. harvest control rule and tools refers to the Natura 2000 assessments which may result in restricted harvesting of seed in order to conserve the features of Natura 2000 designations at an acceptable status. The majority of these developments are presented under Principle 2 as they relate to the conditions of habitat and ecosystems although, indirectly create further harvest controls and limit seed extraction. As a consequence of the Natura 2000 Regulations, a draft seed fishery management plan has been prepared by the Forum (May 2014) based on the historical seed fisheries occurring over the last 30 years as part of the compliance response to the SAC designations.

- Article 6 Assessment of Fisheries, including a Fishery Natura Plan for Seed Mussel (2013-2017), in the Irish Sea Marine Institute Rinville Oranmore, Co. Galway. July, 2014.

The Fishery Natura Plan was submitted as part of the AA conducted by the MI to assess the impact of the fishery on the designated features/conservation objectives of the SAC's in these locations.

*The appropriate assessment of the proposed seed mussel fishery, as described in the FNP, finds that the majority of fishing activity by this fleet, since 1970, has occurred outside of SACs and SPAs. This is also likely to be case in the future given the long time series of survey and fishery data available. The exceptions are the Blackwater Bank, Long Bank and Wicklow Reef SACs where fishing for seed mussel has occurred regularly in the past and is included in proposed fishing areas in the seed mussel FNP. In the case of Blackwater Bank and Long Bank the fishery has not occurred and is highly unlikely to occur in protected sand bank habitat although it occurs within the borders of the sites.*

	<p><i>In any case the characterizing species of the protected habitat within the site is not sensitive to physical disturbance pressure that seed mussel dredging would cause. The possibility of significant effects of the fishery on these sites can be discounted. In the Wicklow Reef SAC the fishery potentially overlaps with protected reef habitat within this site.</i></p> <ul style="list-style-type: none"> <li>• <b>Regulation 6(1) Determination - Fisheries Natura Plan for Seed Mussel Fishing 2013-2017</b></li> </ul> <p>Subsequently, closure of the Wicklow protected reef to mussel seed fisheries has been put in place. <i>In relation to the 4<sup>th</sup> SAC, i.e. Wicklow Reef SAC, the appropriate assessment concluded that significant effects on the reef habitat <u>cannot</u> be discounted and recommended that the mussel seed fishery be excluded from this portion of the SAC. The draft Fisheries Natura Plan has been amended to exclude mussel fishing within the sensitive reef habitat of Wicklow Reef SAC and this prohibition is to be given legal effect through Fisheries Natura Declaration No. 3 of 2013 (Mussel Fishing), made by the Minister in accordance with regulation 9(1) of S.I. 290 of 2013. This Declaration also provides for a buffer zone around the excluded area, where mandatory increased reporting by a Vessel Monitoring System is required.</i></p> <ul style="list-style-type: none"> <li>• <b>MUSSEL SEED (CLOSING OF FISHERIES) REGULATIONS 2013 (SI No. 8)</b></li> <li>• <b>SEA-FISHERIES AND MARITIME JURISDICTION (MUSSEL SEED) (OPENING OF FISHERIES) REGULATIONS 2013 (SI No. 352).</b></li> </ul> <p>Statutory Instruments were provided to the Audit Team that demonstrate the closing of mussel fisheries in the waters of Ireland (except for those areas managed by the Loughs Agency (Foyle and Carlingford) and those areas subject to closures resulting from the Natura 2000 designations (referring to sites in Ireland and N. Ireland). The evidence demonstrates the regime of mussel seed fisheries remaining closed subject to Ministerial Instruments.</p> <ul style="list-style-type: none"> <li>• <b>Mussel Husbandry review, Seed allocation review</b></li> </ul> <p>A draft of the proposed consultation on the husbandry review which was circulated in advance of the meeting was made available to the audit team. The review was presented as an information collection mechanism of seed transfers and growing conditions of each of the bays in N. Ireland and Ireland to better align the available resource to the amount allocated. Minutes from the meeting note that this <i>'was a key recommendation in the Rising Tide report, will contribute to fulfilling MSC certification conditions and as such must be progressed'</i>.</p>
<p><i>Conclusion and Outcome on Condition 1 from 1<sup>st</sup> surveillance audit</i></p>	<p>The evidence presented during the 1<sup>st</sup> surveillance audit demonstrates that the client's actions have met the requirements of the Action Plan for the Year 1 milestone of Condition 1.</p> <p>Year 1 Milestone: <b>By the first surveillance audit or earlier, the assessment team shall be provided with documentary evidence that suitable harvest control rules consistent with the harvest strategy are defined by the management organizations.</b></p> <p>The audit team has been provided with a list of the management measures that are available, including more recent examples of the mechanisms in place to control the opening and closing of seed fisheries resulting from the AA process. The AA does not</p>

assess the seed fishery relative to the mussel seed resource abundance, rather it provides for a wider assessment of the effects of seed fisheries on the conservation status of the designated features of SAC's where seed fisheries occur.

Implicit within the management objectives for the seed mussel fishery is that the seed mussel beds are essentially ephemeral and so harvesting of seed mussel is considered highly unlikely to have any consequence for mussel population size, and this is reflected in the harvest strategy. The strategy is therefore to manage the seed mussel fishery, and not to manage the Irish Sea mussel stock, and so conventional stock assessments with target and limit reference points are not appropriate in this fishery.

Historically, mussel seed harvests have been of variable sizes and in recent years of much smaller size than previous. The harvest strategy must ensure that susceptibility of the stock is maintained at or below acceptable levels given the productivity of the species. Given the limited spatial scale of the seed mussel harvesting activity in relation to the distribution of the mussel stock throughout the Irish sea and (Ireland/N.Ireland) coastal regions in general), in conjunction with the harvesting of seed from seed beds that have historically been described as ephemeral in nature, and the practice of re-laying of seed mussel for cultivation and on-growing to reproductively-active adults, with the potential for actually enhancing rather than impacting negatively on recruitment, the susceptibility of the mussel stock to the fishing activity is still considered minimal.

However, it has been noted during the audit through consultations held with various stakeholders that there are gaps in the knowledge of stock structure and dynamics of mussel populations and of seed mussel settlement in the Irish sea. These consultations, surmise that the availability of seed for harvesting is likely influenced by a number of parameters, which may include:

- Weather patterns and metrological conditions in the Irish sea in general
- The effects of winter metrological conditions on bottom substrate and on developing seed beds
- Effectiveness of seed surveys at locating seed
- Ecological effects such as food availability for seed (and adult mussels)
- Ecological effects and mussel predator abundance
- Locations of spawning populations of mussels and
- Genetic differences within spawning populations of mussels

Historically, the fishery has targeted ephemeral beds in the Irish sea and hence, the fluctuations and recent decline in harvests is a consequence of the availability of seed beds, most particularly in the 'traditional locations' where they have been historically fished. Most stakeholders equate this to highly energetic sea states (winter storms) of overwintering conditions over recent years which disperse substrate and washes out seed. Similar observations of ephemeral nature mussel seed beds have been documented in MSC certification reports in Exmouth ([http://www.msc.org/track-a-fishery/fisheries-in-the-program/in-assessment/north-east-atlantic/exmouth\\_mussels/assessment-downloads-1/20120731\\_PCR.pdf](http://www.msc.org/track-a-fishery/fisheries-in-the-program/in-assessment/north-east-atlantic/exmouth_mussels/assessment-downloads-1/20120731_PCR.pdf) MEP F106), Morecambe Bay (MEP F106), The Dee Estuary (<http://www.msc.org/track-a->

	<p><a href="http://www.msc.org/track-a-fishery/fisheries-in-the-program/certified/north-east-atlantic/north-menai-strait-mussel/assessment-downloads-1/20120508_PCR.pdf">fishery/fisheries-in-the-program/certified/north-east-atlantic/north-menai-strait-mussel/assessment-downloads-1/20120508_PCR.pdf</a>) (MEP F-017) and Lower Saxony, <a href="http://www.msc.org/track-a-fishery/fisheries-in-the-program/certified/north-east-atlantic/germany-lower-saxony-mussel-dredge-and-mussel-culture/assessment-downloads-1/20130430_FR_MUS328.pdf">http://www.msc.org/track-a-fishery/fisheries-in-the-program/certified/north-east-atlantic/germany-lower-saxony-mussel-dredge-and-mussel-culture/assessment-downloads-1/20130430_FR_MUS328.pdf</a> (FCI-0035). There are also instances where seed fisheries occur within more defined systems, such as at Cromane and here, more specific harvest control rules have been created, with wider ecosystem servicing (conservation status of birds, Common Scoter) part of the objective.</p> <p>The Condition is not closed out since the original score for this PI remains unchanged. The fishery will be assessed at future surveillance audits with respect to further explicit definition of the harvest control tools/rules relative to the harvest strategy and uncertainties. (Also refer to conditions 3.2.2 Decision Making and 3.2.4 Research Plan)</p> <p><b>Status of Condition 1: Open – On target.</b></p>
--	--

	<b>Condition 2 (of 8)</b>	
<i>Performance Indicator &amp; Guidepost Issue</i>	<b>PI 2.2.3: Information on the nature and the amount of bycatch is adequate to determine the risk posed by the fishery and the effectiveness of the strategy to manage bycatch</b>	<b>Guidepost 80 (SI d).</b>  Sufficient data continue to be collected to detect any increase in risk to main bycatch species (e.g., due to changes in the outcome indicator scores or the operation of the fishery or the effectiveness of the strategy).
<i>Condition 2</i>	Detailed information on bycatch should be collected over the appropriate spatial and temporal scales, with respect to the extent of fishing activities, to verify existing information on bycatch levels over seed mussel beds as well as over cultivation areas. Following this, a baseline monitoring programme needs to be considered and adopted to ascertain quantitative bycatch data to monitor and confirm the current bycatch impacts from the fishery and in the future.	
<i>Milestones</i>	<p>By first surveillance audit or earlier, the assessment team shall be provided with documentary evidence that a bycatch monitoring program has been planned for all bycatch species at seed and harvest sites.</p> <p>By the second surveillance audit or earlier, the assessment team shall be provided with documentary evidence that a bycatch monitoring program has been adopted/implemented successfully for all bycatch species.</p> <p>By the third surveillance audit or earlier, the assessment team shall be provided with documentary evidence that a bycatch monitoring program has been adapted that will produce sufficient data to monitor and confirm the impacts of the fishery for all bycatch species over time.</p>	

Evidence Year  
1

**The audit team was provided with documents which detail the seed surveys planned for all Irish waters during 2014.**

#### **Northern Irish Seed Beds By-catch Monitoring**

- Seed Survey proposal NI Waters 2013

The BGMCF proposes surveys of seed areas to DARD. These surveys are of 2 types, Transit surveys and targeted surveys. These are primarily directed at locating seed resources but samples are taken and the by-catch is measured. Observers are carried on these industry surveys and by-catch is independently monitored.

- Industry Seed Survey Observer reports.

Copies of the observer reports from the industry survey on the Skullmartin beds in 2013 were provided. The by-catch was recorded and photographs taken of the sorted catch.

- AFBI seed survey report, 2013.
- AFBI Outer Ards Seed Mussel Stock Assessment; July/August 2014

During the active fishing season DARD officials inspect the harvested catch in port and at sea. The catch is closely monitored to ensure that by-catch / waste is kept to a minimum and once the ratio of seed to waste drops below 50% the fishery is closed, even if resource allocation remains.

#### **Irish Sea Seed Beds By-catch monitoring:**

- BIM Seed mussel dredge survey results, 2009-2014

BIM survey all the seed beds in the Irish sea using a dedicated vessel. The survey data for the years 2009-2014 was provided to the audit team. The by-catch is recorded during these surveys.

- BGMCF By-catch sampling plan, 2014

A plan was formulated in 2013 to collect samples of the seed harvest during the seed fishery. Samples were collected but it was not possible to read them due to a technical issue.

A sampling plan for by-catch and alien species has been formulated by the BGMCF to begin in 2014 and this has been documented and provided to the audit team. Observers, if available, will be placed aboard commercial vessels. Samples will be taken each day by the industry, in addition to the independent samples collected by the observers. Standardised sampling forms have been designed and these will be used by both independent observers and industry samplers. A report on the by-catch and alien species sampling will be compiled post fishery

#### **Cultivation Area harvesting by-catch monitoring:**

- Dutch consultants report on cultivation beds associated species and by-catch

The industry presented reports to the audit team of monitoring that is conducted by a Dutch consultant. This monitoring is required by Dutch authorities every three years on any cultivation area from which mussels are sent to Holland. This monitoring is

	mainly focused on invasive species but all by-catch species are recorded.
<i>Conclusion and Outcome on Condition 2 from 1<sup>st</sup> Surveillance Audit</i>	<p>The evidence presented during the 1<sup>st</sup> surveillance audit demonstrates that the client's actions have met the requirements of the Action Plan for the Year 1 milestone of Condition 2.</p> <p>The audit team was presented with a by-catch monitoring plan for all seed fisheries and cultivation sites. By-catch has previously been monitored during seed fisheries and seed surveys. A single protocol such as that proposed will enable quantitative assessment of the by-catch on all seed beds and all cultivation sites. Reports on 2014 seed fishery sampling will be made available on or before next audit date.</p> <p>The Condition is not closed out since the original score for this PI remains unchanged.</p> <p><b>Status of Condition 2: Open – On target.</b></p>

	<b>Condition 3 (of 8)</b>	
<i>Performance Indicator &amp; Guidepost Issue</i>	<b>PI 2.4.2: There is a strategy in place that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to habitat types</b>	<b>Guidepost 80 (Issue a).</b>  There is some objective basis for confidence that the partial strategy will work, based on information directly about the fishery and/or habitats involved.
<i>Condition 3</i>	A decision process that incorporates a clear management strategy for seed exploitation must be adopted with includes a mechanism that prevents the accidental damage to sensitive habitats, particularly for any new or unsurveyed areas.	
<i>Milestones</i>	<p>By first surveillance audit or earlier, the assessment team shall be provided with documentary evidence that a strategy had been established.</p> <p>By the second surveillance audit or earlier, the assessment team shall be provided with documentary evidence that a strategy had been adopted.</p> <p>By the third surveillance audit or earlier, the assessment team shall be provided with documentary evidence that that a strategy had been implemented successfully.</p> <p>By the fourth surveillance audit or earlier, the assessment team shall be provided with documentary evidence that that a strategy achieves the Habitat Outcome 80 level of performance or above.</p>	
<i>Evidence year 1 from 1<sup>st</sup> Surveillance Audit</i>	<p>The audit team was provided with documentation which established the regime in place for the identification, assessment and protection of habitats.</p> <p><b>Irish Sea Seed Fisheries:</b></p> <ul style="list-style-type: none"> <li>• BGMCF Fishery Natura plan for Seed Mussel Fishing in the southern Irish Sea for the years 2014-2019</li> </ul>	

- Article 6 Assessment of Fisheries, including a Fishery Natura Plan for Seed Mussel (2013-2017), in the Irish Sea; Marine Institute Rinville Oranmore, Co. Galway. July, 2014.

The Fishery Natura Plan (FNP) for the Irish Sea seed mussel fishery was written by the BGMCF and submitted for assessment under Article 6 of the Habitats Directive. The Marine Institute then assessed the FNP and the results of this appropriate assessment was provided to the audit team. This assessment finds little of concern with the seed mussel fishery with respect to protected habitats within and adjacent to designated SACs in the Irish Sea.

Where a potential risk to a protected habitat was identified the area was closed to fishing, for example with the *Wicklow Reef SAC*, the appropriate assessment concluded that *“significant effects on the reef habitat cannot be discounted and recommended that the mussel seed fishery be excluded from this portion of the SAC. The draft Fisheries Natura Plan has been amended to exclude mussel fishing within the sensitive reef habitat of Wicklow Reef SAC and this prohibition is to be given legal effect through Fisheries Natura Declaration No. 3 of 2013 (Mussel Fishing), made by the Minister in accordance with regulation 9(1) of S.I. 290 of 2013. This Declaration also provides for a buffer zone around the excluded area, where mandatory increased reporting by a Vessel Monitoring System is required”*.

- MUSSEL SEED (CLOSING OF FISHERIES) REGULATIONS 2013 (SI No. 8)
- SEA-FISHERIES AND MARITIME JURISDICTION (MUSSEL SEED) (OPENING OF FISHERIES) REGULATIONS 2013 (SI No. 352).

**Northern Irish Waters:**

The audit team was provided with details of the Statutory Instruments which have been enacted to protect areas of Northern Irish waters from mussel seed fishing.

Seed mussel fishing has been prohibited from areas within:

- (a) The Mourne Shore herring spawning box;
- (b) An area to the southward and westward of an imaginary straight line drawn from Fair Head Co Antrim to Bull Point, Rathlin Island and thence to the Whistling Buoy of Inishowen Head, County Donegal;
- (c) Rathlin Island candidate Special Area of Conservation (SAC);
- (d) Red Bay candidate Special Area of Conservation (SAC);
- (e) The Skerries and Causeway draft Special Area of Conservation (SAC);
- (f) The Maidens draft Special Area of Conservation (SAC).
- (g) Belfast Lough (inside of a line drawn from South Briggs Buoy to Blackhead Light); and
- (h) Strangford Lough (inside of a line drawn from Ballyquintin Point to Killard Point).

**Castlemaine Seed Fishery:**

- Appropriate Assessment of the impact of mussel fishing and mussel, oyster and

	<p>clam aquaculture on Castlemaine Harbour SAC and SPA. Marine Institute, April 2011</p> <ul style="list-style-type: none"> <li>• 2012 – Castlemaine Seed Fishing Report; BGMCF</li> <li>• Fisheries Natura Plan (<i>Mytilus edulis</i>) Castlemaine Harbour 2011 -2016; BGMCF</li> <li>• Fisheries Natura Declaration No. 1 of 2011, DAFM</li> </ul> <p>The Castlemaine Co-op submitted a FNP for the seed fishery in Castlemaine Harbour for the years 2011 – 2016. The proposed fishery has been assessed by the Marine Institute and the Appropriate Assessment concluded that there would be no significant impact on the protected habitats of the SAC and protected bird species in the associated SPA. The Appropriate Assessment concluded that the activity may be permitted on the basis that less than 15% of any individual community type is affected in any one year of activity and there is a medium to high level of confidence in this conclusion based on evidence at this site and at other sites.</p> <p>The assessment of the impact of this seed fishery will undergo periodic review and this system should provide sufficient protection for vulnerable habitats, as required by this condition.</p>
<p><i>Conclusion and Outcome on Condition 3 from 1<sup>st</sup> Surveillance Audit</i></p>	<p>The evidence presented during the 1<sup>st</sup> surveillance audit demonstrates that the client's actions have met the requirements of the Action Plan for the Year 1 milestone of Condition 3.</p> <p>The evidence presented established that there is a system in place to ensure that protected species and habitats, which have the potential to be impacted by the fishery for seed mussels, are identified, assessed and protected where necessary. Examples of where the fishery was closed or prohibited from such areas were presented.</p> <p>The Condition is not closed out since the original score for this PI remains unchanged.</p> <p><b>Status of Condition 3: Open – On target.</b></p>

<p><b>Item 1:</b></p>	<p><b>Condition 4 (of 8)</b></p>	
<p><i>Performance Indicator &amp; Guidepost Issue</i></p>	<p><b>PI 2.4.3: Information is adequate to determine the risk posed to habitat types by the fishery and the effectiveness of the strategy to manage impacts on habitat types.</b></p>	<p><b>Guidepost 80 (SI c).</b></p> <p>Sufficient data continue to be collected to detect any increase in risk to habitat (e.g. due to changes in the outcome indicator scores or the operation of the fishery or the effectiveness of the measures).</p>
<p><i>Condition 4</i></p>	<p>A monitoring programme of habitats with respect to seed collection and an assessment of the potential impact of the collection of seed needs to be established and used to inform the management decision process for seed exploitation that</p>	

	prevents the accidental damage to sensitive habitats, particularly for any new or unsurveyed areas.
<i>Milestones</i>	<p>By first surveillance audit or earlier, the assessment team shall be provided with documentary evidence that a program had been established.</p> <p>By the second surveillance audit or earlier, the assessment team shall be provided with documentary evidence that a program had been adopted.</p> <p>By the third surveillance audit or earlier, the assessment team shall be provided with documentary evidence that that the program has been implemented successfully.</p>
<i>Evidence year 1 from 1<sup>st</sup> Surveillance Audit</i>	<p>Irish Sea Seed Mussel Fishery:</p> <ul style="list-style-type: none"> <li>• BGMCF Fishery Natura plan for Seed Mussel Fishing in the southern Irish Sea for the years 2014-2019</li> <li>• Article 6 Assessment of Fisheries, including a Fishery Natura Plan for Seed Mussel (2013-2017), in the Irish Sea Marine Institute Rinville Oranmore, Co. Galway. July, 2014.</li> </ul> <p>All Irish Sea seed mussel beds must be assessed prior to fishing activity being permitted. BIM carry out annual surveys on all existing seed beds and any newly identified or potential new beds. Any new bed identified must be assessed by the Marine Institute before any fishing would be permitted on these beds. Industry and BIM surveys would be required to collect baseline data on any new bed prior to the opening of a fishery on the seed resources of the newly identified bed.</p> <p>The historical locations of seed beds are surveyed annually to assess the extent of seed mussel available to the fishery. Surveys by BIM and industry extend to new areas and new beds where time resources allow. Any new beds would be subject to Appropriate Assessment by the Marine Institute and would therefore require baseline data to be collected prior to this assessment.</p> <p>Northern Irish Seed Mussel Beds:</p> <ul style="list-style-type: none"> <li>• Seed Survey proposal NI Waters 2013</li> <li>• Industry Seed Survey Observer reports.</li> <li>• AFBI seed survey report, 2013</li> <li>• AFBI Outer Ards Seed Mussel Stock Assessment; July/August 2014</li> </ul> <p>All Northern Irish Seed Mussel Beds are subject to annual surveys to monitor the seed beds. All fisheries are subject to monitoring of the harvested catch and the spatial extent of the fishery. Any newly identified seed bed would be subject to survey by DARD or AFBI and would be assessed with respect to the impact on sensitive habitats. Baseline data would be required prior to permits being issued for a fishery on any new bed.</p> <p>Castlemaine Mussel Seed Fishery:</p>

	<ul style="list-style-type: none"> <li>• 2012 Castlemaine Seed Fishing Report</li> <li>• Appropriate Assessment of the impact of mussel fishing and mussel, oyster and clam aquaculture on Castlemaine Harbour SAC and SPA April 2011</li> </ul> <p>The mussel seed beds in the Castlemaine Fishery are geographically limited in extent to a higher degree than the Irish Sea and Northern Ireland seed beds. Therefore new seed beds are unlikely to be brought into this fishery however if new beds are identified they would be subject to Appropriate Assessment and this would entail baseline data collection which would identify any vulnerable habitats prior to a fishery permit being issued.</p> <p>The existing seed beds are subject to annual pre and post harvest fishery monitoring. Documented reports were provided which detailed the fishery surveys from 2012. The stock assessment surveys are used to determine the level of stock and the percentage which must be left for the bird species designated in the adjacent SPA. The post fishery survey is used to ensure that a sufficient tonnage of seed mussels have been left in situ.</p>
<p><i>Conclusion and Outcome on Condition 4 from 1<sup>st</sup> Surveillance Audit</i></p>	<p>The evidence presented during the 1<sup>st</sup> surveillance audit demonstrates that the client's actions have met the requirements of the Action Plan for the Year 1 milestone of Condition 4.</p> <p>Evidence was presented which detailed the surveys which must be conducted on all new seed fishery beds identified. Details were presented (see condition 3 above) on the assessment process which is required to be conducted on all new beds prior to a permitted fishery opening.</p> <p>The Condition is not closed out since the original score for this PI remains unchanged.</p> <p><b>Status of Condition 4: Open – On target.</b></p>

<p><b>Item 1:</b></p>	<p><b>Condition 5 (of 8)</b></p>	
<p><i>Performance Indicator &amp; Guidepost Issue</i></p>	<p><b>PI 2.5.2:</b> There are measures in place to ensure the fishery does not pose a risk of serious or irreversible harm to ecosystem structure and function.</p>	<p><b>Guidepost 80 (SI b)</b></p> <p>The partial strategy takes into account available information and is expected to restrain impacts of the fishery on the ecosystem so as to achieve the Ecosystem Outcome 80 level of performance.</p>
<p><i>Condition 5</i></p>	<p>The partial strategy that is in place needs to take into account all available information on the carrying capacity and productivity of individual cultivation bays and have a direct influence on the overall management of the cultivation sites.</p>	

<p><i>Milestones</i></p>	<p>By first surveillance audit or earlier, the assessment team shall be provided with documentary evidence that available information (e.g. relevant site specific evidence, models) is identified for consideration of developing a partial strategy aimed at restraining the impacts of the fishery on the ecosystem so as to achieve the Ecosystem Outcome 80 level of performance.</p> <p>By the second surveillance audit or earlier, the assessment team shall be provided with documentary evidence that information available has been considered with respect to the overall management of the cultivation site stocking densities.</p> <p>By the third surveillance audit or earlier, the assessment team shall be provided with documentary evidence that information available is influencing the strategy for overall management of the cultivation site stocking densities.</p> <p>By the fourth surveillance audit or earlier, the assessment team shall be provided with documentary evidence that the partial strategy continues to be implemented and effective within the licensing scheme for the cultivation sites.</p>
<p><i>Evidence year 1 from 1<sup>st</sup> Surveillance Audit</i></p>	<p>BGMCF site review:</p> <ul style="list-style-type: none"> <li>• Mussel Husbandry Review, 2014. Data collection and use in the revised resource allocation process.</li> </ul> <p>The BGMCF have developed a plan to carry out a review of husbandry practices at all cultivation sites, north and south. The main purpose of this review is to inform the resource allocation process which is proposed over the coming years. However it will also yield important, up to date information on all husbandry practices on cultivation sites. This information will be useful when looking at the overall individual and cumulative impacts of the operation of the cultivating sites on the ecosystem of the bays in which they are located and on the carrying capacity of those bays.</p> <p>Appropriate Assessments of cultivation licenses in SACs:</p> <ul style="list-style-type: none"> <li>• Appropriate Assessment of the impact of mussel fishing and mussel, oyster and clam aquaculture on Castlemaine Harbour SAC and SPA April 2011</li> <li>• Article 6 Assessment of Fisheries, including a Fishery Natura Plan for Seed Mussel (2013-2017), in the Irish Sea Marine Institute Rinville Oranmore, Co. Galway. July, 2014.</li> </ul> <p>Evidence was presented on the Appropriate Assessments of the cultivation sites in the South of Ireland which is part of a large body of work being carried out largely by the Marine Institute.</p> <p>The Appropriate Assessment of the Castlemaine SAC and SPA has been completed and found that there was no significant impact from the mussel fishery on the SAC and SPA. No specific assessment of the carrying capacity of the site was made but by limiting the impact on any one habitat type to 15% this would in effect limit the impact of the mussel cultivation on the overall site integrity. If the overlap on any one habitat type was greater than the 15% threshold then it is presumed that an assessment of the</p>

	<p>carrying capacity of the site would be conducted and any impact from the operation of the cultivating sites would be subject to mitigation.</p> <p>The Appropriate Assessment work programme is progressing and in addition to Castlemaine, 1 other bay (Lough Swilly) has been partially assessed. Work on 2 other growing bays is planned for 2014. These assessments will look at the impact of the cultivating activity on the qualifying interests of the SAC. However they should also incorporate an assessment of the overall integrity of the site including carrying capacity where this is required.</p> <p>In Northern Ireland Appropriate Assessments have been completed on the cultivating sites in Belfast Lough.</p> <ul style="list-style-type: none"> <li>• Cumulative Impact Assessment: Belfast Lough aquaculture 2014. AFBI</li> </ul> <p>The carrying capacity of Belfast Lough was assessed by AFBI in 2014 using the SMILE (Sustainable Mariculture in northern Irish Lough Ecosystems) model of carrying capacity. The Appropriate Assessment concluded that if every aquaculture license in the lough was utilised for mussel cultivation, this could breach the carrying capacity threshold set at 50% of chlorophyll a (used as a proxy for food resource). However the Appropriate Assessment concluded that stocking at this density was not likely to occur and therefore the carrying capacity of Belfast Lough was not likely to be breached.</p> <p>Cross-border mussel aquaculture:</p> <p>No information was presented on the Appropriate Assessments which are required in Carlingford and Lough Foyle. A carrying capacity model has been developed for Carlingford Lough and one is being developed for Lough Foyle (pers comm). It is assumed that the Loughs Agency will use these models to conduct assessments of the carrying capacity of the bays and the impacts of mussel aquaculture on that capacity.</p>
<p><i>Conclusion and Outcome on Condition 5 from 1<sup>st</sup> Surveillance Audit</i></p>	<p>The evidence presented during the 1<sup>st</sup> surveillance audit demonstrates that the client's actions have met the requirements of the Action Plan for the Year 1 milestone of Condition 5.</p> <p>Evidence was presented which indicated that the BGMCF was developing a plan to investigate husbandry practices in cultivation bays. This information will be utilised to ensure that the cultivation of mussels on licensed sites does not cause damage to the integrity of the ecosystem of the bay within which the production occurs. There is a system in place which will ensure that the overall integrity of the cultivating bays is not adversely impacted by the cultivation of mussels.</p> <p>The Condition is not closed out since the original score for this PI remains unchanged.</p> <p><b>Status of Condition 5: Open – On target.</b></p>

<b>Item 1:</b>	<b>Condition 6 (of 8)</b>	
<i>Performance Indicator &amp; Guidepost Issue</i>	<b>PI 2.5.3:</b> There is adequate knowledge of the impacts of the fishery on the ecosystem.	<b>Guidepost 80 (SI e)</b>  Sufficient data continue to be collected to detect any increase in risk level (e.g., due to changes in the outcome indicator scores or the operation of the fishery or the effectiveness of the measures).
<i>Condition 6</i>	A procedure or mechanism with a scientific basis for the continued collection of sufficient data that would detect any increase in risk levels to the ecosystem due to changes in current cultivation practices is required. This data should relate to the performance indicator for achieving an 80 score for PI2.5.2 b.	
<i>Milestones</i>	<p>By first surveillance audit or earlier, the assessment team shall be provided with documentary evidence of the type and extent of information to be considered for the objective/science based detection of any increase in risk level due to the overall management of the cultivation sites.</p> <p>By the second surveillance audit or earlier, the assessment team shall be provided with documentary evidence of the procedure or mechanism for information collection and review for informing of risk level associated with the management of the cultivation sites.</p> <p>By the third surveillance audit or earlier, the assessment team shall be provided with documentary evidence of how information available from scientific evidence and is influencing the overall management of the cultivation sites to ensure that increase in risk levels of the impacts of the cultivation sites on the ecosystem can be managed so as to achieve outcome indicator score 80 for PI 2.5.3.</p> <p>By the fourth surveillance audit or earlier, the assessment team shall be provided with documentary evidence that the procedure/mechanism for information collection and review is adopted for detecting increase in risk levels due to changes in the outcome scores or the operation of the fishery or the effectiveness of the measures.</p>	
<i>Evidence year 1 from 1<sup>st</sup> Surveillance Audit</i>	<p>This condition is closely related to condition 5 above, P.I. 2.5.2. The information which has been collected and continues to be collected to satisfy that condition will also satisfy this condition.</p> <ul style="list-style-type: none"> <li>• Cumulative Impact Assessment: Belfast Lough aquaculture 2014. AFBI</li> <li>• Appropriate Assessment of the impact of mussel fishing and mussel, oyster and clam aquaculture on Castlemaine Harbour SAC and SPA April 2011</li> <li>• Mussel Husbandry Review, 2014. Data collection and use in the revised resource allocation process.</li> <li>• 2012 Castlemaine Seed Fishing Report</li> <li>• Fisheries Natura Plan (<i>Mytilus edulis</i>) Castlemaine Harbour 2011 -2016; BGMCF</li> <li>• Cultivation Area harvesting by-catch monitoring:</li> <li>• BGMCF By-catch sampling plan, 2014</li> </ul>	

<p><i>Conclusion and Outcome on Condition 6 from 1<sup>st</sup> Surveillance Audit</i></p>	<p>The evidence presented during the 1<sup>st</sup> surveillance audit demonstrates that the client's actions have met the requirements of the Action Plan for the Year 1 milestone of Condition 6.</p> <p>Condition 6 is closely linked to the condition attached to achieving P.I 2.5.2, (condition 5 above). Evidence was presented on the data which has been gathered and the ongoing data gathering exercises which satisfies condition 5. The BGMCF have developed a plan to investigate husbandry practices in cultivation bays. This information will be utilised to ensure that the cultivation of mussels on licensed sites does not cause damage to the integrity of the ecosystem of the bay within which the production occurs.</p> <p>This review together with the ongoing work on assessing SACs should collect sufficient data to ensure that any increased risk to the ecosystem, brought about by a change in cultivation practices, would be detected.</p> <p>The Condition is not closed out since the original score for this PI remains unchanged.</p> <p><b>Status of Condition 6: Open – On target.</b></p>

<b>Item 1:</b>	<b>Condition 7 (of 8)</b>	
<i>Performance Indicator &amp; Guidepost Issue</i>	<b>PI 3.2.2: The fishery-specific management system includes effective decision-making processes that result in measures and strategies to achieve the objectives</b>	<b>Guidepost 80 (SI c)</b> Decision-making processes use the precautionary approach and are based on best available information.
<i>Condition 7</i>	The decision making process that set the harvest cap was set on historical information. A formal review of the harvest cap within the definition of a precautionary approach suitable for mussel stock sustainability is required and the precautionary approach to decision making is formally adopted by the management agencies.	
<i>Milestones</i>	<p>By first surveillance audit or earlier, the assessment team shall be provided with documentary evidence of the available information which will be considered to support and inform a precautionary management approach to decision making on stock densities for cultivation beds.</p> <p>By the second audit or earlier, the assessment team shall be provided with documentary evidence of how this information is being used to inform the decisions for stocking densities and that a precautionary approach is being adopted with respect to meeting the objectives of the fishery (and of Principle 2 with respect to managing risks to ecosystem effects).</p> <p>By the third surveillance audit or earlier, the assessment team shall be provided with documentary evidence that the client has formally committed to a precautionary approach in decision making, using best available information and aligned to the specific objectives of the fishery and those of MSC Principles 1 and 2. This may be formulated within a fishery management plan.</p>	
<i>Evidence Year 1 from 1<sup>st</sup> surveillance audit</i>	<ul style="list-style-type: none"> <li>● <b>Mussel Husbandry review, Seed allocation review</b></li> </ul> <p>A draft of the proposed consultation on the husbandry review which was circulated in advance of the meeting was made available to the audit team. The review was presented as an information collection mechanism of seed transfers and growing conditions of each of the bays in N. Ireland and Ireland to better align the available resource to the amount allocated. Minutes from the meeting note that this <i>'was a key recommendation in the Rising Tide report, will contribute to fulfilling MSC certification conditions and as such must be progressed'</i>.</p> <p>There are established government departmental decision making processes and a fishery specific forum (BGMCF) that has demonstrably resulted in measures and strategies to achieve the fishery-specific objectives that were outlined in the 2008 Bottom Mussel Review document. A 2011 annual review provides an up-date of the decisions taken.</p> <p>However, it is not explicitly stated within the management system that decision making processes always respond within a precautionary approach and that the original cap on mussel seed, although based on best available information at that time</p>	

	<p>is now due for review given that new information is likely available. For example, on-growing locations are now subject to AA, where relevant and may likely provide new information and requirements of a site specific nature in order to meet both wider legislative (Habitats Directive) and fishery specific objectives. Additionally, more recent data from production performance of each area under cultivation may provide important information that can be used to inform a precautionary approach to decisions on mussel cultivation. To this end, the Mussel husbandry/seed allocation review proposed by the Forum is seen as a useful tool for data collection on the stocking, husbandry and performance parameters of each of the grow out locations in Ireland and N. Ireland.</p>
<p><i>Conclusion and Outcome on Condition 7 from 1<sup>st</sup> Surveillance Audit</i></p>	<p>The evidence presented during the 1<sup>st</sup> surveillance audit demonstrates that the client's actions have met the requirements of the Action Plan for the Year 1 milestone of Condition 7.</p> <p>By first surveillance audit or earlier, the assessment team shall be provided with documentary evidence of the available information which will be considered to support and inform a precautionary management approach to decision making on stock densities for cultivation beds.</p> <p>The husbandry review proposal was issued by the Bottom Grown Mussel Consultative Forum Secretariat on behalf of the IRL Department of Agriculture Food and Marine (DAFM) and the NI Department of Agriculture and Rural Development (DARD). As such it serves to address the condition for both Ireland and Northern Ireland certificates. The review is expected to provide new information on the husbandry and productivity conditions of each bay which will inform the management entities on ensuring that decisions on a revision to the harvest cap (which is a cap on the total capacity of growing areas) is undertaken using a precautionary approach with respect to the sustainable production parameters of each bay.</p> <p>The Condition remains on track although is not closed out since the original score for this PI remains unchanged.</p> <p><b>Status of Condition 7: Open – On target.</b></p>

<p><b>Item 1:</b></p>	<p><b>Condition 8 (of 8)</b></p>	
<p><i>Performance Indicator &amp; Guidepost Issue</i></p>	<p><b>PI 3.2.4: The fishery has a research plan that addresses the information needs of management.</b></p>	<p><b>Guidepost 80 (SI a)</b></p> <p>A <b>research plan</b> provides the management system with a strategic approach to research and <b>reliable and timely information</b> sufficient to achieve the objectives consistent with MSC's Principles 1 and 2.</p>

<p><i>Condition 8</i></p>	<p>A research plan that provides the management system with a strategic approach to research and provided reliable and timely information sufficient to achieve the objectives consistent with MSC’s Principles 1 and 2 is required.</p>
<p><i>Milestones</i></p>	<p>By first surveillance audit or earlier, the assessment team shall be provided with documentary evidence of a management review of the fisheries research requirements that is aligned with the strategies and objectives of the fishery, and conforms with the MSC Principles of 1 and 2. Where research planning coincides with information requirements identified in conjunction with conditions raised under Principle 1 and 2 of this assessment, these should be identified and indication as to how they will be implemented.</p> <p>By the second surveillance audit or earlier, the assessment team shall be provided with documentary evidence of the adoption of the Research Plan and priority /on-going research/information requirements.</p> <p>By the third and fourth surveillance audit or earlier, the assessment team shall be provided with documentary evidence that adoption/progress of the Research Plan is providing reliable and timely information sufficient to achieve the objectives consistent with MSC’s Principles 1 and 2.</p>
<p><i>Evidence Year 1 from 1<sup>st</sup> surveillance audit</i></p>	<ul style="list-style-type: none"> <li>● <b>Letter circulated to members of the Forum and industry regarding research proposals</b></li> <li>● <b>Outline of the proposed research programme for the Irish Sea seed mussel fishery for 2014 and beyond.</b></li> </ul> <p>An outline of the research proposals that have been presented and discussed by the Forum during the year. The research proposal contains both items that are now confirmed as committed items for research and items that at the time of audit, were proposed but mechanisms for their implementation were not yet formulized.</p> <p>A summary of key research items noted in the proposed plan, their status with respect to the above and their relationship to the MSC Performance Indicators and conditions as follows:</p> <p>Relative to P1 and Stock structure, habitat structure, larval behavior and settlement patterns of ephemeral beds:</p> <p><i>BIM’s annual survey effort has demonstrated very large scale changes to the benthos from year to year as a result of wind and wave induced scouring on the sea bed associated with these storms. This matter is central to the success of the sector and at a previous BGMCF meeting it was determined that effort be put into examining means of gaining a greater understanding of the problem and devise means of mitigating its effects.</i></p> <p><i>Component 1: An investigation into the abundance of mussel larvae in the water column in the Irish Sea, together with an investigation into mussel spat fall on areas not subject to dynamic movement of the substrate arising from storm action (Which supports Principal 1 of the MSC)</i></p>

*Component2: An investigation into the feasibility of providing artificial collection methods to gather seed mussel spat to supplement the natural spat fall (Which supports Principal 1 of the MSC)*

In consultation with the client during the audit, a proposal to undertake a literature review of the existing status of research knowledge on mussel larval behavior and factors affecting deposition and settlement was introduced. This was especially brought to light during stakeholder and management agency meetings which highlighted research undertaken by Knight *et al.*, in the last 4-5 years. Whilst a literature review was not originally specified as a condition, the assessment team saw this as a useful contribution to the development of research themes on the subject matter.

Other research items noted:

- *Bycatch monitoring, wider assessment from survey and industry participation. P2.2.3 (This will be in association with the Loughs Agency and AFBI).*

Whilst not strictly seen as research, the assessment team noted that coordination of the various by-catch monitoring activities by the various agencies would lead to the development of a rationalized and improved monitoring procedure for bycatch.

- *Alien species assessment of seed beds (P2) (Note this was conducted in 2013 however system was not effective (This is in association with the MI)*

In connection with the above and part of overall monitoring and supporting compliance for reducing risk of transfer of alien species.

- *Support alien species assessment undertaken by the Dutch processors on Irish growing areas (All Island BGMCF).*

Industry noted the activity of alien species assessment required for growing areas prior to the export of live shellfish to Dutch processors.

- *Genetics – Examine cost and funding opportunities for a wider genetics assessment of the mussels in IRL (BGMCF secretariat and possibly QUB))*

In addition to the proposed actions, data is collected/reviewed as part of the activities of AA undertaken by various agencies connected with the management of the mussel fisheries:

*Habitat assessment in both established and proposed new areas, IRL – Marine Institute, NI -AFBI*

- *Appropriate assessments/ Tests of significance in compliance with Natura 2000 IRL – Marine Institute, NI –AFBI*
- *Loughs Agency – Development of IBIS II*

<i>Conclusion and Outcome on Condition 8 from 1<sup>st</sup> Surveillance Audit</i>	<p>The evidence presented during the 1<sup>st</sup> surveillance audit demonstrates that the client's actions have met the requirements of the Action Plan for the Year 1 milestone of Condition 8.</p> <p>The Condition is not closed out since the original score for this PI remains unchanged.</p> <p><b>Status of Condition 8: Open – On target.</b></p>
---	---

## 9. Harmonization of Certificates

The MSC wishes to discourage overlapping assessments to avoid potential financial, consistency and credibility costs, including:

- fisheries managers, scientists and stakeholders receiving duplicate requests for information;
- duplication of costs for a fishery's certification, including that expense incurred by fishery management agencies pre- and post-certification; and
- the possibility of different assessments placing different conditions upon the same fisheries managers and upon different fishery clients.

The MSC has provided direction in cases where a certificate sharing arrangement has not been possible. TAB Directive D-015 V2 provides guidance for harmonisation where a fishery in assessment overlaps with an already certified fishery. Certification Bodies are obliged to follow this guidance with the objective of ensuring the consistency of outcomes of duplicate assessments are harmonized.

For the respective clients included in this audit,

The Directive (TAB D-015) states that:

- 1.5 The assessment team responsible for the new assessment shall explicitly consider the findings of the most recent surveillance report(s) produced for the overlapping certified fishery. Similarly, the CB responsible for the surveillance of the overlapping certified fishery shall explicitly consider the findings of the assessment team responsible for the overlapping fishery in assessment when conducting annual surveillance audits. In addition;

MSC expects that the outcome of the assessment report, particularly the overall result that is achieved (whether a pass or a fail) and the setting of conditions, will be consistent between overlapping fisheries in assessment and certified fisheries.

**No action taken as this fishery does not have harmonisation issues in relation to overlapping fisheries.**

## 10. Conclusions and Recommendations

The assessment team conducting this 1<sup>st</sup> surveillance audit confirms that the client has met the general requirements for continued certification to the MSC Principles and Criteria for Sustainable Fishing in regard to:

- The Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery and the linked Northern Ireland Grown Bottom Mussel (*Mytilus edulis*) Fishery).

The assessment team also concludes that there is sufficient evidence and information provided by the client and substantiated through the course of the consultation meeting during the surveillance audit to confirm that commitment to meeting the Year 1 Milestone of conditions of certification has been met. Therefore, the assessment team recommends that continued certification be awarded to the respective client fisheries.

SAI Global determines that the timelines and related Action Plan for the Condition placed on the client's fishery remain unchanged from the original conditions set and that these will be subject to annual surveillance audit, next potentially scheduled for July 2015.

The surveillance score remains 6 therefore on-site surveillance audit will be necessary.

<b>Table C4: Surveillance Level Years after certification or recertification</b>					
<b>Surveillance score (from Table C3)</b>	<b>Surveillance level</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
2 or more	Normal Surveillance	On-site surveillance audit	On-site surveillance audit	On-site surveillance audit	On-site surveillance audit & recertification site visit

## 11. Outcome of SAI Global Assurance Services Decision

SAI Global determines that:

- The Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery and the linked Northern Ireland Grown Bottom Mussel (*Mytilus edulis*) Fishery

**Continues to operate a well-managed and sustainable fishery and therefore, continued certification to the MSC Principles and Criteria for Sustainable Fishing is awarded.**

## 12. Information Sources

### Meetings:

Refer to table of meetings itemized in Section 3 (Table 1).

## **Report and publication**

### **Evidence provided on progress on conditions**

Knights A. M., T. P. Crowe, C. Burnell 2006. Mechanisms of larval transport: vertical distribution of bivalve larvae varies with tidal conditions. *Marine Ecology Progress Series* 326: 167-174.

Maguire, J.A., T. Knights, G. Burnell, T. Crowe, F. O'Beirn, D. McGrath, M. Ferns, N. McDnough, N. McQuaid, B. O'Connor, R. Doyle, C. Newell, R. Seed, A. Smaal, T. O'Carroll, L. Watson, J. Dennis, M. O'Cinneide 2007. Management recommendations for the sustainable exploitation of mussel seed in the Irish Sea. *Marine Environment and Health Series* No 31. Reference No. ST/02/03.

Marine Institute 2013. Annex 1: Appropriate Assessment of Fisheries and Aquaculture in Lough Swilly (SAC 002287).

Marine Institute 2013. Article 6 Assessment of Fisheries, including a Fishery Natura Plan for Seed Mussel (2013-2017), in the Irish Sea. July 11<sup>th</sup> 2013.

Marine Institute response to IFI observations on the Appropriate Assessment of the Irish Sea seed mussel fishery. 23<sup>rd</sup> August 2013.

Marine Institute response to BWI observations on the Appropriate Assessment of the Irish Sea seed mussel fishery. 23<sup>rd</sup> August 2013.

Marine Institute response to Coastwatch observations on the Appropriate Assessment of the Irish Sea seed mussel fishery. 23<sup>rd</sup> August 2013.

Marine Institute response to NPWS observations on the Appropriate Assessment of the Irish Sea seed mussel fishery. 23<sup>rd</sup> August 2013.

BGMCF Information Note 16<sup>th</sup> May 2014.

Draft Minutes of BGMCF Meeting 15<sup>th</sup> May 2014

BGMCF 2012 Castlemaine Seed Fishing Report

BGMCF 2014 Fishery Natura Plan for Seed Mussel Fishing in Southern Irish Sea for the years 2014-2019.

BGMCF 2014 Draft Fishery Natura Plan *For Seed Mussel fishing* Long Bank SAC, Blackwater Bank SAC. Wicklow Reef SAC, Wicklow Head SPA, Rockabill to Dalkey Island SAC, Rockabill SPA, *for the years 2013-2018*

BGMCF letter regarding the Research Plan

Industry response to Marine Institute correspondence

Draft Terms of Reference and Modus-Operandi for the Inshore Fisheries Technical Advisory Committee

Castlemaine Fisheries Natura Plan – Variation Request proposed on the 19<sup>th</sup> August 2013 for an addition of seed sourced from The Irish Sea to supplement co-op activities between 2013 and 2016.

Harvest Control Rules – Seed fishing ROI waters

Agri-food and Bioscience Institute 2013. Mussel Stock Assessment: Ards Peninsula. August 2013.

26<sup>th</sup> September 2013 Skullmartin Rock seed mussel survey.

NPWS. Wicklow Reef SAC (site code: 2274). Conservation objectives supporting document – Marine Habitat. Version 1 June 2013.

NPWS. Blackwater SAC (site code: 2953). Conservation objectives supporting document – Marine Habitat. Version 1 April 2013.

NPWS. Rockabill to Dalkey Island SAC (site code: 3000). Conservation objectives supporting document – Marine Habitat and Species. Version 1 April 2013.

DAFM Fisheries Natura Declaration No. 3 of 2013. September 2013.

DARD Fisheries Act (Northern Island) 1966, as amended. Section 14 permit. 2013

Ministerial Determination in relation to EIS requirements for Shellfish Aquaculture Licensing in Catlemaine Harbour. October 2012.

Ministry for Agriculture, Food and the Marine. Statutory Instruments SI No. 8 of 2013. Mussel Seed (closing of fisheries) regulations 2013.

Ministry for Agriculture, Food and the Marine. Statutory Instruments SI No. 352 of 2013. Sea Fisheries and Maritime Jurisdiction (Mussel Seed) (Opening of Fisheries) regulations 2013.

Determination by Minister for Agriculture, Food and the Marine.. Regulation 6(1) Determination. Fishery Natura Plan for Seed Mussel Fishing 2013-2017.

South Ards Modolious locations

Carnsore mussel exclusion 2014 and 2014 revised

Hook Head mussel exclusion 2014 and 2014 revised

Saltee mussel exclusion 2014 and 2014 revised

DAFM and DARD Consultation paper – Mussel Husbandry Review 2014 Data collection & Use in the revised resource allocation process.

Proposed Research Programme for the Irish Sea seed mussel fishery for 2014 and beyond.

## APPENDIX 1: Stakeholder Comments

### Comment from Coastwatch

Hi Orla

Please find the Coastwatch submission on bottom grown mussels enclosed.

### Coastwatch submission on the 'Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery MSC label.

#### Introduction

This fisheries and aquaculture combination was certified as sustainable on the 30th July 2013 and has carried the MSC label for the past year. It is now undergoing its first review. Coastwatch was invited to make a submission.

On July 8<sup>th</sup> 2014 Coastwatch representatives attended a meeting with MSC Assessors – that is representatives of the **SAI Global Assurance Services / Global Trust** (Quayside Business Park, Mill Street Dundalk, County Louth, IRELAND [www.saiglobal.com/assurance](http://www.saiglobal.com/assurance)) The meeting took place in BIM headquarters and Joanne Gaffney of BIM was present for most of the meeting.

The meeting clarified details about the All Ireland Bottom Mussel Fisheries and monitoring/control. Coastwatchers noted that some detail was difficult to find on line and also presented concerns about a number of aspects of both the wild fisheries and aquaculture. After clarifications and discussions this environmental NGO felt that the label was not justified for this fisheries in present conditions and there should not be seed taken this year to allow recovery.

Since then Coastwatchers have carefully examined extra information leads provided during the meeting and is now recommending that the MSC label be withdrawn.

The reasons are summarised below and some expanded upon.

1. The fisheries has the MSC label as a sign of being 'sustainable', but the wild seed management especially the harvest from the Irish sea as practised over the past few years appears to be anything but sustainable. (See appendix 1 attached)
2. Loopholes were identified: A boat which carries the MSC label can contract to dredge mussels from grounds which are not MSC and still sell the crop as MSC – example spring 2014 George Golden dredging mussels in Lough Swilly in the lapsed license grounds which Gallagher is claiming.
3. Misleading information for the consumer:

- BIM holds the label and then passes it to bottom mussel industry operators. That includes large powerful dredgers and potentially small traditional boats which fish with hand held dredges and can only take a small amount seed. On the MSC website the information for the consumer appears misleading to us. While dredging by ‘modified Dutch design’ is mentioned, it is not described. Instead virtually the entire ‘More about Fishing Methods’ section describes the artisan handheld dredge method. We estimate that > 95% of the MSC labelled tonnage produced is not fished this way.
  - We understand that the final crop is certified, not just the seed mussel. Yet the consumer brief includes no information about how the mussels are ‘cultured’. What happens to the seed once dredged up? If it was actual undersized mussel which need a year or two to grow, then the harvested seed is relayed – or dumped depending on operator - in the inshore water plots, to be dredged up again and often a repeat of this step to a second relay plot. Why is this and the carbon footprint not described?
  - The Fishery tonnage heading explains that the total seed allocations for 2010 season (Northern Ireland and Ireland) were 35,397 tonnes. It doesn’t tell you what it was when the fisheries got its MSC label or the previous year and most importantly it does not tell you what the actual seed stocks were - a fraction of the stock allocations! Imagine ICES were to allocate more mackerel than the total stock estimate! Imagine that was then ecolabelled.
  - Some 3 of 16 operators now certified operate part of solely out of Lough Foyle where aquaculture is not licensed. The consumer information on the web (copied in appendix 1) is incorrect when stating permitted plots.
4. Definition: In Irish law the SI opening the mussel seed harvest defines ‘Mussel seed’ not by age, or age and size, but by planned use. A seed mussel is one ‘**not intended for direct human consumption**’. The MSC label is applying the same bizarre definition as in the Statutory instruments for this fisheries. This is not in keeping with the ecosystem management approach. As it means that multiannual established mussel beds are just as open to be dredged as a single spat fall seed mussel bed – as long as the mussels harvested spend a few days or weeks in an aquaculture plot. The weakness of this definition has already been pointed out by Coastwatch when we were part of the Advisory group to the minister but has still not been addressed. Just as the Blue Flag goes beyond what the bathing water directive requires, consumers would expect the MSC label to use an ecologically meaningful definition.

5. Lack of management information. The information on stable (multiannual) mussel beds around Ireland is not available. There is no map showing established mussel beds in the Irish sea, not even in Natura 2000 sites, though we know of beds which are decades old in estuaries and fishermen maintain that there were stable mussel beds outside Wexford harbour and in Long Bank SAC, also outside Carlingford and Castlemain. Given our modern ocean research capabilities and mobile fish stock estimates it should not be too difficult to establish mussel population structures and locate and map mussel beds made up of sessile distinct colour biogenic reef forming organisms.

It is quite likely that we have both intertidal and sublittoral mussel genotypes, suited to establishing and holding on in deeper water - just like there are depth and exposure related genotypes in many other species eg native oysters. You need to know something to manage it. Here the unknowns are deemed so large that government decided it could not include the fisheries in the MSFD descriptor

for fish and commercially harvested shellfish. This exclusion continues today in the Monitoring proposals just published.

We cannot see how there is enough information for an ecolabel – but not enough for the MSFD. We are concerned that GES has not been defined for this species.

6. Socially justified? Coastwatch has seen that the labour intensive small boats in Castlemaine harbour have a high conversion of seed to final harvest crop (1 to 7 and up to 11 tonnes) While the officially BIM quoted conversion by the large mussel boats is a miserable 1 tonne of seed making one tonne of harvest size mussels. Yet most MSC carrying operators are large operators.

The CFP clearly states (Recital 33) *“Member States should promote responsible fishing by providing incentives to those operators who fish in the least environmentally damaging way and who provide the greatest benefits for society”*.

7. Non compliance with the Habitats Directive

In Lough Swilly mussel dredging was carried out by a certified operator in April 2014 in the SAC and SPA (EC Habitats and Birds Directives) without an appropriate assessment. While we tried to halt him, we were unsuccessful. The seafloor of this sheltered formally rich grounds beside Inch Island was wrecked and soup like when Coastwatchers revisited the site a month later.

We would be grateful if you could provide us an acknowledgement of this submission and the nature of your decision and the main reasons and considerations on which the decision is based.

Very best

Karin

Karin Dubsky  
International Coordinator  
**Coastwatch Europe**  
T: [+353 \(0\)53 942 5843](tel:+3530539425843)  
F: [+353 \(0\)53 94 25046](tel:+3530539425046)  
M: [+353 \(0\)868 111 684](tel:+3530868111684)  
E: [KDubsky@Coastwatch.org](mailto:KDubsky@Coastwatch.org)  
W: [www.Coastwatch.org](http://www.Coastwatch.org)

## Comment from Irish Vessel Mussel Fishing Alliance



This is the worst managed fishery anywhere in the world and it has very little stakeholder buy in. It is criminal for the exchequer to be prioritising funding for this sham while denying funding to children with special needs or hospital funding. All this just so a group of academics can meet, greet and back slap each other.

There is also a legal issue regarding United Kingdom vessels from Northern Ireland fishing in this fishery. Could MSC please advise us as to the legal framework which allows these vessels operate in Irish Waters as soon as possible. This information was not included in the assessment in 2013 while the legal regime for Irish vessels was listed. If these UK vessels are operating in Irish Waters with no legal frame work in place then these vessels must be operating in an unlicensed unregulated fishery. This is a serious matter which needs to be clarified.

I await hearing from you.

Yours Sincerely,



IRMFVA

Irish Registered Mussel Fishing Vessel Alliance, The Harbour, Dunmore East, Co. Waterford, Ireland



07<sup>th</sup> July 2014

To all Stakeholders & MSC,

We wish to express our disbelief at the initial awarding of MSC accreditation to the Irish Bottom Grown Mussel Fishery. Now we wait to see if the upcoming Surveillance Audit will continue to ignore the fact that this fishery has collapsed and that the Department of Agriculture Food and the Marine's refusal to acknowledge that they have presided over the destruction of the Irish Bottom Mussel Industry.

We intended to bring the actions of the Department, BIM and Global Trust/MSC to the media's attention as we believe that their action or inaction have been contrary to what would be expected of managers of a Sustainable Fishery. We have already objected to and questioned the awarding of the MSC label to this fishery. We contend that a stakeholder is someone who will lose their livelihood if the resource is alienated from them.

In 2013 MSC awarded its label to the fishery. The reality was that the fishery was already collapsed then with the catch of mussel seed being 2,500 tonnes. A decade previous the catch of mussel seed was 25,000 tonnes. The catch in 2013 was by far the lowest since record taking began, it was also a continuance of a downward slide in the catch of mussel seed.

In 2014 so far no mussel seed has been found by BIMs survey vessel other than clumps of seed mussel so sparsely spread that they could not be quantified by the officials carrying out the survey. No beds of seed mussel have been located.

In 2013 during a High Court Case Josephine Kelly of the DAFM used the fact that the Irish Bottom Grown Mussel Fishery had been awarded MSC accreditation to defend the DAFM management of this fishery. As we know the fishery has collapsed we must question how MSC are allowing their name to be used in these circumstances. If MSC are comfortable with this situation then a bigger question needs to be asked of the integrity of the MSC label in other certified fisheries. By permitting the MSC label to be used for this fishery, the label will become toxic. By giving this fishery a MSC label the fishery is being further destroyed as management seek comfort of marching under the MSC flag.

Irish Registered Mussel Fishing Vessel Alliance. The Harbour. Dunmore East. Co. Waterford. Ireland

## APPENDIX 2: SAI Global's response to stakeholder's comments



**Karin Dubsky**

International Coordinator  
**Coastwatch Europe**

**Re: Coastwatch submission on the 'Ireland and Northern Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery MSC Certifications**

28<sup>th</sup> August 2014

Dear Karin,

Further to our acknowledgement of receipt of your stakeholder submission in connection with the MSC surveillance audit for the Northern Ireland and Ireland bottom grown mussel fishery certificates, the assessment team have reviewed the information that you have provided and would like to make the following responses.

At our meeting, Coastwatch brought to our attention the difficulty in accessing information on the original assessment, certification and client information. We provided clarification of how to access this on the MSC website (link provided again below), although I note that many of your comments refer to the summary information on the certified fisheries, rather than the detailed reports available on the downloads. I would like to confirm that much of the information to your queries lies within the overall full assessment report which can be obtained from the download link on the website (link provided below). We will also send all relevant documents (Certification Report, Surveillance Audit Report) directly to you which are also published on the MSC website.

I have also referred back to the Certification Reports for these fisheries in addressing the comments you raise (numbered one to seven) in your submission:

1. The fisheries has the MSC label as a sign of being 'sustainable', but the wild seed management especially the harvest from the Irish sea as practised over the past few years appears to be anything but sustainable. (See appendix 1 attached).

Please note we did not receive your Appendix 1.

As you are aware, fishery science has not ascertained a definable stock-recruitment relationship for bivalve molluscs and hence, the assessment of stock status under MSC performance indicators was undertaken using a risk based approach. This considered the overall impact of the fishery on the total mussel stock in the waters under assessment and concluded that the spatial and temporal scales of the fishery (active for only a few weeks per year) and occurring in very small areas compared to the total area of coastal (intertidal and sub-tidal) waters of Ireland/Northern Ireland available for mussels. The fishery targets ephemeral seed beds which occur

in discrete locations which are both variable and unpredictable in size and location, although there is consistency over the years of the general vicinity where they are likely to occur.

However, it is stressed that ephemeral beds represent only a component of the overall potential spawning settlement for mussels in the Irish Sea and surrounding waters of Ireland and Northern Ireland.

With respect to your statement on the management of harvests of wild seed it is apparent that there has been a decline in the volume of seed associated with ephemeral seed beds available to the fishery which we have documented in the original assessment report. There has been a recent 5 year decline although greater quantities of seed were identified in 2008 and 2009. The 2006 seed fishery was approximately the same as 2013. As the fishery relies upon ephemeral beds, by nature they can be unpredictable and variable in location. The fishery commenced in the late 1960's and the harvest strategy then as now, was to remove available seed from these beds and relocate to inshore sheltered waters where they can be grown to market size, which also results in a net potential spawning contribution, albeit from a relocated site. However, it is important to acknowledge that seed fishing does not have the objective of seed mortality since relocated mussels are not harvested for circa 2+ years.

The assessment team were satisfied that the regulatory framework in place is sufficient for the opening, closing, location and quantity of seed to be fished per permit holder and these are demonstrably improved when Principle 2 performance is considered viz a viz the Habitats Directive. However, within the context of the control of harvest, the assessment team has raised Conditions relating to the fisheries' performance against the MSC PI 1.2.2; well defined and effective harvest control rules in place and PI 3.2.2; the fishery-specific management system includes effective decision-making processes that result in measures and strategies to achieve the objectives. In summary, these relate to the basis of the original cap on total seed fishable by the combined fisheries which appears obsolete compared to volumes of seed fished over recent years and the decision mechanism which controls harvesting (timing) of a particular seed fishery.

A review of the original basis for forming the harvest cap, based on new information on productivity of on growing beds (since husbandry practices have likely changed and new data is available) has been instigated as part of the action plan to address these conditions. In your submission letter, *'The Fishery tonnage heading explains that the total seed allocations for 2010 season (Northern Ireland and Ireland) were 35,397 tonnes'* makes reference to the disparity of the cap and current size of seed fisheries. Additionally, the volumes of seed fished over the last 10 years are available in the Public Certification Report and the Surveillance Audit Report provides the recent 2013/14 figures.

**2. Loopholes were identified:** A boat which carries the MSC label can contract to dredge mussels from grounds which are not MSC and still sell the crop as MSC – example spring 2014 George Golden dredging mussels in Lough Swilly in the lapsed license grounds which Gallagher is claiming.

As a point of clarification, all current mussel growing beds, including Lough Swilly are part of the certificates and since there are members of the client group that have operations in both Northern Ireland and Ireland, I can also confirm that the example you refer to is a member of the client group of both certificates and can fish under both.

**3. Misleading information for the consumer:**

-BIM holds the label and then passes it to bottom mussel industry operators. That includes large powerful dredgers and potentially small traditional boats which fish with hand held dredges and can only take a small amount seed. On the MSC website the information for the consumer appears misleading to us. While dredging

by 'modified Dutch design' is mentioned, it is not described. Instead virtually the entire 'More about Fishing Methods' section describes the artisan handheld dredge method. We estimate that > 95% of the MSC labelled tonnage produced is not fished this way.

I think the information you refer to is from the summary of the features of the fishery provided on the MSC website. The Public Certification Report available in the download section contains greater detail, descriptions and photographic illustrations of each gear type and places this in context of the use of each gear type. It is acknowledged, that the vast majority of seed and harvest size mussels are fished with the modified Dutch dredge and SAI Global does not attempt to mislead consumers in anyway. The Public Certification Report also provides information on the modifications to the gear that relate to reducing the impact on bottom substrate.

We understand that the final crop is certified, not just the seed mussel. Yet the consumer brief includes no information about how the mussels are 'cultured'. What happens to the seed once dredged up? If it was actual undersized mussel which need a year or two to grow, then the harvested seed is relayed – or dumped depending on operator - in the inshore water plots, to be dredged up again and often a repeat of this step to a second relay plot. Why is this and the carbon footprint not described?

Your statement is correct in that the certificate applies to the final harvested product. Greater detail is provided in the Public Certification Report and should be reviewed for higher levels of information than provided in the Summary Section. Mussel seed is transferred to the relaying beds and operators use slight variations on the re-seeding process based on their knowledge, vessel operational modes and husbandry objectives, although they are required to work within a licensed capacity of each site and do aim to improve productivity of output based on unit inputs. Within the regulatory framework, re-locating mussels to other relaying locations is practiced. These locations are within the units of certification. Carbon footprint is not a performance indicator of the MSC Standard.

- The Fishery tonnage heading explains that the total seed allocations for 2010 season (Northern Ireland and Ireland) were 35,397 tonnes. It doesn't tell you what it was when the fisheries got its MSC label or the previous year and most importantly it does not tell you what the actual seed stocks were - a fraction of the stock allocations! Imagine ICES were to allocate more mackerel than the total stock estimate! Imagine that was then ecolabelled.

With respect to the fishery tonnage heading, details of total harvests of finished product is provided in the Public Certification Report and also documents the seed allocations available over the last 10 years. The Surveillance Audit report up-dates this with 2013 fishery transfers and also total production (derived from previous seed fisheries). The cap of 35,397 tonnes has been subject to a Condition and we note your comment regarding the disparity of the cap and recent seed fisheries. However, the cap is not implemented directly and seed fisheries are controlled based on their availability on a season to season basis, assessed via quantification surveys and to that extent, the cap can be considered redundant. The cap relates to the licensed capacity of on-growing beds derived some 10 years ago and as such, its basis is not a result of an assessment of a target mussel standing stock that allows for an MSY objective for fishing rate of seed. Hence, reference to ICES stock assessments appropriate for other fisheries is not relevant in this context.

Some 3 of 16 operators now certified operate part of solely out of Lough Foyle where aquaculture is not licensed. The consumer information on the web (copied in appendix 1) is incorrect when stating permitted plots.

Based on your observation, the assessment team would like to clarify that Lough Foyle is under the management authority of the Loughs Agency and that currently the Agency has not implemented an

aquaculture permitting process such as that described for Ireland and Northern Ireland. The Loughs Agency is an agency of the Foyle, Carlingford and Irish Lights Commission (FCILC), established as one of the cross-border bodies under the 1998 Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of Ireland. The Agency aims to provide sustainable social, economic and environmental benefits through the effective conservation, management, promotion and development of the fisheries and marine resources of the Foyle and Carlingford Areas. Since its inception, the Agency has implemented a management framework for Lough Foyle with a broad range of objectives, including:

- the promotion of development of Lough Foyle and Carlingford Lough for commercial and recreational purposes in respect of marine, fishery and aquaculture matters;
- the management, conservation, protection, improvement and development of the inland fisheries of the Foyle and Carlingford Areas;
- the development and licensing of aquaculture; and
- the development of marine tourism

Within the management framework, seed mussel allocations are still regulated by DAFM or DARD depending on the country of vessel registration but in either case, recommendations are formed through the consultative forum of BGMCF and whilst, no licences are currently in place for aquaculture activities in Lough Foyle due to the historical issues regarding jurisdiction, a licensing regime is under development, implemented by the Loughs Agency for the current producers. This information is presented in the Public Certification Report available on the MSC website.

4. Definition: In Irish law the SI opening the mussel seed harvest defines ‘Mussel seed’ not by age, or age and size, but by planned use. A seed mussel is one ‘**not intended for direct human consumption**’. The MSC label is applying the same bizarre definition as in the statutory instruments for this fisheries. This is not in keeping with the ecosystem management approach. As it means that multiannual established mussel beds are just as open to be dredged as a single spat fall seed mussel bed – as long as the mussels harvested spend a few days or weeks in an aquaculture plot. The weakness of this definition has already been pointed out by Coastwatch when we were part of the Advisory group to the minister but has still not been addressed. Just as the Blue Flag goes beyond what the bathing water directive requires, consumers would expect the MSC label to use an ecologically meaningful definition.

The assessment team acknowledges your comment on the Statutory Instrument. The assessment team is satisfied that the management framework, (regulations and system) would operate to avoid the extraction of multi-annual mussel beds, if they were to be discovered in sufficient quantities for commercial use. However, referring to your concern, the assessment team has raised two Conditions on the fisheries’, designed to improve the basis of the harvest control rule and supporting decision making process as described in the Public Certification Report and the 1<sup>st</sup> Surveillance Report which will be published shortly. Action plans and milestones which the assessment team will audit on an annual frequency, are provided in the Report, designed to raise the performance of the fishery to a unconditional pass score for each of these Conditions. In this regard, we acknowledge your comment and we will continue to keep you informed of the audit outcomes as they progress.

5. Lack of management information. The information on stable (multiannual) mussel beds around Ireland is not available. There is no map showing established mussel beds in the Irish sea, not even in Natura 2000 sites, though we know of beds which are decades old in estuaries and fishermen maintain that there were stable mussel beds outside Wexford harbour and in Long Bank SAC, also outside Carlingford and Castlemaine. Given our modern ocean research capabilities and mobile fish stock estimates it should not be too difficult to establish mussel population structures and locate and map

mussel beds made up of sessile distinct colour biogenic reef forming organisms.

The assessment team acknowledges your comments with regard to an absence of knowledge of mussel stock population structures and mapping any multi-annual beds. We have documented the advancements in the protection of sensitive habitats as defined under Natura 2000 legislation and also note that Long Bank SAC, in addition to a number of areas have now been assessed under the Habitats Directive against the outlined conservation objectives in each case. This has led to the closure of a number of areas to mussel seed fisheries, albeit not for habitat conservation measures. The assessment team met with mussel fishers during the initial assessment of the fisheries both in Ireland and Northern Ireland and the assessment reviewed a substantial amount of information available on seed bed surveys and fisheries which dates back to the later 1960's. Other studies (Maguire et al., 2007) have also noted evidence of the possibility of some mussel beds or proportions of these to remain overwinter and have alluded to the causal factors of ephemeral and permanent beds. Additionally, we have confirmed that both DAFM (via BIM) and DARD (via AFBI) continue to survey the coastline of Ireland and Northern Ireland in order to locate and assess the parameters of seed beds (size, structure, substrate, viability and predation) and at the same time, will document evidence of larger mussels which may have overwintered.

It is quite likely that we have both intertidal and sublittoral mussel genotypes, suited to establishing and holding on in deeper water - just like there are depth and exposure related genotypes in many other species eg native oysters. You need to know something to manage it. Here the unknowns are deemed so large that government decided it could not include the fisheries in the Marine Strategy Framework Directive descriptor for fish and commercially harvested shellfish. This exclusion continues today in the Monitoring proposals just published.

We cannot see how there is enough information for an ecolabel – but not enough for the MSFD. We are concerned that GES has not been defined for this species.

The Marine Strategy Framework Directive (MSFD) establishes a framework within which EU Member States are required to take the necessary measures to achieve or maintain Good Environmental Status (GES) in the marine environment by 2020. It aims to protect Europe's marine waters by applying an ecosystem-based approach to the management of human activities, while enabling sustainable use of marine goods and services for future generations. There is a cyclical review process of setting, monitoring and re-confirming the status and conservation objectives of the MSFD, defined as 6 years and that as new data can be incorporated into the process that may define objectives over time. In the Ireland's Marine Strategy Framework Directive Article 19 Report of the Initial Assessment, GES and Targets and Indicators, there are several references to mussel bed features. Additionally, the assessment team noted that there was consultation on the matter you refer too where submissions were made with respect to mussel fisheries during the public consultation phase (Response to Submissions – MSFD Initial Assessment Consultation, DECG 2013).

The response to the submissions noted that 'Mussel beds of commercial interest are largely confined to small beds in the coastal waters of the Irish Sea (with the exception of Castlemaine Harbour, Kerry) and as such are probably not the most suitable for the assessment of environmental status at the scale of Ireland's Assessment Area. The mussel seed fishery is assessed under the Habitats Directive where appropriate'.

The assessment team is aware that the MSFD by definition is part of an integrated framework of other European and National legislature that shapes policy for the protection of Ireland's marine environment. In this context, MSFD is seen as a positive contributor in defining GES at the spatial scale of the State for its EEZ and even though explicit objectives for mussel fisheries may not be set out within its objectives it will support the cascading legislature across conservation and management of anthropogenic activities that may impact on the

marine environment.

The assessment team will review the developing implementation of the MSFD during the 2015 surveillance audit of the fisheries in this context.

With regard to genetic studies on mussels we acknowledge your comment for further information on the structure (genetic) of mussel populations in the Irish Sea. The client group has set out a formal proposal of research priorities for funding as part of meeting the year 1 milestone for a Condition associated with Principle 3 which identifies genetic research (PI 3.2.4: The fishery has a research plan that addresses the information needs of management).

We will continue to monitor the progress of the research proposals and plans in this regard.

6. Socially justified? Coastwatch has seen that the labour intensive small boats in Castlemaine harbour have a high conversion of seed to final harvest crop (1 to 7 and up to 11 tonnes) While the officially BIM quoted conversion by the large mussel boats is a miserable 1 tonne of seed making one tonne of harvest size mussels. Yet most MSC carrying operators are large operators.

The CFP clearly states (Recital 33) *“Member States should promote responsible fishing by providing incentives to those operators who fish in the least environmentally damaging way and who provide the greatest benefits for society”*.

Whilst socio-economic parameters are not directly assessed in the MSC Standard, three performance indicators were considered relevant in regard to maximizing the output from seed transfers and conditions were raised. PI 1.2.2; well defined and effective harvest control rules in place and PI 3.2.2 the fishery-specific management system includes effective decision-making processes to ensure that viability of transferred seed remains within defined objectives.

Additionally, a further condition with regard to P.I 2.5.3 Information and Knowledge of the Impacts on the Ecosystem should be available. We have documented the implementation of an audit process that will collect, review and should analysis on the productivity parameters of each producer in Ireland and Northern Ireland which will respond to your comment indirectly (refer to Mussel Husbandry review, Seed allocation review). With regard to PI 3.2.2, the assessment team considered that indicators of ecosystem changes should be considered by the fishery to ensure that the cultivation of mussels on licensed sites does not cause damage to the integrity of the ecosystem of each bay. These Conditions remain open, although satisfactory progress has been made against the milestones set out in the Public Certification Report and are reported upon within the 1<sup>st</sup> Surveillance Report.

## 7. Non compliance with the Habitats Directive

In Lough Swilly mussel dredging was carried out by a certified operator in April 2014 in the SAC and SPA (EC Habitats and Birds Directives) without an appropriate assessment. While we tried to halt him, we were unsuccessful. The seafloor of this sheltered formally rich grounds beside Inch Island was wrecked and soup like when Coastwatchers revisited the site a month later.

For clarification, the licensed aquaculture operators in Lough Swilly do not hold individual Appropriate Assessments (AA) as such assessments would fail to consider cumulative impact. The cumulative AA is for the entire Lough and specific to the defined conservation objectives. The AA has been completed and published May 2014 (ANNEX 1: Appropriate Assessment of Fisheries and Aquaculture in Lough Swilly (SAC 002287) (May 2014) provided by Marine Institute. However, whilst the AA has been completed, implementation of its

findings has only just commenced. Aquaculture operations that are covered by section 19A (4) of the Fisheries (Amendment) Act 1997 may continue to operate pending a final determination in each case. The assessment team will review the outcome of implementation at the next Surveillance Audit.

Yours sincerely,

Dave Garforth  
**Seafood Business Manager**  
**EMEA Region**

**SAI Global Assurance Services /Global Trust**

Quayside Business Park, Mill Street

Dundalk, County Louth, IRELAND

Phone: +353 (0) 42 932 0912

Mobile: +353 (0) 87 7978480

[www.saiglobal.com/assurance](http://www.saiglobal.com/assurance)

[www.GTCERT.com](http://www.GTCERT.com)



Irish Vessel Mussel Fishing Alliance  
The Harbour,  
Dunmore East,  
Co. Waterford.

28th August 2014

**Ref: Your submission to SAI Global regarding MSC Certification of the Ireland/N. Ireland bottom grown mussel fishery**

Dear Irish Vessel Mussel Fishing Alliance Member,

The audit team appointed to conduct the surveillance audit for the MSC certificates of the N. Ireland and Ireland mussel fisheries have reviewed your submission and have discussed the concerns that you have raised in relation to the MSC certification requirements and performance indicators and criteria that the fisheries are measured against. We do take your concerns seriously and do wish to clarify the points raised where they may have bearing on the performance of these fisheries to the MSC Standard.

I have noted the two letters as identified by their file names from your e-mail submission:

**In response to CCF07072014005:**

The MSC certification provides a declaration of a well-managed fishery. There are conditions attached to various performance indicators under each Principle which require actions to be taken in order to improve the fishery management overall. There are 8 conditions set on the fishery with agreed actions and milestones that must be undertaken by the management authorities and the connected BGCMP. We have undertaken and reported upon the 1<sup>st</sup> surveillance audit against these conditions which is provided in the report. SAI Global is not in a position to comment on the prioritization of funding for the Bottom Grown mussel fishery other than to note that the assessment team is content that sufficient resources are available for the management of the Bottom Grown mussel sector, within the context of MSC certification and the performance gaps identified as documented as Conditions in the final certification report of the fishery.

With respect to your comment on the legal framework for the operation of UK registered vessels from N. Ireland fishing in Irish waters, I can provide the following clarification:

There is a recognizable and implemented framework for the management of both UK N. Ireland registered vessels and Irish registered vessels. This includes the Voisinage Agreement; the Common Fisheries Policy and associated EU legislation; the Fisheries Amendment Act 1997 (RoI legislation) and the Sea Fisheries & Maritime Jurisdiction Act 2006 as amended (RoI legislation); the Fisheries Act (Northern Ireland) 1966, as amended (NI legislation) Sea Fisheries Act 1968 and the Sea Fish (Conservation) Act 1967, as amended (UK legislation) and the Foyle and Carlingford Fisheries Order 2007. These provide the basis for the regulatory framework for the Bottom Grown mussel sector.

Access arrangements to Irish and Northern Irish waters are governed by the Voisinage Agreement, a neighbourhood agreement formally recognised under the London Fisheries Convention and adopted as far back as March 1964 by the then 13 European states, including Ireland and Northern Ireland.

To participate in the mussel seed fishery, operators are required to be licensed by their respective jurisdictions. The respective Departments of Ireland (DAFM) and N. Ireland (DARD) work cooperatively to manage all licences issued under the Agreement. DARD issues licences to operators who have licensed aquaculture sites in Northern Ireland waters and in respect of vessels registered in Northern Ireland. SAI Global has reviewed the list of vessels that participate in the Bottom Mussel sector from both N. Ireland and Ireland and can confirm that they are appropriately registered.

### **In response to CCF07072014006**

We again note your concern and are aware of the original objection to the certification. We are also aware that the objection was not upheld by the MSC.

The performance of the fishery against the MSC Standard has considered the basis of harvesting of seed mussels and associated decision processes and there are conditions set on PI 1.2.2; well defined and effective harvest control rules in place, PI 3.2.2; the fishery-specific management system includes effective decision-making processes that result in measures and strategies to achieve the objectives and PI 3.2.4; the fishery has a formal research plan. The progress on achieving the required 80 scores for these performance indicators is contained in the 1<sup>st</sup> surveillance audit report.

You refer to a downward trend in the seed fishery and a collapse. There has been a decline in the identification of seed beds available to the fishery which we have documented in the original assessment report. There has been a decline in seed availability over the last 5 years although greater quantities of seed were identified in 2008 and 2009. 2006 was approximately the same as 2013. As the fishery relies upon ephemeral beds, by nature they can be unpredictable and variable in location.

The fishery commenced in the late 1960's and the harvest strategy has been to remove available seed from these beds and relocate to inshore sheltered waters. It is generally observed that ephemeral seed beds do not survive winter conditions. We note that seed fishing does not result in seed mortality as with a normal fishery since relocated mussels are not harvested for circa 2+ years.

The harvest strategy supports a net contribution to the spawning population of mussels whereby, once seed is relocated and matures it will have a net spawning contribution to the Irish sea, albeit from a relocated site.

Seed availability from ephemeral beds is both variable and unpredictable. Causal factors may include significant storms occurrences in the Irish sea and associated removal of typical bottom substrate, prevailing wind patterns at the time of settlement, wider mussel stock/ecosystem factors and the success of seed locating surveys. The Irish Sea is a highly energetic and hydrodynamically complex environment and annual/seasonal changes are likely to have a significant effect on larval dispersal. There has been some research projects that are advancing knowledge on larval dispersal and settlement of mussels in the Irish sea (Maguire et al. 2007) and the client group through the BGMCF have now commenced identification of research priorities that will consider larval abundance and dispersal factors. The absence of a formal research plan was noted at full assessment and is now a condition on the certificate to develop a plan specific to the knowledge gaps of the fishery.

We have also assessed and confirm that seed fisheries take place in a regulated manner; including caps on quantities fished, specific open periods and the registration of vessels as described previously. There is also a comprehensive reporting system for seed fishing.

With reference to seed availability for 2014; we have interviewed the survey officer and reviewed survey reports which are also publically available (<http://www.bim.ie/our-publications/aquaculture/>). Most recently (July 2014 reports), the Survey Officer reported for Southern Irish sea 'that due to weather and tide condition, it was not possible to deploy the grab and thus a definitive tonnage could not be estimated. However, based on previous

experience, historic data, the current tonnage (at the current size) of the three areas (Rusk channel, Cahore shore and west Long Bank) may be conservatively estimated as being between 2500 and 4000 metric tonnes ([Seed Mussel Survey Report for the South Irish Sea 2014](#)). Other areas showed only intermittent seed patches. The reports also make reference to storm impact on the bottom substrate.

With respect to MSC claims, it is appropriate for the fishery and management agencies to refer to MSC certification and they are entitled to identify the fishery as MSC certified. Surveillance audits will continue to assess the progress of the client group at fulfilling the requirements of the 8 Conditions on the certificate and report on these annually, the reports of which will be available on the MSC website. The surveillance audit for the first annual surveillance audit will be posted shortly. (MSC link to be added).

<http://www.msc.org/track-a-fishery/fisheries-in-the-program/certified/north-east-atlantic/ireland-bottom-grown-mussel/assessment-downloads>

<http://www.msc.org/track-a-fishery/fisheries-in-the-program/certified/north-east-atlantic/northern-ireland-bottom-grown-mussel/assessment-downloads>

Yours sincerely,

**Dave Garforth**

**SAI Global Assurance Services /Global Trust**

Quayside Business Park, Mill Street

Dundalk, County Louth, IRELAND

Phone: +353 (0) 42 932 0912

Mobile: +353 (0) 87 7978480

[www.saiglobal.com/assurance](http://www.saiglobal.com/assurance)

[www.GTCERT.com](http://www.GTCERT.com)