

Submission AGR 00242-20: Recommendation to refuse an Aquaculture and Foreshore Licence Application for 1 site (T08/115A)

TO: Minister
STATUS: Completed
PURPOSE: For Decision

AUTHOR: OMahony, Jane
OWNER: OMahony, Jane
REVIEWERS: Farrell, Geraldine
Horan, Helena
Quinlan, John
Beamish, Cecil
Ennis, Joan

DIVISION: Coastal Zone Management
DECISION BY:

Final comment

Minister determines that the Aquaculture and Foreshore Licences not be granted for the reasons outlined. AK 29/10

Action required

Ministerial Determination on Aquaculture/Foreshore Licensing Application (T08/115)

Executive summary

The Ministers determination is requested in relation to an application for an Aquaculture Licence from Sliogeisc Siar Teoranta, 36 Mullen Mor, Tuam Road, Co. Galway. The application is for the cultivation of Native and Pacific Oysters using Bags and trestles, float and bag, moulded baskets and longlines on Site T08/115A, totalling 17.754 hectares on the foreshore in Aughinish Peninsula, Co. Clare.

A submission in respect of the application for the Foreshore Licence is also set out for the Minister's consideration.

It is recommended that the Minister determines that the Aquaculture and Foreshore Licences **not be granted** for the reasons outlined in the 'Detailed Information' section below.

Detailed information

DECISION SOUGHT

The Minister's determination is requested please in relation to an application for an Aquaculture Licence from Sliogeisc Siar Teoranta, 36 Mullen Mor, Tuam Road, Co. Galway, for a site at Aughinish Peninsula, Co. Clare.

A submission in respect of the accompanying Foreshore Licence is also set out below, for the Minister's consideration.

Note: Tabs attached to this submission may contain additional information which is subject to redaction if transmitted to third parties.

BACKGROUND

Marine aquaculture operations require separate Aquaculture and Foreshore Licences and Ministerial approval is required in respect of this submission (Aquaculture Submission) and submission underneath (Foreshore Submission), which refer to the same site.

The Aquaculture Licence defines the activity that is permitted on a particular site and the Foreshore Licence allows for the occupation of that particular area of foreshore. The continuing validity of each licence is contingent on the other licence remaining in force.

APPLICATION FOR AN AQUACULTURE LICENCE

An application (TAB A) for an Aquaculture Licence has been received from the applicant referred to above (in conjunction with an application for a Foreshore Licence), for the cultivation of Native and Pacific Oysters using bags and trestles, float and bag, moulded baskets and longlines in relation to a 17.754 hectare site on the foreshore at the Aughinish Peninsula, Co. Clare (T08/115A).

LEGISLATION

Section 7 of the Fisheries (Amendment) Act 1997 provides that the licensing authority (i.e. Minister, delegated officer or, on appeal, the Aquaculture Licences Appeals Board) may, if satisfied that it is in the public interest to do so, license a person to engage in aquaculture.

Article 6 (3) of the Habitats Directive provides that *"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon ... shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives ... the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned ..."*

CONSULTATION AND PUBLIC COMMENT

The application was sent to the Department's technical experts, statutory consultees and was also publicly advertised in a composite public notice covering both aquaculture and foreshore elements.

Technical Consultation – TAB B

Marine Engineering Division (MED): MED have stated that the site dries out at low tide and the proposed use of longlines will not be possible. They noted the site is adjacent to Aughinish Martello Tower which is a protected structure and of tourist interest. Following the findings of the Appropriate Assessment and follow-up survey by the Marine Institute MED also undertook an inspection on site in July 2020. While at the proposed site MED met with a local seaweed harvester who advised that there are two local harvesters with traditional rights for harvesting seaweed at this location. A number of "pathways" across the foreshore were evident and MED was advised that these were historical tracks created by moving boulders to allow ponies/horses to pull loads of seaweed up the foreshore. In addition MED were advised that the access point proposed by the applicant is in fact a private farm track which is gated, and any access through this route would require permission from the owner.

Given the existence of native oysters and alien species of seaweed as advised by the MI and the presence of seaweed harvesting on the site, MED does not recommend the licensing of this site. The issue of the access would also have to be cleared up prior to any licence being granted.

Marine Survey Office (MSO): No comments were received from the MSO. A specific condition covering MSO matters would need to be inserted if a licence was to be granted as follows:

The Minister's determination in respect of this licence is conditional upon immediate full compliance by the Licensee in respect of all requirements and conditions which are imposed under the relevant legal provisions applicable to the Marine Survey Office.

Sea Fisheries Protection Authority (SFPA): Stated they had no observations to make in relation to this application.

Statutory Consultation – TAB C

Regulation 10 of the Aquaculture (Licence Application) Regulations, 1998 requires certain statutory bodies to be notified of an Aquaculture Licence application.

Comments were received from the following statutory bodies:

Marine Institute (MI): The MI noted that Site T08/115A is located in the Aughinish Bay Shellfish Growing Waters area and oysters in the bay are currently have an "A" classification under Annex II of EU Regulation 854/2004. The MI also noted that the site is located within the Galway Bay Complex Bay SAC and Inner Galway Bay SPA and the findings of the AA report and the Licensing Authority's Conclusion Statement. They recommended that if licensed the licensee is required to prepare a Contingency Plan which should identify, inter alia, methods for the removal from the environment of any non-target species introduced as a result of operation at this site. They also recommended that the source of seed must be approved by the Department, triploid seed only be used and the access route over the intertidal habitat must be strictly adhered to, in order to minimise habitat disturbance. The MI noted that the CLAMS process might be useful and appropriate vehicle for the development and implementation of alien species management and control plans. These concerns can be dealt with by way of licence conditions to this effect (**schedule 4**).

Commissioner of Irish Lights (CIL): CIL has no objection to this application. However, if granted, structures must be clearly marked

and the applicant must secure Statutory Sanction from CIL for the aids to navigation that may be required by the MSO (**schedule 3**).

Bord Iascaigh Mhara (BIM): No comments were received.

Public Consultation

The application was publicly advertised using a composite public notice covering both aquaculture and foreshore elements, in The Clare Champion on 2nd August 2019. The application and supporting documentation were available for inspection at Ballyvaughan and Ennistymon Garda Stations for a period of 30 days from the date of publication of the notice in the newspaper.

There were no objections/comments received from the public consultation process.

A copy of all the observations/submissions received at the Public/Statutory consultation stage was forwarded to the applicant.

Follow-up Site Inspection Findings and other relevant matters

It was noted during the Appropriate Assessment that *Sargassum muticum* was present in the area of this site. A follow-up site inspection by the Marine Institute of the site found it to have the invasive seaweed *Sargassum muticum* within its boundaries. Aquaculture activities would likely result in dislodging of this species and dispersal beyond the boundaries of the site. Furthermore, it is likely that the macro-alga would settle on the culture species in bags or baskets, i.e., oysters, which could act as a vector if they are relocated to other grow out areas both within and outside Galway Bay. Due to the invasive nature of the *Sargassum muticum* the use, for aquaculture purposes, of this site and its environs would only increase the spread within the bay.

The site was also found to be characterised by the presence of extensive and evenly spaced boulders interspaced by long 'pathways' comprised of muddy sand. These boulder fields, in places, had clear boundaries marked on corners with standing stones. Toward the southern end of the site the substrate consists of mobile sands which borders the main channel into Aughinish and Corranroo Bays. The presence of so many boulders throughout the site if licensed would most likely require the removal of some in places. Such activity could result in considerable harm to the intertidal habitat. Throughout the site individuals of the native oyster, *Ostrea edulis*, were also found. The presence of the native oyster could leave them susceptible to inadvertent harm or harvest within an aquaculture site.

After the period of Public Consultation had concluded a member of the public contacted Aquaculture & Foreshore Management Division to advise staff that the Company of which he was Director held a Deed which he purported gave the Company exclusive claim to the area of a Natural Oyster Bed, which this application lies partially over. The Deed was sent to the Division for review. However an investigation into the ownership claim was not completed as the findings of the Appropriate Assessment and follow-up survey meant the site was unsuitable for aquaculture licensing due to habitat and substrate issues. This matter was not reviewed further at this time.

CRITERIA IN MAKING LICENSING DECISIONS

The licensing authority, in considering an application, is required by statute to take account of, as appropriate, the following points and must also be satisfied that it is in the public interest to license a person to engage in aquaculture:

a) the suitability of the place or waters

Scientific advice is to the effect that the place is not suitable for the cultivation of oysters;

b) other beneficial uses of the waters concerned

Public access to recreational and other activities can be accommodated by this project; However Seaweed gathering would no longer be possible within the site boundaries.

c) the particular statutory status of the waters

(i) Natura 2000

The site is located within the Galway Bay Complex SAC and the Inner Galway Bay SPA. An Article 6 Appropriate Assessment has been carried out in relation to aquaculture activities in this SAC and/or SPA. This Assessment and its findings were examined by the Department and its scientific/technical advisors. This led to the Licensing Authority (i.e. the Minister) producing a Conclusion Statement outlining how it is proposed to licence and manage aquaculture activities in the above Natura sites in compliance with the EU Habitats and Birds Directives.

This specific site is referenced in the Appropriate Assessment Conclusion Statement which stated:

*"Due to the presence of the native oyster, *Ostrea edulis* as well as the presence of the non native seaweed *Sargassum muticum* at Site T08/115A and the risk of the dispersal of *Sargassum muticum* beyond the boundaries of the site, it is not proposed to licence this site."*

(ii) Shellfish Waters

The site is located within Aughinish Bay Shellfish Designated Waters.

The oysters in these waters currently have a "A" classification

d) the likely effects on the economy of the area

Aquaculture has the potential to provide a range of benefits to the local community, such as attraction of investment capital, development of support services, etc.

e) the likely ecological effects on wild fisheries, natural habitats, flora and fauna

No significant issues arose regarding wild fisheries. The potential ecological impacts of aquaculture activities on natural habitats, flora and fauna are addressed in the Article 6 Appropriate Assessment for Galway Bay SAC and Galway Bay Inner SPA and in the Licensing Authority's Conclusion Statement.

The Department of Culture, Heritage and the Gaeltacht (DCHG) raised no objection on nature conservation grounds

f) the effect on the environment generally

g) DCHG raised no objection to the development from an underwater archaeological perspective

RECOMMENDATION

It is recommended that the Minister:

Refuses the granting of an Aquaculture Licence to Sliogeisc Siar Teoranta, 36 Mullen Mor, Tuam Road, Co. Galway. The reasons for the recommendation are:

- Due to the presence of the native oyster, *Ostrea edulis* as well as the presence of the non native invasive seaweed *Sargassum muticum* at Site T08/115A and the risk of the dispersal of *Sargassum muticum* beyond the boundaries of the site.
- The physical suitability of the site for trestles is questionable only parts may be suitable. At the southern end of the site the substrate consists of mobile sands. The development as proposed would be likely to cause disturbance to the habitat if the boulder lines or parts of the boulder lines on the site were to be moved to allow trestle placement.
- The site is located within the Galway Bay SAC. An Article 6 Appropriate Assessment has been carried out in relation to aquaculture activities in this SAC. Taking account of the recommendations of the Appropriate Assessment the proposed aquaculture activity at this site is not consistent with the Conservation Objectives for the SAC.
- The potential risks from licensing the proposed aquaculture activities at this site, on the integrity of the Natura 2000 site cannot be discounted.

REASONS FOR DECISION

The Minister for Agriculture, Food and the Marine is required to give public notice of both the licensing determination and the reasons for it. To accommodate this, it is proposed to publish the following on the Department's website, subject to the Minister approving the above recommendation:

"Determination of Aquaculture/ Foreshore Licensing application –T08/115"

Sliogeisc Siar Teoranta has applied for authorisation to cultivate Native and Pacific Oysters using Bags and trestles, float and bag, moulded baskets and longlines on the inter-tidal and sub-tidal foreshore on a 17.754 hectare site (T08/115A) in Aughinish Peninsula, Co. Clare.

The Minister for Agriculture, Food and the Marine has determined that it is not in the public interest to grant the licences sought. In making his determination the Minister considered those matters which by virtue of the Fisheries (Amendment) Act 1997, and other relevant legislation, he was required to have regard. Such matters include any submissions and observations received in accordance with the statutory provisions. The Minister also had regard to the findings of the Departments advisors and the Appropriate Assessment Conclusion Statement. The following are the reasons and

considerations for the Minister's determination to refuse the licences sought: -

- Due to the presence of the native oyster, *Ostrea edulis* as well as the presence of the non native invasive seaweed *Sargassum muticum* at Site T08/115A and the risk of the dispersal of *Sargassum muticum* beyond the boundaries of the site.
- The physical suitability of the site for trestles is questionable only parts may be suitable. At the southern end of the site the substrate consists of mobile sands. The development as proposed would be likely to cause disturbance to the habitat if the boulder lines or parts of the boulder lines on the site were to be moved to allow trestle placement.
- The site is located within the Galway Bay SAC. An Article 6 Appropriate Assessment has been carried out in relation to aquaculture activities in this SAC. Taking account of the recommendations of the Appropriate Assessment the proposed aquaculture activity at this site is not consistent with the Conservation Objectives for the SAC.
- The potential risks from licensing the proposed aquaculture activities at this site, on the integrity of the Natura 2000 site cannot be discounted."

Recommendation to Refuse a Foreshore Licence application (T08/115)

DECISION SOUGHT

The Minister's determination is requested please in relation to the application for a Foreshore Licence from Sliogeisc Siar Teoranta, 36 Mullen Mor, Tuam Road, Co. Galway, for a site in Aughinish Peninsula, Co. Clare, in which it is proposed to conduct aquaculture.

BACKGROUND

Marine aquaculture operations require separate Aquaculture and Foreshore Licences and Ministerial approval is required in respect of this submission (Foreshore Submission) and submission above (Aquaculture Submission), which refer to the same site.

The Foreshore Licence allows for the occupation of the particular area of foreshore while the Aquaculture Licence defines the activity that is permitted in this area. The continuing validity of each licence is contingent on the other licence remaining in force.

APPLICATION FOR A FORESHORE LICENCE

An application for a Foreshore Licence has been received from the applicant referred to above (in conjunction with an Aquaculture Licence application), relating to the occupation of the foreshore associated with the Aquaculture Licence application which covers a 17.754 hectare site (numbered T08/115A – see TAB A).

LEGISLATION

Section 3 of the Foreshore Act, 1933 gives power to the Minister to license the use of foreshore, if he is of the opinion that it is in the public interest to do so.

CONSULTATION AND PUBLIC COMMENT

The application was sent to the Department's technical experts and was also publicly advertised in a composite public notice covering both aquaculture and foreshore elements.

This application was also sent to the Department of Housing, Planning and Local Government (DHPLG) in accordance with subsection (1B) of Section 3 of the Foreshore Act, 1933, which requires consultation between the Minister for Agriculture, Food and the Marine and the Minister for Housing, Planning and Local Government. Whilst aquaculture legislation requires certain statutory bodies to be notified of an aquaculture application, no other statutory bodies are prescribed consultees under Fisheries related foreshore legislation.

Department of Housing Planning and Local Government (DHPLG):

There were no comments received from a water quality or foreshore perspective

Technical Consultation – TAB B

Marine Engineering Division (MED): MED have stated that the site dries out at low tide and the proposed use of longlines will

not be possible. They noted the site is adjacent to Aughinish Martello Tower which is a protected structure and of tourist interest. Following the findings of the Appropriate Assessment and follow-up survey by the Marine Institute MED also undertook an inspection on site in July 2020. While at the proposed site MED met with a local seaweed harvester who advised that there are two local harvesters with traditional rights for harvesting seaweed at this location. A number of "pathways" across the foreshore were evident and MED was advised that these were historical tracks created by moving boulders to allow ponies/horses to pull loads of seaweed up the foreshore. In addition MED were advised that the access point proposed by the applicant is in fact a private farm track which is gated, and any access through this route would require permission from the owner.

Given the existence of native oysters and alien species of seaweed as advised by the MI and the presence of seaweed harvesting on the site, MED does not recommend the licensing of this site. The issue of the access would also have to be cleared up prior to any licence being granted.

Marine Survey Office (MSO): No comments were received from the MSO.

Sea Fisheries Protection Authority (SFPA): Stated they had no observations to make in relation to this application.

Public Consultation

The application was publicly advertised using a composite public notice covering both aquaculture and foreshore elements in The Clare Champion on 2nd August 2019. The application and supporting documentation were available for inspection at Ballyvaughan and Ennistymon Garda Stations for a period of 4 weeks from the date of publication of the notice in the newspaper.

There were no objections/comments received from the public consultation process.

Follow-up Site Inspection Findings and other relevant matters

It was noted during the Appropriate Assessment that *Sargassum muticum* was present in the area of this site. A follow-up site inspection by the Marine Institute of the site found it to have the invasive seaweed *Sargassum muticum* within its boundaries. Aquaculture activities would likely result in dislodging of this species and dispersal beyond the boundaries of the site. Furthermore, it is likely that the macro-alga would settle on the culture species in bags or baskets, i.e., oysters, which could act as a vector if they are relocated to other grow out areas both within and outside Galway Bay. Due to the invasive nature of the *Sargassum muticum* the use, for aquaculture purposes, of this site and its environs would only increase the spread within the bay.

The site was also found to be characterised by the presence of extensive and evenly spaced boulders interspaced by long 'pathways' comprised of muddy sand. These boulder fields, in places, had clear boundaries marked on corners with standing stones. Toward the southern end of the site the substrate consists of mobile sands which borders the main channel into Aughinish and Corranroo Bays. The presence of so many boulders throughout the site if licensed would most likely require the removal of some in places. Such activity could result in considerable harm to the intertidal habitat. Throughout the site individuals of the native oyster, *Ostrea edulis*, were also found. The presence of the native oyster could leave them susceptible to inadvertent harm or harvest within an aquaculture site.

After the period of Public Consultation had concluded a member of the public contacted Aquaculture & Foreshore Management Division to advise staff that the Company of which he was Director held a Deed which he purported gave the Company exclusive claim to the area of a Natural Oyster Bed, which this application lies partially over. The Deed was sent to the Division for review. However an investigation into the ownership claim was not completed as the findings of the Appropriate Assessment and follow-up survey meant the site was unsuitable for aquaculture licensing due to habitat and substrate issues. This matter was not reviewed further at this time.

CRITERIA IN MAKING LICENSING DECISIONS

The Minister, in considering an application for a Foreshore Licence, may, if satisfied that it is in the public interest to do so, grant such a licence.

Section 82 of the Fisheries (Amendment) Act, 1997 stipulates that the Minister, in considering an application for a licence under the Foreshore Acts, which is sought in connection with the carrying on of aquaculture pursuant to an Aquaculture Licence, shall have regard to any decision of the licensing authority in relation to the Aquaculture Licence.

RECOMMENDATION

It is recommended that the Minister:

refuses the granting of a Foreshore Licence to Sliogeisc Siar Teoranta, 36 Mullen Mor, Tuam Road, Co. Galway, for a site in Aughinish Peninsula having regard to the decision in relation to the Aquaculture Licence application. The reasons for the decision are

- Due to the presence of the native oyster, *Ostrea edulis* as well as the presence of the non native invasive seaweed *Sargassum muticum* at Site T08/115A and the risk of the dispersal of *Sargassum muticum* beyond the boundaries of the site.
- The physical suitability of the site for trestles is questionable only parts may be suitable. At the southern end of the site the substrate consists of mobile sands. The development as proposed would be likely to cause disturbance to the habitat if the boulder lines or parts of the boulder lines on the site were to be moved to allow trestle placement.
- The site is located within the Galway Bay SAC. An Article 6 Appropriate Assessment has been carried out in relation to aquaculture activities in this SAC. Taking account of the recommendations of the Appropriate Assessment the proposed aquaculture activity at this site is not consistent with the Conservation Objectives for the SAC.
- The potential risks from licensing the proposed aquaculture activities at this site, on the integrity of the Natura 2000 site cannot be discounted.

Related submissions

There are no related submissions.

User details

INVOLVED: OMahony, Jane
Farrell, Geraldine
Horan, Helena
Quinlan, John
Beamish, Cecil
Sub Sec Gens Office
eSub Sec Gen
eSub Ministers Office
eSub Minister

READ RECEIPT: OMahony, Jane
Farrell, Geraldine
Horan, Helena
Quinlan, John
Beamish, Cecil
Ennis, Joan
Kelly, Aiden
Smith, Ann



AQUACULTURE - LICENSING UNDER
FISHERIES (AMENDMENT) ACT 1997 as amended

and

FORESHORE ACT 1933 as amended

*Application Form for an Aquaculture and Foreshore Licence for
a single specific site.*

*If a Licence is required for more than one site a separate
application form must be completed for each site.*

Important Note

Section 4 of the Fisheries and Foreshore (Amendment) Act, 1998 (No. 54 of 1998) prohibits any person making an application for an Aquaculture Licence from commencing aquaculture operations until duly licensed under the Fisheries (Amendment) Act, 1997 (No. 23 of 1997), and provides that a breach of that prohibition will cause the application to fail.

A copy of an Environmental Impact Statement and Natura Impact Statement should be enclosed, if required, with all new, review and renewal applications. See Guidance Notes Section 3.

Aquaculture & Foreshore Management Division
Department of Agriculture, Food and the Marine
National Seafood Centre
Clonakilty, Co. Cork
P85 TX47
Telephone: (023) 8859500
Fax: (023) 8821782

Revised May 2018

AQUACULTURE AND FORESHORE LICENCE APPLICATION FORM, for purposes of FISHERIES (AMENDMENT) ACT, 1997 and FORESHORE ACT, 1933

NB: The accompanying Guidance Notes should be read before completing this form.

Note: Details provided in Parts 1 and 2 will be made available for public inspection. Details provided in Parts 3 and 4 and any other information supplied will not be released except as may be required by law, including the Freedom of Information Act 1997 as amended.

USE BLOCK CAPITALS IN BLACK INK PLEASE

For Office Use
Application Ref. No. <u>T8/115.</u>
Date of Receipt (Dept. Stamp):



Type of Applicant (tick one)	
Sole Trader	<input type="checkbox"/>
Partnership	<input type="checkbox"/>
Company	<input checked="" type="checkbox"/>
Co-Operative	<input type="checkbox"/>
Other	Please specify- <input type="text"/>

PART 1: PRELIMINARY DETAILS

Applicant's Name(s)	<u>SLIOGEISC SIAR Teo</u>
1.	Aoife Buckley
Address:	36 Mullan Mor Tuam Road Galway
2.	
Address:	
3.	
Address:	
4.	
Address:	

Contact in case of enquiries (if different from above)	
Contact Name	
Organisation Name (if applicable)	
Address	

PART 1: PRELIMINARY DETAILS

TYPE OF APPLICATION – please indicate relevant type of application	
This Application Form is valid for each type of application - <i>See Guidance Note 3.1</i>	
(i) Aquaculture Licence	<input checked="" type="checkbox"/>
(ii) Trial Licence	<input type="checkbox"/>
(iii) Foreshore Licence, if Marine Based	<input checked="" type="checkbox"/>
(iv) Review of Aquaculture Licence	<input type="checkbox"/>
(v) Renewal of Aquaculture Licence	<input type="checkbox"/>

TYPE OF AQUACULTURE

See Guidance Note 3.2

Indicate the relevant type of application with a tick.

(i) MARINE-BASED

- | | | |
|--|--------------------------|--------------------------|
| Finfish | <input type="checkbox"/> | Go to Parts 2.1 and 2.1A |
| Shellfish <i>Subtidal</i> | ✓ | Go to Parts 2.2 and 2.2A |
| <i>Intertidal</i> | ✓ | Go to Parts 2.2 and 2.2A |
| Seaweed/Aquatic Plants/Aquatic Fish Food | <input type="checkbox"/> | Go to Parts 2.3 and 2.3A |

(ii) LAND-BASED

- | | | | | |
|----------------|--------------------------|-------------------|--------------------------|--------------------------|
| Finfish | <input type="checkbox"/> | Shellfish | <input type="checkbox"/> | Go to Parts 2.4 and 2.4A |
| Aquatic Plants | <input type="checkbox"/> | Aquatic Fish Food | <input type="checkbox"/> | Go to Parts 2.4 and 2.4A |

(iii) TRIAL LICENCE

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Go to appropriate Parts as above and to Part 2.5. |
|--------------------------|---|

2.2 MARINE-BASED SHELLFISH AQUACULTURE

When filling out this section refer also to 2.2A and Guidance Note 3.3 for information on Conditions and Documents required with this application type

Proposed Site Location

- (i) Bay: _____ Aughinish Peninsula _____
- (ii) County: _____ Co Clare _____
- (iii) OS Map No: _____ 51 _____
- (iv) Co-ordinates of Site: (please specify coordinate reference system used e.g. Irish Grid (IG) or Irish Transverse Mercator (ITM) or Latitude/Longitude [in which case specify whether ETRS89 or WG84 etc.]

The Co-ordinates for the site are based on the Irish National Grid Co-Ordinate System

- (v) Size of Site (hectares): _____ 18 _____

(vi) Species (common and scientific name) and whether native or non-native species: (see Guidance Notes 3.3.1)

Native & Gigas

(vii) Whether production will be sub-tidal or inter-tidal?
 _____ primarily inter-tidal _____

(viii) Please supply details of (a) source of seed e.g. wild hatchery and location and (b) means of collection and introduction to culture.

Buy locally where possible to eliminate introduction of foreign species and safeguard the area. The introduction of seed to the site will comply with the legislation relating to fish health and will only be purchased from approved Hatcheries

NB Importation of seed into the State or movement of seed within the State requires notification to the Marine Institute as per the Fish Health Authorisation Regulations – See Guidance Notes Section 6

(ix) Method of culture (rope, trestles – intensive; bottom – extensive; other) _____
 _____ Trestle & Bag, Float & Bag, Moulded Baskets, Long lines _____

(x) Proposed number of lines/ropes/trestles as per site layout drawing
 _____ 30 double row trestles per hectare _____

(xi) Proposed Production Tonnage:

Year 1	0	Year 2	0	Year 3	10	Year 4	20	Year 5	30
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(xii) (a) Please outline the reasons for site selection:

_____ Grade A Water & Accessibility _____

(b) If using trestles please outline the physical characteristics of the site which make it suitable for using trestles

Accessibility, not rocky & sheltered _____

(xiii) Is it intended that the product is for direct human consumption or half grown? Please specify
Predominantly for direct human consumption but as a sub income may have to sell some half grown

(xiv) How will the visual impact issues of the flotation devices for the proposed application be addressed?

Only used for early stages, not protruding above water more than 10 cm and black in colour to blend in _____

(xv) Is the site located in Designated Shellfish Waters Area? (Refer to Guidance Note 3.3.2)

Yes Y No

If yes give details.

Aughinish Peninsula

If no outline the reasons why you believe the site suitable for the proposed aquaculture, notwithstanding its location outside Designated Shellfish Waters Area?

(xvi) Has the area been classified under Food Safety Legislation? (For Bivalve Molluscs) What is the current classification of the area for the proposed species applied for?

Classified as Grade "A"

(xvii) Is the site located in/adjacent to a sensitive area e.g. SPA (Special Protection Area) or SAC (Special Area of Conservation) i.e. a Natura 2000 site? (Refer to Guidance Note 3.3.1- Natura 2000 sites)

Yes all of the above & appropriate assignment completed

(xviii) Are there known sources of pollution in the vicinity e.g. sewage outfall? No
If yes please give full details.

(xix) Methods used to harvest the shellfish and details of any subsequent processing of shellfish

By Hand

(xx) Describe any proposed purification facilities to be used:
At present not planned hope to build one in the near future

(xxi) What are the main predators of the species to be cultivated?

N/A

(xxii) Describe the method(s) which will be used to control them

See Part 2.2A for details of documentation to be included with this application type

2.2A DOCUMENTATION REQUIRED FOR MARINE-BASED SHELLFISH AQUACULTURE

(to be included separately with a Licence Application for a new site or for a renewal or review of an existing Licence)

- 1. An appropriate Ordnance Survey Map (recommendation is a map to the Scale of 1:10,000/1:10,560, i.e. equivalent to a six inch map). Note: The proposed access route to the site from the public road across tidal foreshore must also be shown on the map.**
- 2. Scale drawing of the structures to be used and the layout of the farm.**
The proposed site drawings must illustrate all site structures above and below the water including mooring blocks. (recommended scales normally 1:100 for structures and 1:200 for layout) (See Guidance Note 3.3.2)
- 3. The prescribed application fee (See Guidance Note Section 4)**
- 4. If the applicant is a limited Company within the meaning of the Companies Act 1963. as amended, the Certificate of Incorporation and Memorandum and Articles of Association**
- 5. If the applicant is a Co-operative, the Certificate of Incorporation and Rules of the Co-operative Society**
- 6. Environmental Impact Statement (if required) in certain cases- See Guidance Notes Section 3.3.1**
- 7. Alien Species dossier (where required) – See Guidance Notes Section 3.3.1**

NOW COMPLETE PARTS 2.6, 3, 4 AND 5 PLEASE

**2.6 Employment, Qualifications, Experience, etc
TO BE FILLED IN BY ALL AQUACULTURE APPLICANTS**

(i) Please provide details of experience/qualifications of the applicant and any key personnel which are relevant to the aquaculture now proposed:

I plan to hire an operational manager with experience in oyster farming to run the business on a day to day basis, to train and lead the employees, The operations manager will also oversee all Health & Safety issues on site. I will primarily be focusing on the overall running of the business front & back end

(ii) If a new application please provide details of projected employment creation during first four years of the proposed aquaculture project:

(iii) In the case of a renewal please provide current and future details:

FULLTIME JOBS

Year 1:	1	Year 2:	2	Year 3:	2	Year 4:	3
---------	---	---------	---	---------	---	---------	---

PART TIME JOBS

Year 1:	2	Year 2:	4	Year 3:	6	Year 4:	7
---------	---	---------	---	---------	---	---------	---

PART 5: APPLICATION DOCUMENTATION

The following documents are enclosed with this application:

NB: Refer to Guidance Note Section 3.3 – Guidance on Application Documentation

No.	DOCUMENTATION	YES	NO	N/A
1a	An appropriate Ordnance Survey Map (recommendation is a map to the scale of 1:10,000/10:10,560, i.e., equivalent to a six inch map)	√		
1b	The proposed access route to the site from the public road across tidal foreshore must also be shown	√		
2a	Scale drawing of the structures to be used (recommended scale normally 1:100 for structures).	√		
2b	Scale drawing of farm layout (recommended scale normally 1:200 for layout)	√		
3	The prescribed application fee	√		
4	Environmental Impact Statement (EIS), if required			√
4a	Natura Impact Statement (NIS), if required			√
5	Water Quality Analysis Report, if appropriate			checked
6	Decision of Planning Authority under the Planning Acts, if required			√
7	Copy of Licence under Section 4 of the Local Government (Water Pollution) Act, 1977 – Effluent Discharge, if required			√
8	If the applicant is a limited Company within the meaning of the Companies Act 1963, as amended, a copy of the Certificate of Incorporation and Memorandum and Articles of Association.	√		
9	If the applicant is a Co-operative, a copy of the Certificate of Incorporation and Rules of the Co-operative Society			√
10	Integrated Pest Management Plan, if required			√
11	Alien Species documentation, if required.			√

PART 5: DECLARATION AND SIGNING

NB: Refer to Guidance Note Section 3.5 and Section 4 - Guidance on Declaration and Signing and Annual Aquaculture and Foreshore Licence Fees

If this is a renewal/review have you met all licence conditions of the existing aquaculture licence? If applicable, explain why you have not complied with all conditions:

I/We hereby declare the information provided in Parts 1, 2, 3 and 4 above to be true to the best of my/our knowledge and that I am over 18 years of age. I/We enclose an application fee* of € 95.23 with this application.

Signature(s) of Applicant(s):
(Please state capacity of persons signing on behalf of a Company/Co-op)



Director

Date: 01/03/2018

NB All persons named on this licence application must sign and date this application form. Only the existing licence holder(s) can apply for the renewal/review of an Aquaculture Licence.

*Preferred method of payment is by cheque or bank draft. The fee should be made payable to the Department of Agriculture, Food and the Marine.

Refer to Guidance Note Section 4 - Guidance on Aquaculture and Foreshore Licence Fees

The application form should be forwarded, with the required documents and application fee, to:

**Aquaculture Licensing
Aquaculture & Foreshore Management Division
Department of Agriculture, Food and the Marine
National Seafood Centre
Clonakilty
Co. Cork**

1 NO. SITE AT AUGHINISH PENINSULA CO.CLARE

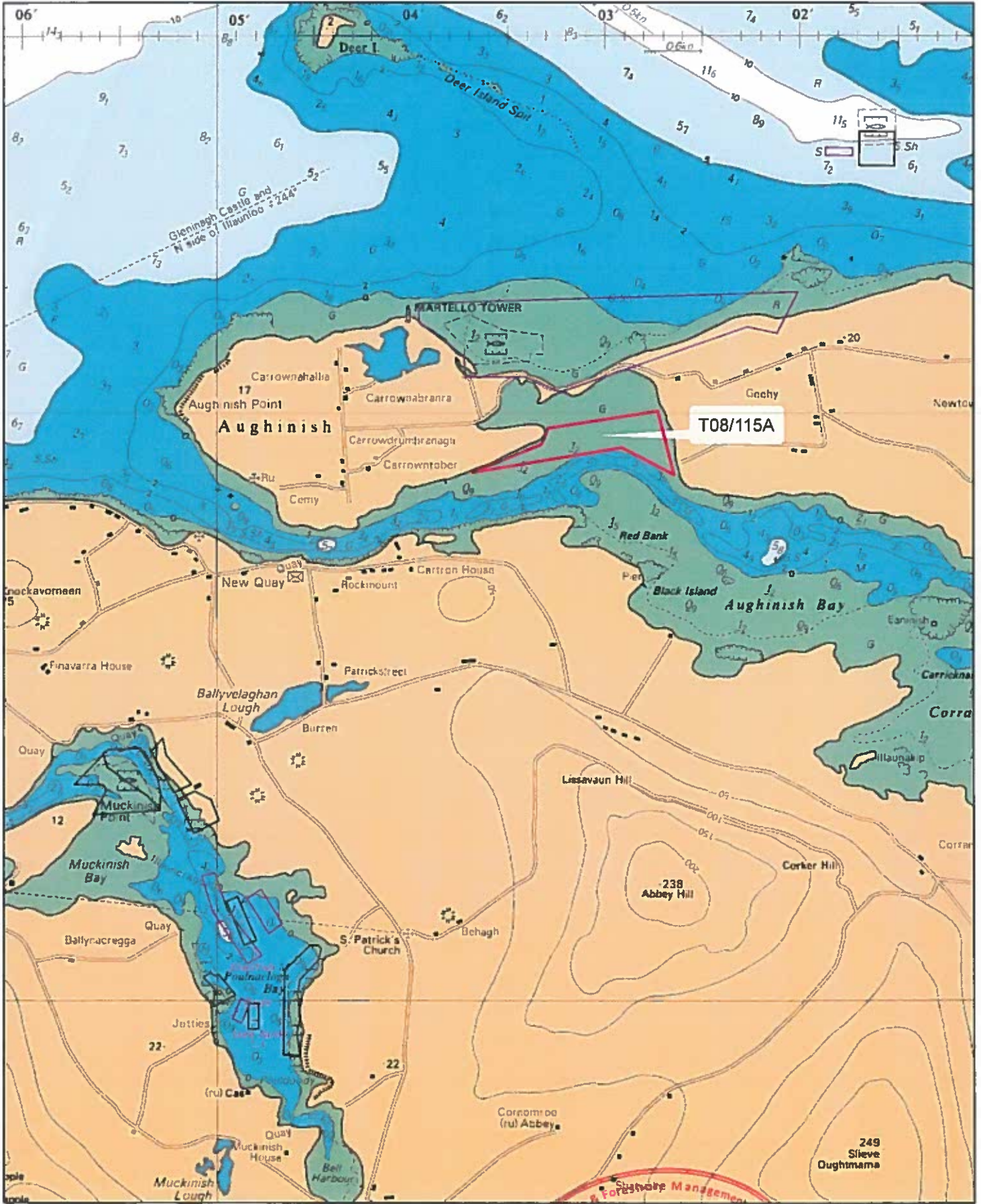
Co-ordinates & Area

Site T08/115A (17.754 Ha)

The area seaward of the high water mark and enclosed by a line drawn from Irish National Grid Reference point

129475, 213021 to Irish National Grid Reference point
130125, 213132 to Irish National Grid Reference point
130229, 212758 to Irish National Grid Reference point
129915, 212911 to Irish National Grid Reference point
129029, 212752 to Irish National Grid Reference point
129439, 212924 to Irish National Grid Reference point
129457, 212970 to the first mentioned point.





Aqua Culture Sites
 <all other values>
Site Status
 Application
 Lapsed
 Licensed
 Refused
 Revoked

1:30,000

Sites highlighted in red denotes Application
 Part of Admiralty Chart No =1984-6
 Not to be used for Navigation



Department of
**Agriculture,
 Food and the Marine**
 An Roinn
**Talmhaíochta,
 Bia agus Mara**

129000

130000

214000

214000

213000

213000

212000

212000

SHEET 31

T08/115A

Redbank Oyster Bed

AUGHI

LAFFON

Black Island

129000






1:10,560

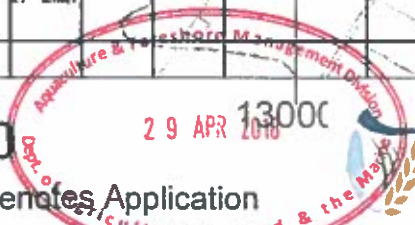
29 APR 2018

Sites highlighted in red denotes Application

Ordnance Survey Ireland Licence No. EN 0076413

© Ordnance Survey Ireland/Government of Ireland

- Aqua Culture Sites**
call other values
- Site Status**
-  Application
 -  Lapsed
 -  Licensed
 -  Refused
 -  Revoked
 - Surrendered



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 An Roinn
**Talmhaíochta,
 Ría agus Mara**

214000

SHEET 3A

213000

230

T08/115A

access point

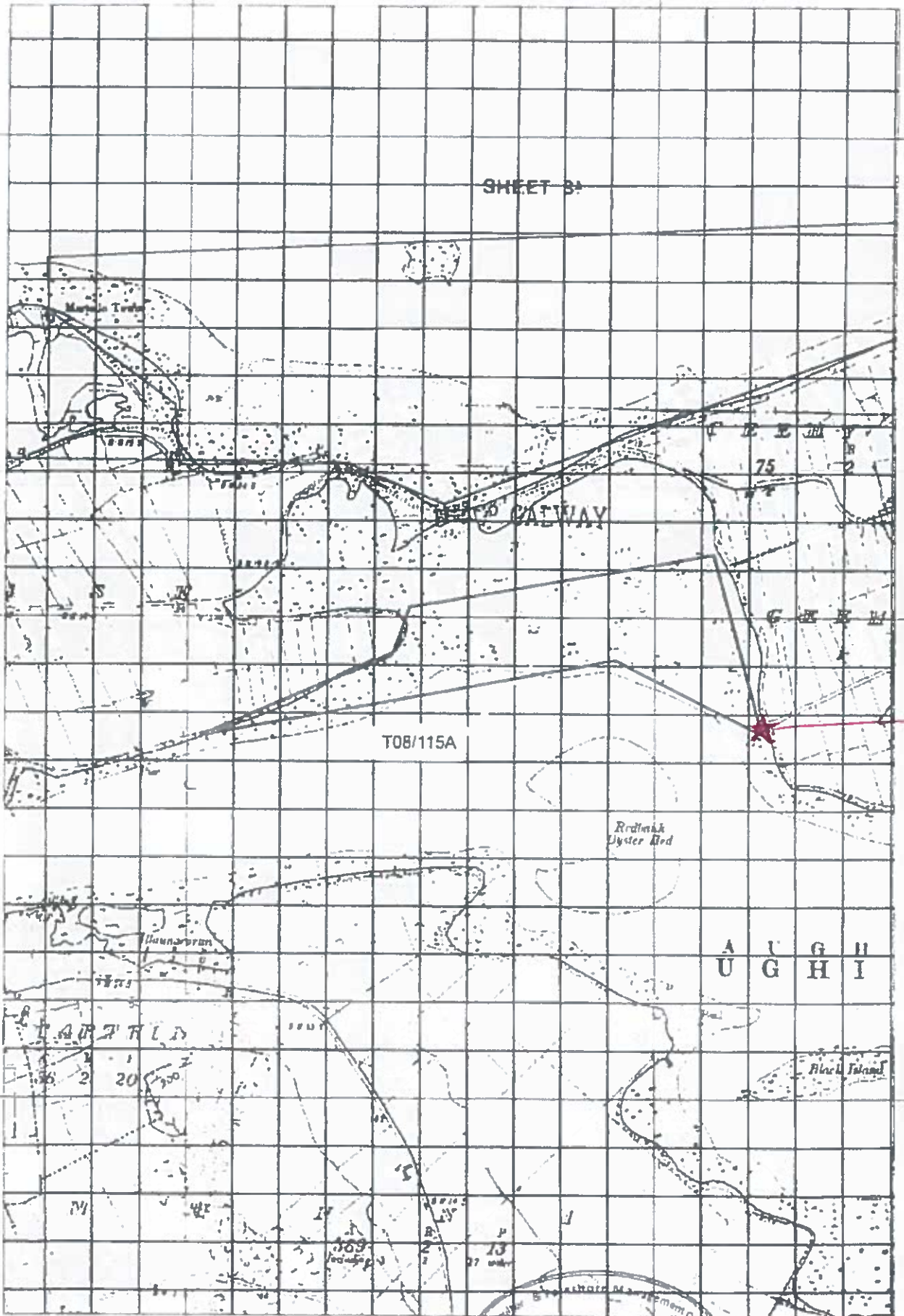
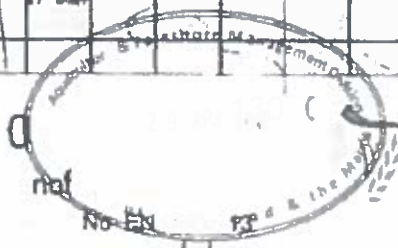
212000

AUGH I

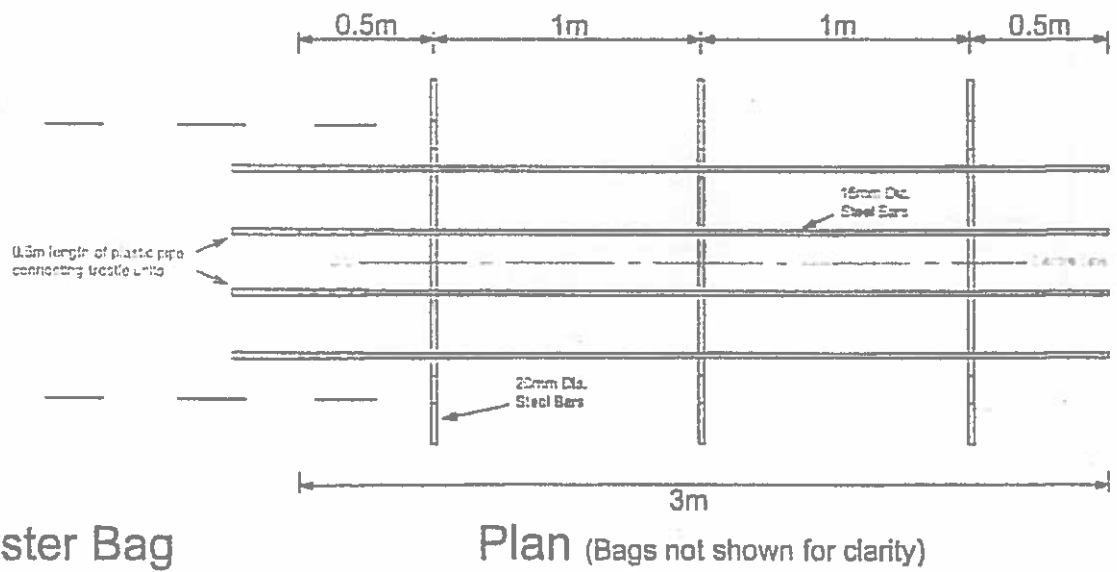
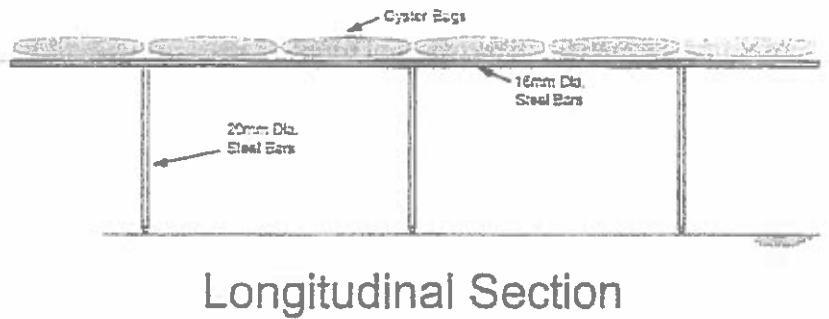
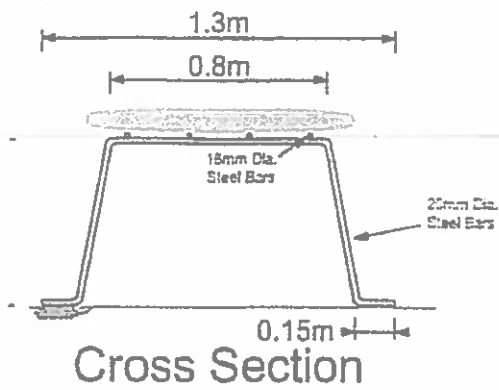
Aqua Culture Sites
 See Status

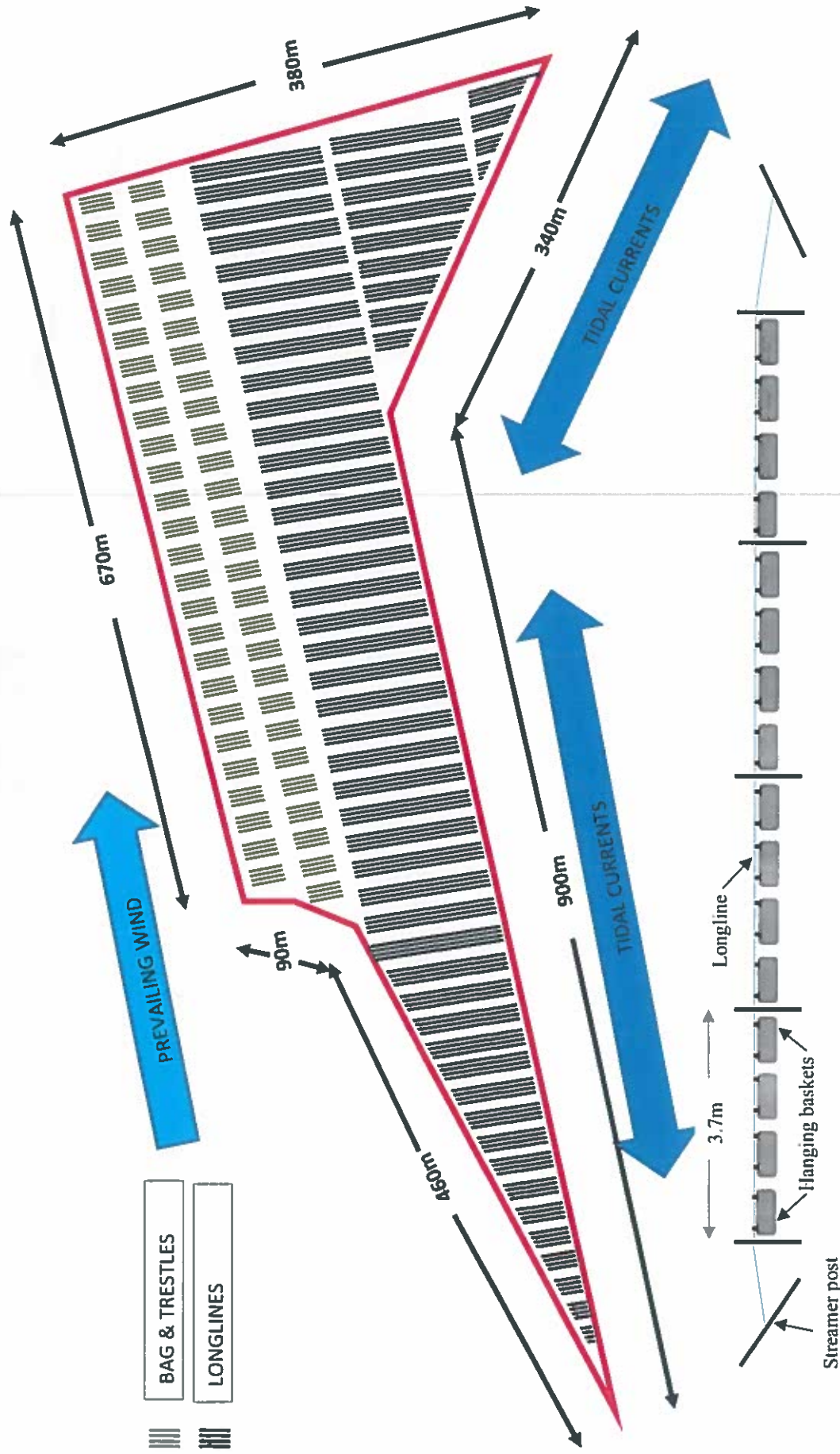
- Admission
- Leased
- Revised
- Revised
- Surround

Sites highlighte
 Ordnance Srv
 © Ordnance



T8/115.





Plan of proposed oyster growing facility at full capacity with layout of structures outlined. The lower section of the site is the growing area and will consist entirely of longlines. Each pod of longlines contains 4 longlines, each 120m in length, 0.75m apart. Each pod has an access route in between of approx. 4.5m width. The longline is supported by poles, 3.7m apart. Each 3.7 m section contains 4 hanging baskets. The upper section of the site is the hardening/harvesting area and will contain bags and trestles. Each pod is 30m in length.



Marine Engineering Division

Report on Aquaculture Licence Application

Application Reference No: T08/115

Report Prepared By: Edwina Forde

Date: 28/01/19

Applicant Sliogeisc Siar Teoranta, c/o Aoife Buckley, 36 Mullan Mor, Tuam Road, Galway

Location Aughinish Bay

Applicant Type Aquaculture/Foreshore Licence Application

Sites

T08/115

Site Area (Ha)

17.75

Species Native and Gigas

Cultivation Method Extensive – Trestles and bags, float and bag, moulded baskets, longlines

Intertidal/Non-Intertidal Intertidal and Sub-tidal

Source of seed Not identified

Annual Production Estimates 30 tonnes (Year 5)

Shellfish Waters Designation Yes No
Reference: SI 55 of 2009 –Map8

Environmental Designation Yes No
Reference: Galway Bay Complex SAC (000268) and Inner Galway Bay SPA (0004031)

Development Plans Yes No
Reference: Clare County Development Plan 2017-2023
Development Plan Objective No. 12.8 Aquaculture

Pre-Consultation Meeting Yes No
Date:

Drawing Validation Sheet

OSI Maps

Comment:

Yes No

6" scale maps prepared by GIS Mapping Section.

BA Chart

Comment:

Yes No

BA Charts prepared by GIS Mapping Section.

Farm Layout Drawing

Yes No

Directional Arrow Yes No

Scale Yes No

Title Block Yes No

Date Yes No

Comment: No farm layout drawing submitted.

Drawings of structures

Comment:

Yes No

Drawings not suitable. Only drawing of 1 type of structure provided.

Details of Proposed Navigation Marking

Comment:

Yes No

No drawings provided

Site Access Indicated

Comment:

Yes No

Site access map submitted is suitable

Site Co-Ordinates Indicated

Comment:

Yes No

Site co-ordinates indicated in application.

Site Overlap

Comment:

Yes No

Oyster Fishery Order Overlap

Comment:

Yes No

The application is submitted with each of the requirements listed and is therefore deemed to be a valid application.

AFMD should be aware that insufficient details have been submitted as per above.

Site Suitability Assessment

Site Location

The site is located in Aughinish Bay, South Galway Bay in Co. Clare. The 17.75 Ha site is parallel to the causeway linking Aughinish to the mainland of Co. Clare. Aughinish Bay is a large relatively shallow inlet on the North Clare coast. Aquaculture in this bay has been in-situ for many years, which indicates that the hydrodynamic regime is suitable for this type of aquaculture. The Wild Atlantic Way runs on the N67 to the south but this site cannot be viewed directly from the route. Appropriate Site Location maps have been submitted with this application.

Site Management

This application is for aquaculture activity in Aughinish Bay, Co. Clare. This application is for native and gigas using trestles and bags, float and bag, moulded baskets and longlines. This area dries out at low tide therefore the proposed use of longline culture would not be possible.

Proposed Site Layout and Structures

The existing aquaculture sites in Aughinish Bay have been configured to facilitate navigation, farming operations, and visual impact within the overall aquaculture area. This application is for various culture types. The applicant has not indicated how these structures will be positioned nor in what quantity. A Farm site layout and detail of structures to be licensed for this application have not been prepared.

Land Based Facilities / Site Access

The applicant proposes to access the site at two locations using an existing route to the existing aquaculture site from Geery North. Details of the access route were included with the application.

Navigation

A proposed navigational marking scheme has not been submitted as part of the application. Applicant is to maintain all navigation markers as specified by the license.

Visual Impact

The Clare County Development Plan 2017-2023 indicates there are scenic routes surrounding Aughinish Bay. The views of this site are adjacent to scenic routes. The aquaculture in Aughinish Bay has been in place for some time and has become embedded in the landscape. Without a site layout plan further assessment cannot be made on the visual impact of this site. This site is adjacent to Aughinish Martello Tower which is a protected structure No 422.

Impact / Cumulative Impact

There has been licensed aquaculture activity in Aughinish Bay for many years. There is tourism, fishing and marine leisure in the area. The Galway Bay Complex SAC (000268) and Inner Galway Bay SPA (0004031) should be consulted for details of the aquaculture activity that may pose a potential significant negative impact on the protected areas.

Marine Engineering Division does not recommend licencing this site as insufficient detail has been submitted as outlined above.

Comment: Please make the applicant aware of the services provided by Bord Iascaigh Mhara in its role to help develop the Irish Seafood Industry by providing technical expertise, business support funding, training and promoting responsible environmental practice.

From: Foley, Tina
Sent: 27 September 2018 10:15
To: Coakley, John
Cc: DAFM Queries
Subject: Aquaculture Application: T8 115 Sliogeisc Siar Teoranta - Aughinish Peninsula

Hi John,

Please see below response received from Ros an Mhil Port in respect of the above application as requested.

Kind regards

Tina

Tina Foley
Clerical Officer
Food & Fisheries Support Unit

T +353 238859313
E tina.foley@sfpa.ie



An t-Údarás um Chosaint Iascaigh Mhara, Clogheen, Cloich na Coillte, Co. Chorcaí
Head Office, National Seafood Centre, Park Road, Clogheen, Clonakilty, Co. Cork
Eircode: P85TX47
www.sfpa.ie

From: "Lynch, Grainne"
Date: 27 September 2018 at 09:43:13 GMT+2
To: "Murray, Paul", "Allison, James"

Subject: RE: RESPONSE OVERDUE: Aquaculture Application: T8 115 Sliogeisc Siar Teoranta - Aughinish Peninsula

Hi Paul,
I have no observations to return regarding the application.
Thanks,
Grainne.

From: Crowley, Raphael
Sent: 14 July 2020 17:12
To: Farrell, Geraldine
Cc: Horan, Helena; OMahony, Jane; Forde, Edwina
Subject: RE: T08/115 - Onsite MED inspection required

Geraldine

I refer to your email below and information provided by the Marine Institute.

I inspected this location on 10 July 2020.

I met with a local seaweed harvester on site who advised that there are two local harvesters with traditional rights for harvesting seaweed at this location. A number of "pathways" across the foreshore were evident and I was advised that these were historical tracks created by moving boulders to allow ponies/horses to pull loads of seaweed up the foreshore.

In addition I was advised that the access point proposed by the applicant is in fact a private farm track which is gated, and any access through this route would require permission from the owner.

Given the ongoing issues with gaining access to this site, the presence of seaweed harvesting on the site and the existence of native oysters and alien species of seaweed as advised by the MI, MED does not recommend the licencing of this site.

Regards

Raphael

Raphael Crowley

Chartered Engineer - Marine Engineering Division

An Roinn Talmhaíochta, Bia agus Mara

Department of Agriculture, Food and the Marine

Pointe Uí Rinn, Cathair Uí Mhóráin, Trá Lí, Co. Chiarraí, V92 X2TK

Reen Point, Blennerville, Tralee, Co. Kerry, V92 X2TK

M +353 (0)87 2336425 T +353 (0)66 7149344 www.agriculture.gov.ie

From: Farrell, Geraldine
Sent: 19 March 2020 15:39
To: Crowley, Raphael
Subject: FW: T08/115 - Onsite MED inspection required

Hi Raphael,

Attached is the report of the site survey undertaken by the MI as part of the AA work on site T08/115.

Regards,

Geraldine

Geraldine Farrell

*Ardoifigeach Feidhmiúcháin, Bainistiú Dobharshaothraithe agus Cladaigh
HEO, Aquaculture and Foreshore Management Division*

An Roinn Talmhaíochta, Bia agus Mara

Department of Agriculture, Food and the Marine

National Seafood Centre, Clogheen, Clonakilty, Co. Cork, P85 TX47

An Lárionad Bia Mara Náisiúnta, An Cloichín, Cloich na Coillte, Corcaigh, P85 TX47

T +353 (0)23 8859519

www.agriculture.gov.ie

From: Farrell, Geraldine

Sent: Tuesday 10 March 2020 14:41

To: Forde, Edwina

Cc: Crowley, Raphael ; Horan, Helena ; Quinlan, John ; OMurchu, Noel ; OMahony, Jane

Subject: T08/115 - Onsite MED inspection required

Hi Edwina,

You will be familiar with the above case, as we discussed the possible oyster bed issue before Christmas. I attach your original application report for reference also.

It is understood that there may be seaweed gathering/cultivation at the proposed site. Can you please undertake an onsite inspection as soon as possible and send us on a full report?

Thanks,

Geraldine

Geraldine Farrell

*Ardoifigeach Feidhmiúcháin, Bainistiú Dobharshaothraithe agus Cladaigh
HEO, Aquaculture and Foreshore Management Division*

An Roinn Talmhaíochta, Bia agus Mara

Department of Agriculture, Food and the Marine

National Seafood Centre, Clogheen, Clonakilty, Co. Cork, P85 TX47

An Lárionad Bia Mara Náisiúnta, An Cloichín, Cloich na Coillte, Corcaigh, P85 TX47

T +353 (0)23 8859519

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Ms. Geraldine Farrell
Aquaculture and Foreshore Management Division
Dept. of Agriculture Food & the Marine
National Seafood Centre
Clonakilty
Co. Cork

Your Reference: T08/115
Our Reference: LA:0485.1085
Date: 19/07/2018

LL: LA0485.1085

Applicant: Sliogeisc Siar Teoranta
Site: Aughinish Peninsula, Co. Clare

Dear Ms. Farrell,

Thank you for your letter advising us of this application.

Based on the information supplied, there appears to be no objection to the development. It is important to ensure that no navigable inter-tidal channels are impeded by the site.

If a licence is granted, all structures must be clearly marked as required by Regulations and Licensing Permit conditions and to the approval of the Nautical Surveyor with the Marine Survey Office.

We would request that you include the following terms in the licence–

- That the applicant secures Statutory Sanction from the Commissioners of Irish Lights for the aids to navigation that may be required by the Marine Survey Office. These aids should be in place before development on the site commences. Statutory sanction forms are available at <http://www.irishlights.ie/safety-navigation/statutory-sanction.aspx>
- The size and specification of aids to navigation should be of the design and specification approved by the Marine Survey Office and must be agreed in advance with the Commissioners of Irish Lights.

It is recommended that local fishing and leisure interests be consulted prior to a decision being made.

Furthermore, if a licence is granted, the UK Hydrographic Office at Taunton: sdr@ukho.gov.uk must be informed of the development's geographical position in order to update nautical charts and other nautical publications.

Yours sincerely,



Capt. Harry Duggan
for Director of Operations and Navigation

cc Capt. T. O'Callaghan, Dept. of Transport Tourism & Sport, Marine Survey Office



Marine Institute
Foras na Mara

Rinville,
Oranmore,
Co. Galway
Tel: 091 387200

Date: 22 August 2019

Jane O'Mahony
Aquaculture and Foreshore Management Division
Department of Agriculture, Food and the Marine
Clogheen,
Clonakilty
Co. Cork.

Advice on Aquaculture Licence Application

Applicant	Sliogeisc Siar Teo.
Application type	New
Site Reference No	T08/115A
Species	Native oysters (<i>Ostrea edulis</i>) and Pacific oysters (<i>Crassostrea gigas</i>) - using bags and trestles and hanging baskets and longlines
Site Status	Located within the Inner Galway Bay SPA (Site Code 004031) and the Galway Bay Complex SAC (Site Code 000268) Located within the Aughinish Bay Shellfish Growing Waters Area

Dear Jane

This is an application for an aquaculture licence for the production of Native oysters (*Ostrea edulis*) and Pacific oysters (*Crassostrea gigas*) using bags and trestles and hanging baskets and longlines Site T08/115A on the foreshore in Aughinish Bay, Co. Clare. The area of foreshore at Site T08/115A is 17.754Ha

Site T08/115A is located within the Aughinish Bay Shellfish Growing Waters Area.

Oysters in the Aughinish Bay area have an "A" Classification under Annex II of EU Regulation 854/2004.

No chemicals or hazardous substances will be used during the production process.

The cultivation of shellfish at this site will produce faeces and pseudofaeces. Any impact will be limited to the area of the sites. The build-up of excess organic matter beyond the footprint of the sites is not considered likely. On the basis of targeted research¹, the impact of intertidal oyster cultivation using bags and trestles on the majority of community types is considered not significant

Considering the location, nature and scale of the proposed aquaculture activity, and in deference to our remit under the Marine Institute Act, and the considerations implicit to Sections 61(e and f) of the Fisheries (Amendment) Act, 1997 the Marine Institute is of the view that there will be no significant impacts on the marine environment and that the quality status of the area will not be adversely impacted.

Site T08/115A is located within the Inner Galway Bay SPA (Site Code 004031) and the Galway Bay Complex SAC (Site Code 000268).

¹ Forde, J., F. O'Beirn, J. O'Carroll, A. Patterson, R. Kennedy. 2015. Impact of intertidal oyster trestle cultivation on the Ecological Status of benthic habitats. Marine Pollution Bulletin 95, 223–233.

We note the findings of the Appropriate Assessments reports^{2,3,4} and the Department's Draft Natura conclusion statement⁵ in regard to the impacts on the Conservation Objectives within the Inner Galway Bay SPA and the Galway Bay Complex SAC.

In making the final determination with respect to this application it is recommended that DAFM take full account of the conclusions and recommendations of the Appropriate Assessment reports and the mitigation measures set out in the Department's Natura Conclusion Statement.

Specific information on the source of seed for the site has not been provided and the MI recommends that this information be sought from the applicant prior to any final licence determination being made.

In order to be able to assess and manage the potential risk of the introduction of invasive non-native species the MI recommends that the initial source of seed / seeded strings and other sources which may be used at any point in the future should be approved by the Minister. This approval should be a specific condition of any licence that may issue. It should be noted that the control of alien species is a separate issue to the control of diseases in the context of the current Fish Health legislation.

Notwithstanding the recommendation outlined above, and in the event that an Aquaculture Licence is granted, the movement of stock in and out of the site should follow best practice guidelines as they relate to the risk of introduction of invasive non-native species (e.g. [Invasive Species Ireland](#)). In this regard it is recommended that, prior to the commencement of operations at the site, the applicant be required to draw up a contingency plan, for the approval of DAFM, which shall identify, *inter alia*, methods for the removal from the environment of any invasive non-native species introduced as a result of operations at this site. If such an event occurs, the contingency plan shall be implemented immediately.

In the event that invasive non-native species are introduced into a site as a result of aquaculture activity the impacts may be bay-wide and thus affect other aquaculture operators in the bay. In this regard, therefore, the Marine Institute considers that the CLAMS process may be a useful and appropriate vehicle for the development and implementation of alien species management and control plans.

Kind regards,



Dr. Terry McMahon
Section Manager, Marine Environment and Food Safety Services,
The Marine Institute.

2

<https://www.agriculture.gov.ie/media/migration/seafood/aquacultureforeshoremanagement/aquaculturelicensing/appropriateassessments/galway/GalwayBayComplexSACAAREportJuly2019220719.pdf>

3

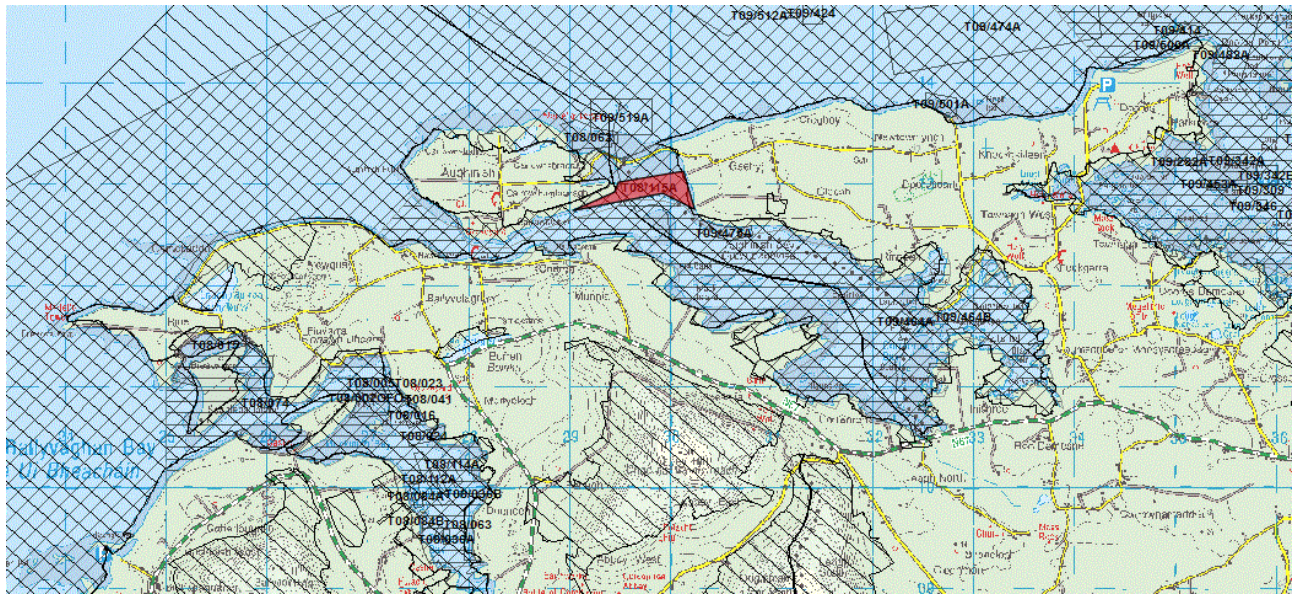
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
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<https://www.agriculture.gov.ie/media/migration/seafood/aquacultureforeshoremanagement/aquaculturelicensing/appropriateassessments/galway/Annex%202.pdf>


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<https://www.agriculture.gov.ie/media/migration/seafood/aquacultureforeshoremanagement/aquaculturelicensing/appropriateassessmentconclusionstatement/2019new/DRAFTAACConclusionStatementGalwayBaySAC29072019.pdf>



Shellfish Waters Directive Area


Aquaculture Site


Special Area of Conservation


Special Protection Areas


From: Francis X O Beirn [Francis.XOBeirn@Marine.ie]
Sent: 26 February 2020 17:34
To: Farrell, Geraldine
Cc: Terry McMahon
Subject: Aughinish, Galway

CAUTION: This Email originated from Outside of this department. Do not click links or open attachments unless you recognise the sender and know the content is safe. Otherwise Please Forward any suspicious Emails to Notify.Cyber@agriculture.gov.ie .

Hi Geraldine,
I'm just back from inspecting the sites at Aughinish Co. Galway.

I'll produce a more detailed report next week - [REDACTED]

[REDACTED]

The site T08/115A is comprised of boulders arranged in rows, presumably oriented for the collection of seaweed. It is not clear if this area is actively managed/harvested. In addition, native oysters are found throughout the site. At the southern end of this site the substrate is coarse and mobile. It is my view, that the substrate would not be conducive to the presence and maintenance of oyster trestles.

I hope this is of some help and as indicated I'll provide a more detailed report next week.

All the best
Francis

Francis O'Beirn PhD
Team Leader Benthos Ecology
Marine Institute
Rinville, Oranmore
Galway, Ireland
H91R673

Landline: + 353 91 387250
Mobile: +353 87 9683094

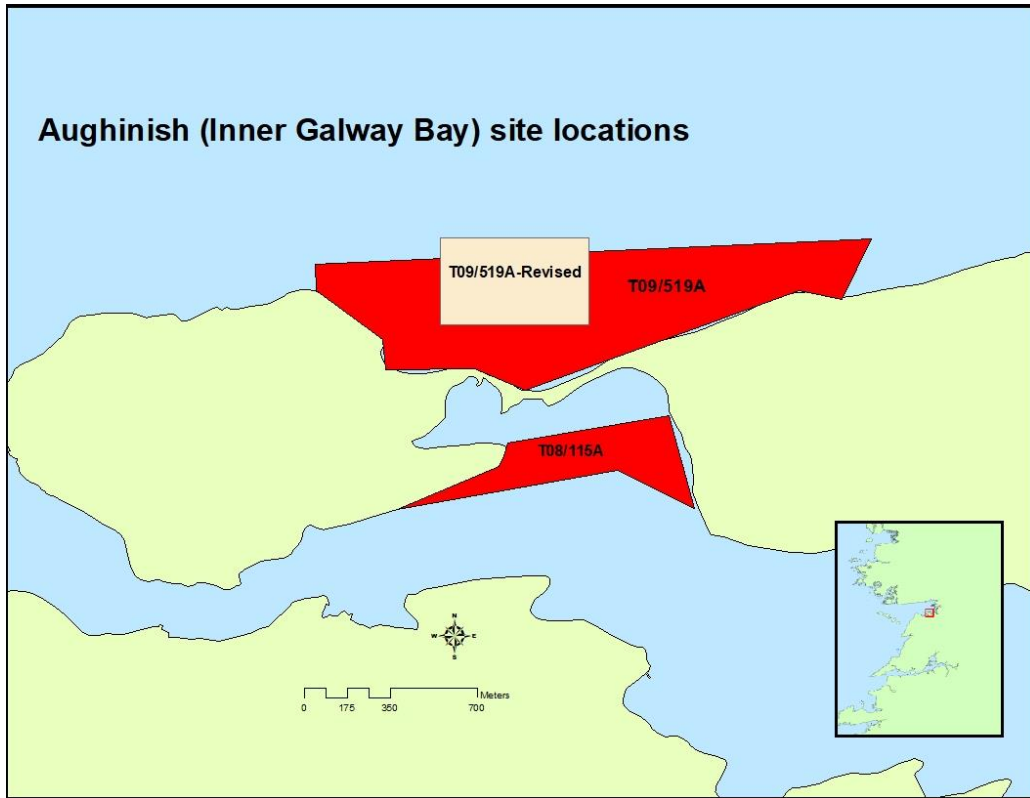


Figure 1. Location of visual inspection survey at Auginish in Inner Galway Bay on February 26, 2020.



Figure 2. Mearl found within site [REDACTED]

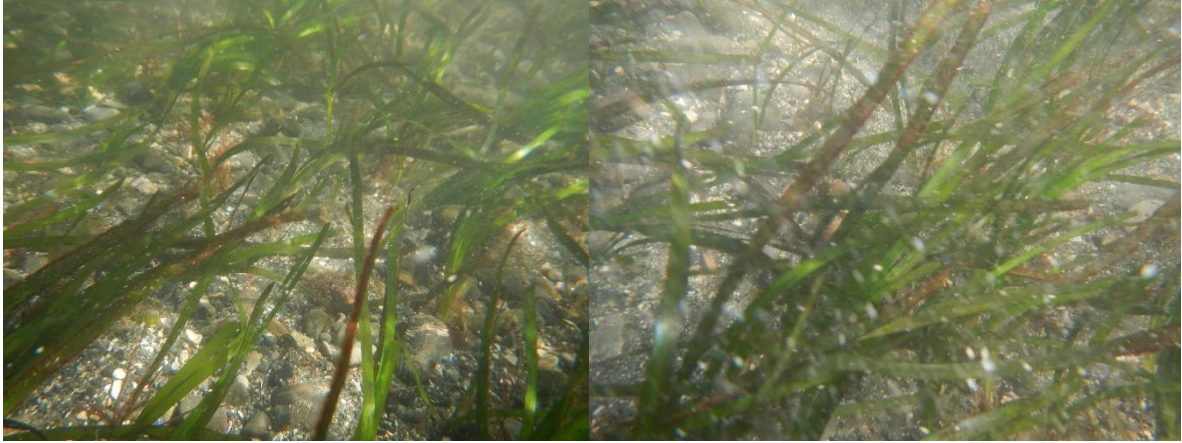


Figure 3. Eel grass (*Zostera* sp.) within the boundaries of the site [REDACTED].

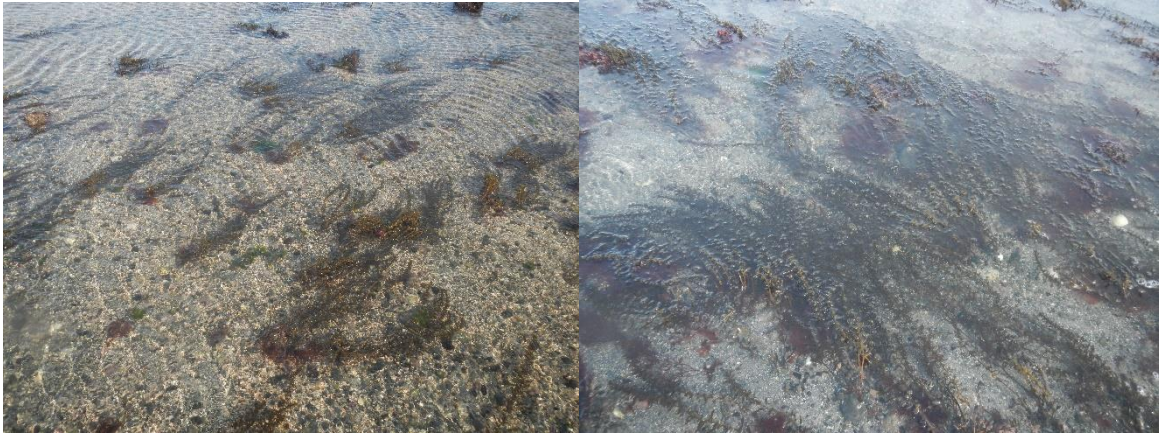


Figure 4. *Sargassum muticum* within the site boundaries ([REDACTED]).



Figure 5. Site T08-115A arrangement of boulders in defined areas.



Figure 6. Native oyster, *Ostrea edulis*, found within site T08-115A

Appropriate Assessment Conclusion Statement for aquaculture activities in Galway Bay Complex SAC (Site Code: 000268) and Inner Galway Bay SPA (004031)

This Conclusion Statement outlines how it is proposed to licence and manage aquaculture activities in the above Natura 2000 sites in compliance with the EU Birds and Habitats Directives. Aquaculture in these Natura sites will be licensed in accordance with the standard licence terms and conditions as set out in the aquaculture licence templates. These are available for inspection on the Department's website at:

<http://www.agriculture.gov.ie/fisheries/aquacultureforeshoremanagement/aquaculturelicensing/>

The licences will also incorporate specific conditions to accommodate Natura requirements, as appropriate, in accordance with the principles set out in this document.

Appropriate Assessment reports relating to aquaculture in the Galway Bay Complex Special Area Conservation (SAC) (000268) and Inner Galway Bay Special Protection Area (SPA) (004031) have been prepared to inform this process. The reports assessed the potential ecological impacts of aquaculture activities on Natura features in both the SAC and the SPA. In addition to the target Natura sites, there are a number of other SACs proximate to the proposed aquaculture activities and a screening was carried out on their likely interactions with aquaculture.

Aquaculture activity in the Natura Sites

The profile of the aquaculture industry in the Bay, used in this assessment, was prepared by BIM and is derived from the list of licence applications received by DAFM and provided to the MI for assessment in April 2019. At this time a total of 52 aquaculture sites, covering a total area of approximately 247 hectares (ha) occur within Inner Galway Bay. These include 33 licensed sites covering a total area of 76 ha, and 19 application sites. Most of the sites are small, with a mean area of 2.3 ha (range 0.4 - 6.8 ha). However, there are four larger sites (all applications) with areas of 11-79 ha. Since the completion of the Appropriate Assessment a number of the larger sites were significantly reduced in size (with the largest site reducing from 79 ha to 21 ha) prior to the Public and Statutory Consultation stage of the application process and another application was withdrawn by the applicant.

The predominant existing/proposed aquaculture activity is the intertidal cultivation of Pacific Oysters using a variety of methods. Other existing and/or planned activities are subtidal suspended mussel cultivation using rafts and longlines, bottom cultivation of native oysters, scallop cultivation, clam cultivation and seaweed cultivation.

Galway Bay Complex SAC

Galway Bay Complex is designated as a Special Area of Conservation (SAC) (Site Code 000268) under the Habitats Directive. Galway Bay Complex SAC is a large site situated on the west coast of Ireland, comprising the entire marine area of inner Galway Bay, extending from the north shore (Silverstrand west of Galway city) to Tawin in the middle of the bay to a point on the south shore west of Ballyvaughan in County

Clare. The marine area is designated as a large shallow inlet and bay and for intertidal mud and sand flats not covered by seawater at low tide. The bay supports a variety of sub-tidal and intertidal sedimentary and reef habitats including habitats that are sensitive to pressures, which might arise from fishing and aquaculture, such as maerl (corraline algae) and seagrass beds. The area is also designated for and supports significant numbers of Harbour Seal and Otter while salmon and sea lamprey, designated in the Lough Corrib SAC which flows into the north east corner of the Bay, migrate through the Bay as smolts and as mature animals returning from sea. Conservation Objectives for these habitats and species (within the Galway Bay Complex SAC) were identified by National Parks and Wildlife Service (NPWS) and relate to the requirement to maintain habitat distribution, structure and function, as defined by characterizing (dominant) species in these habitats.

For designated species the objective is to maintain various attributes of the populations including population size, cohort structure and the distribution of the species in the Bay. Guidance on the conservation objectives is provided by NPWS.

Qualifying interests of SAC

The SAC is designated for a number of habitats and species as listed in Annex I and II of the EU Habitats Directive including:-

- 1140 Mudflats and sandflats not covered by sea water at low tide
- 1150 Coastal lagoons
- 1160 Large shallow inlets and bays
- 1170 Reefs
- 1220 Perennial vegetation of stony banks
- 1310 *Salicornia* and other annuals colonising mud and sand
- 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- 1355 Otter *Lutra lutra*
- 1365 Harbour Seal *Phoca vitulina*
- 1410 Mediterranean salt meadows (*Juncetalia maritimi*)
- 3180 Turloughs*
- 5130 *Juniperus communis* formations on heaths or calcareous grasslands
- 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia) (*important orchid sites)
- 7210 Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae**
- 7230 Alkaline fens

A full assessment was carried out on the likely interactions between aquaculture operations and the feature of the Annex 1 habitats Mudflats and Sandflats not covered by seawater at low tide (1140), Large Shallow

Inlets and Bay (1160) and Reefs (1170). In addition, a number of other habitat features were screened and excluded from further consideration as no spatial overlap or likely interaction with aquaculture activities (existing or proposed) was expected to occur. These included (1150) Coastal lagoons, (1220) Perennial vegetation of stony banks, (1310) Salicornia and other annuals colonising mud and sand (1330) Atlantic salt meadows (*Glauco-Puccinellietalia maritima*) and (1410) Mediterranean salt meadows (*Juncetalia maritimi*).

Habitats and species that are key contributors to biodiversity and which are sensitive to disturbance should be afforded a high degree of protection i.e. thresholds for impact on these habitats is low and any significant anthropogenic disturbance should be avoided. In Galway Bay these habitats included (1160) Zostera dominated community complex and (1160) Maerl dominated community

The likely effects of the aquaculture activities were considered in light of the sensitivity of the constituent communities of these Annex 1 habitats. The likely interactions between the proposed aquaculture activities and the Annex II Species Harbour Seal (*Phoca vitulina*) and Otter (*Lutra lutra*) were also assessed.

Inner Galway Special Protection SPA

The Special Conservation Interests (SCIs) of the Inner Galway Bay SPA include: All the SCI species of the Inner Galway Bay SPA: Light-bellied Brent Goose, Wigeon, Teal, Shoveler, Golden Plover, Lapwing, Ringed Plover, Curlew, Bar-tailed Godwit, Turnstone, Dunlin, Redshank, Sandwich Tern, Common Tern, Black-headed Gull and Common Gull. The Sandwich Tern and Common Tern SCIs refer to breeding populations. Cormorant is listed as separate SCIs for its breeding and non-breeding/wintering populations. All the other SCIs refer to non-breeding/wintering populations.

The assessment also includes the following SCIs of other SPAs: the non-breeding/wintering Shoveler, breeding Common Scoter and breeding Common Gull SCIs of the Lough Corrib SPA; and the non-breeding/wintering Wigeon, Golden Plover and Black-tailed Godwit SCIs of the Rahasane Turlough SPA.

The conservation objectives for the Cormorant, Sandwich Tern and Common Tern breeding populations in Inner Galway Bay are to maintain their favourable conservation status, which are defined by there being no significant decline in the abundance of the breeding population, the productivity rate, the distribution of breeding colonies and prey biomass available, and no significant increase in barriers to connectivity and disturbance at the breeding site.

The conservation objectives for the non-breeding SCI species at Inner Galway Bay are to maintain their favourable conservation condition, which are defined by there being stable or increasing long-term population trends and no significant decrease in numbers or range of areas used within Inner Galway Bay.

The wetland habitats within the Inner Galway Bay SPA and the waterbirds that utilise this resource are an additional SCI (the wetlands and water birds SCI). The conservation objective for the wetlands and water birds SCI is to maintain its favourable conservation condition, which is defined by there being no significant decrease in the permanent area occupied by wetland habitats.

All of the SCI species for the Inner Galway Bay make significant use of subtidal and/or intertidal habitat within the SPA and were, therefore, carried forward for full Appropriate Assessment. Many of the SCI species listed for the other SPAs were screened out because they do not use subtidal and/or intertidal habitat and/or were considered unlikely to make significant use of the Inner Galway Bay SPA due to their typical foraging ranges. The SCI species retained for full Appropriate Assessment from the other SPAs were Shoveler, Golden Plover and Common Gull (Lough Corrib SPA) and Wigeon, Golden Plover and Black-tailed Godwit (Rahasane Turlough SPA).

The Conservation Objectives define the favourable conservation condition of the wetlands and waterbirds SCI at Inner Galway Bay purely in terms of habitat area. None of the activities being assessed will cause any change in the extent of wetland habitat. Therefore, the activities being assessed are not likely to have any significant impact on this SCI.

Appropriate Assessment

The function of the Appropriate Assessment is to determine if the ongoing and proposed aquaculture activities are consistent with the Conservation Objectives for these sites; and in the case of SPAs also those neighbouring sites where there is the potential usage of aquaculture areas by birds for which these SPAs have been designated. NPWS provide guidance on interpretation of the Conservation Objectives which are, in effect, management targets for habitats and species in the sites. The assessment of activities was informed by this guidance, which is scaled relative to the anticipated sensitivity of the habitats and species to disturbance by the proposed activities.

Appropriate Assessment of the SAC

The appropriate assessment and risk assessment finds that the majority of activities, at the current and proposed or likely future scale and frequency of activity are consistent with the Conservation Objectives. The following are the exceptions:

Maerl-dominated community and Zostera-dominated community complex

Aquaculture activity is deemed disturbing on two community types, Maerl-dominated community and *Zostera*-dominated community complex. The risk to the conservation status of sensitive habitats (i.e. Mearl and *Zostera*) posed by number of overlapping or adjacent aquaculture locations therefore, cannot be discounted. These impacts, in some areas, are potentially exacerbated by fishing activities. The AA Report

recommended that all efforts should be made to avoid overlap with these sensitive areas and a suitable buffer zone be applied in order to allow for mapping anomalies and enforcement measures.

Introduction of non-native species

The presence of non-native species *Didemnum* sp. in Galway Bay is acknowledged and in particular, is associated with structures used to culture oysters (trestles). The AA Report recommended that best practice should be employed to ensure that structures and netting are kept clean at all times and that any biofouling be dealt and disposed of in a responsible manner such that it is removed from the marine environment and does not pose a risk to the conservation features of the site. The draft Code of Practice produced by Invasive Species Ireland' is recommended as a suitable reference for appropriate management actions.

Notwithstanding that current levels of feral Pacific oyster recruitment in Galway Bay are considered relatively low, the AA Report recommended that operators be encouraged to increase their use of triploid oysters in order to mitigate the risk of successful reproduction. This is recommended on the basis that oyster recruitment has been recorded in Galway Bay and that it is proposed to increase the levels of oyster production in the bay and hence the potential for spawning and recruitment will increase.

The AA Report recommended that acceptable sources of seed (in terms of alien species risk) are identified for aquaculture culture operations and that all future movements of all shellfish stock (mussels, oysters and clams) in and out of Galway Bay Complex SAC should adhere to relevant fish health legislation.

Annex II Species interaction with Aquaculture

The likely interactions between the proposed aquaculture activities and the Annex II Species Harbour Seal (*Phoca vitulina*) and Otter (*Lutra lutra*) were also assessed. The objectives for these species in the SAC focus upon maintaining the good conservation status of the population. The AA Report concluded that the activities proposed in the areas that potentially overlap with otter habitat do not pose a threat to the conservation status of this species.

It is acknowledged in this assessment that the favourable conservation status of the Harbour seal (*Phoca vitulina*) has been achieved given current levels of aquaculture production within the SAC. The aspect of the culture activities that could potentially disturb the Harbour seal status relates to movement of people and vehicles within the sites as well as accessing the sites over intertidal areas and via water.

The current levels of licensed aquaculture (existing) are considered non-disturbing to harbour seal conservation features in all areas of the SAC.

In relation to new licence applications, and given the potential broad range of Harbour Seal within the SAC, the AA Report noted that the risk of disturbance to Harbour Seals should be assessed on the basis of the

nature of the culture type and location relative to seal sites. For example, it concluded that a site may pose a greater risk of disturbance than others on the basis of blocking potential egress routes available to seals and the proposed levels of activity at the sites. To this end, the AA report recommended that consideration should be given to not licensing sites where access is blocked and where there does not appear to be any mitigating actions to prevent disturbance to seals.

The aquaculture activities proposed do not pose a threat to otter in the Galway Bay Complex.

AQUACULTURE AND FISHERIES INTERACTIONS WITH SPA FEATURES

The assessment did not identify any significant potential displacement impacts from aquaculture or fisheries activities on the following SCIs of Inner Galway Bay SPA: Light-bellied, Wigeon, Teal, Shoveler, Grey Heron, Oystercatcher, Golden Plover, Lapwing, Dunlin, Bar-tailed Godwit, Curlew, Redshank, Turnstone, Black-headed Gull and Common Gull. Therefore, no impacts to the conservation objectives for these species are predicted.

The AA Report concluded that full development of the existing licensed sites is unlikely to cause significant displacement impacts to any of the species covered by this assessment. Full development of the application sites, however, may cause significant displacement impacts to a number of species covered by this assessment, particularly Light-bellied Brent Goose, Ringed Plover and Curlew mainly at two large sites on either side of the Aughinish Island causeway.

Red-breasted Merganser

New evidence has indicated that Red-breasted Merganser has a higher potential sensitivity to disturbance from moving vessels than was previously assumed. Single trips to all the application sites would cumulatively flush a theoretical total of 34 mergansers, causing a 60% increase in the total number of birds flushed. The significance of disturbance impacts from use of marine access routes will depend on the seasonal timing and frequency of husbandry activity in each of the relevant aquaculture sites.

Great Northern Diver

In Irish coastal waters, Great Northern Divers appear to be relatively tolerant of disturbance from marine traffic. Northern Diver communal roosts in Inner Galway Bay are not known so the potential disturbance impact from vessel traffic along the marine access routes to these roosts cannot be assessed.

However, the roosting Great Northern Divers would only be potentially vulnerable to disturbance impacts from around one hour before dusk to shortly after dawn the following morning.

Cormorant (non-breeding)

In Irish coastal waters, foraging Cormorants appear to be relatively tolerant of disturbance from marine traffic. Roosting Cormorants are likely to be much more sensitive to disturbance than they are when

foraging. The impact of disturbance to birds at daytime roosts may be minor due to the typically small size of these roosts and the widespread availability of alternative roosts throughout the site. Disturbance to nocturnal roosts may have more severe impacts on Cormorant populations. However, the roosting Cormorants would only be potentially vulnerable to disturbance impacts from around two hours before dusk to shortly after dawn the following morning.

High tide roosts

Most roosts are not located close to any of the relevant aquaculture sites or access routes. However, the marine access route from New Quay into Muckinish Bay passes close to a concentration of wader roosts in the outer part of Muckinish Bay and an alternate access from the south would avoid these roosts. Another concentration of wader roosts occurs around the aquaculture site at Tawin East. Additional individual roosts occur close to some of the other aquaculture sites and access routes.

Breeding SCIs

Cormorant

The main Cormorant breeding colony in Inner Galway Bay is located on Deer Island. This is around 1.7 km from the nearest aquaculture site, and around 1.3 km from the nearest marine access route.

Therefore, this colony is not likely to be affected by disturbance impacts from aquaculture activity associated with the aquaculture sites covered by this assessment. However, disturbance from vessel traffic along the marine access route is more likely given the closer distance and the fact that there appears to be limited existing vessel activity in this area. The significance of any such disturbance impact will depend on the seasonal timing and frequency of husbandry activity in the seaweed cultivation site, although a single severe disturbance event can be enough to cause breeding seabirds to abandon a colony in some instances.

Common Tern and Sandwich Tern

In recent years, the main Common Tern breeding colony in Inner Galway Bay has moved between Mutton Island and Rabbit Island in the northern part of the bay. These islands are over 3.5 km from the nearest aquaculture site.

A Sandwich Tern breeding colony is on Illaunagurroge in Corranroo Bay and this also holds a subsidiary Common Tern breeding colony. There are two application sites for oyster trestle cultivation in Corranroo Bay at distances of around 200 m and 500 m from the breeding colony. However, these are not new applications and these sites were included in the 2014 assessment. That assessment concluded that there was potential for disturbance to the colony from husbandry activity if the workers are accompanied by dogs, but this could be addressed by an appropriate license condition.

The significance of potential disturbance impacts arising from boat movements to the Red-breasted Merganser, roosting Great Northern Diver and high tide waterbird roosts cannot be fully dismissed. However, to minimise impacts to Great Northern Diver the AA report recommended that that boat activity be

restricted around one hour before dusk to shortly after dawn, while it also recommended that the proximity of boat movements to high tide roosts should be restricted to avoid disturbance to roosting birds. The risk of disturbance to Red-breasted Merganser for those sites which are accessed by boat may be mitigated if boat movements are relatively infrequent, or biased towards the months of May – September.

Cumulative impacts

The assessment did not identify any potentially significant potential cumulative impacts of fisheries activities in Inner Galway Bay in-combination with the aquaculture activity in the sites covered by that assessment. However, it noted that there would be a risk of in-combination effects in the event of recommencement or intensification of scallop and/or razor clam dredging, crayfish set net fisheries, spratt and herring fisheries in the wider area, and native oyster dredging.

The 2014 assessment identified the following potentially significant cumulative impacts from other activities in Inner Galway Bay in-combination with the aquaculture activity in the sites covered by that assessment. The 2014 assessment concluded that “overall, it is possible, but not highly likely, that disturbance from recreational activity in the intertidal zone could have in-combination effects with displacement impacts from aquaculture activities that cause a measurable increase in the overall cumulative impact” to Ringed Plover. In this AA Report the overall calculated displacement impact for Ringed Plover is higher than that calculated in the 2014 assessment. There is also a concentration of intertidal oyster cultivation along the shoreline between Aughinish Island and Doorus Point, overlapping with a beach recreation area at Traught Beach, and other shoreline access points at Newtown Lynch and along the Aughinish Island causeway. This is a sandy shoreline with high potential habitat suitability for Ringed Plover. Therefore, the potential for cumulative impacts from disturbance by beach recreation and other intertidal activity in combination with displacement by intertidal oyster cultivation is particularly high in this area.

The main impacts from aquaculture activities to Sandwich Tern and Common Tern in the 2014 assessment were also from bottom mussel cultivation. With the exception of the potential for dogs to cause disturbance to the Illaunagurroge breeding colony, which can be controlled by an appropriate licence condition, there are no measurable impacts to these species identified in the present assessment.

In addition to Ringed Plover, other species could potentially be affected by cumulative impacts from disturbance by beach recreation and other intertidal activity in combination with displacement by intertidal oyster cultivation. There is a potentially significant calculated displacement impact to Light-bellied Brent Goose. This species is not likely to be as strongly associated with beach recreation areas as Ringed Plover. However, it may be more vulnerable to disturbance impacts from winkle picking and bait digging. There was also a potentially significant calculated displacement impact to Curlew. This species has a dispersed distribution pattern across intertidal habitat so it tends not to occur in large concentrations in specific areas making it less vulnerable to point source disturbance impacts. The calculated displacement impacts for Bar-

tailed Godwit and Dunlin were below the significance threshold but not negligible. Both these species are likely to experience some degree of disturbance impact from beach recreation and other intertidal activity.

There is potential for marine traffic to cause cumulative impacts to Red-breasted Merganser, roosting Great Northern Diver and high tide waterbird roosts in combination with disturbance from aquaculture husbandry activity and associated access to/from the aquaculture sites. The current distribution patterns of Red-breasted Merganser, roosting Great Northern Diver and high tide waterbird roosts probably reflect existing levels of disturbance from the above activities. Introduction of additional disturbance sources, particularly in areas with low existing levels of disturbance, could have significant cumulative impacts.

Conclusions:

The appropriate assessment and risk assessment finds that the majority of activities, at the current and proposed or likely future scale and frequency of activity are consistent with the Conservation Objectives for these Natura sites. Some general conclusions and recommendations follow:

In Galway Bay Complex SAC/Inner Galway Bay SPA there are a range of aquaculture activities currently being carried out and proposed. Based upon this, and the information provided in the aquaculture profiling the likely interaction between aquaculture methodology and conservation features (habitats and species) of the site was considered.

Full development of the existing licensed aquaculture sites is unlikely to cause significant displacement impacts to any of the Annex II species covered by this assessment.

Full development of the majority of the proposed aquaculture sites is unlikely to cause significant displacement impacts to any of the Annex II species covered by this assessment. The exception is an intertidal oyster aquaculture site in Kinvarra Bay.

Full development of the application aquaculture sites may cause significant displacement impacts to a number of species covered by this assessment, particularly Light-bellied Brent Goose, Ringed Plover and Curlew. This is mainly due to the two large sites on either side of the Aughinish Island causeway.

The appropriate assessment noted that there remained a risk of disturbance to Red-breasted Merganser for those sites which are accessed by boat. However as it is not proposed to licence the specific sites in question, and as a result of the amendment of the access route to T08/114A this risk has been removed.

There is potential for beach recreation and other intertidal activities such as shellfish collection to have cumulative impacts on Light-bellied Brent Goose, Ringed Plover and other species in combination with displacement impacts from aquaculture activity.

Follow-up site inspections February 2020

- Site T09/519A, on the northern side of the Aughinish causeway, occupies a sandy bay, which is mapped as a mixture of intertidal sand, fine to medium sand with bivalves and *Laminaria*-dominated community complexes, with the fucoid-dominated community complex on the upper shore. During the site inspection in May 2019 extensive colonisation of the sand flats by the non-native and invasive seaweed *Sargassum muticum* was noted. Due to the reduction in size of the site prior to public consultation but after the Appropriate Assessment Report was submitted, a further site inspection was undertaken by the Marine Institute on the reduced site in February 2020. The second assessment again confirmed the presence of *Sargassum muticum* throughout the smaller site area in addition to extensive overlap of Eel grass (*Zostera* sp.) habitat. Aquaculture activities would likely result in dislodging of *Sargassum* sp. and dispersal beyond the boundaries of the site. Furthermore, it is likely that the macro-alga will settle on the culture species in bags or baskets, i.e., oysters, which could act as a vector if they are relocated to other grow out areas both within and outside Galway Bay. The activities proposed would result in considerable harm to the sensitive Eel grass habitat. On this basis and given the invasive nature of the *Sargassum muticum*, the use of site T09/519A for shellfish culture would likely result in harm to the SAC and conservation features within the bay.
- Site T08/115A, was found to also have the invasive seaweed *Sargassum muticum* within the site. Aquaculture activities would likely result in dislodging of this species and dispersal beyond the boundaries of the site. Furthermore, it is likely that the macro-alga will settle on the culture species in bags or baskets, i.e., oysters, which could act as a vector if they are relocated to other grow out areas both within and outside Galway Bay. Due to the invasive nature of the *Sargassum muticum* the use of site T08/115A and its environs would only increase the spread within the bay. The site was also found to be characterised by the presence of extensive and evenly spaced boulders interspaced by long ‘pathways’ comprised of muddy sand. These boulder fields, in places, had clear boundaries marked on corners with standing stones. Toward the southern end of the site the substrate consists of mobile sands which border the main channel into Aughinish and Corranroo Bays. Throughout the site individuals of the native oyster, *Ostrea edulis*, were also found. The presence of the native oyster could leave them susceptible to inadvertent harm or harvest within an aquaculture site. The presence of so many boulders throughout the site if licensed would most likely require the removal of some in places. Such activity could result in considerable harm to the intertidal habitat.

Summary of Mitigation Measures and Management Actions that are being implemented as a consequence of the findings in the Appropriate Assessment report

Taking account of the recommendations of the Appropriate Assessment, as well as additional technical/scientific observations, the following measures are being taken in relation to licensing aquaculture in these Natura sites:

- Aquaculture activity is deemed disturbing on two community types, Maërl-dominated community and *Zostera*-dominated community complex. Overlap with these sensitive areas will not be permitted and a suitable buffer zone will be applied in order to allow for mapping anomalies and enforcement measures. Reduction by the applicant after the original Appropriate Assessment of site T09/520 has removed the overlap that existed for that site.
- The presence of non-native species *Didemnum* sp. in Galway Bay is acknowledged and in particular, is associated with structures used to culture oysters (trestles). Therefore structures and netting must be kept clean at all times and that any biofouling be dealt and disposed of in a responsible manner such that it is removed from the marine environment and does not pose a risk to the conservation features of the site. Adherence to such practice will be included in the licence conditions.
- Due to the extensive overlap of Eel grass (*Zostera* sp.) habitat and the presence of the non native seaweed *Sargassum muticum* at Site T09/519A and the risk of its dispersal beyond the boundaries of the site, it is not proposed to licence this site..
- Due to the presence of the native oyster, *Ostrea edulis* as well as the presence of the non native seaweed *Sargassum muticum* at Site T08/115A and the risk of the dispersal of *Sargassum muticum* beyond the boundaries of the site, it is not proposed to licence this site.
- There was potential for one of the access routes to the application site for seaweed cultivation to cause disturbance to a small Cormorant breeding colony and to Red-breasted Merganser in Muckinish Bay. Therefore the access route will be amended to remove this impact if the site is licensed.
- Notwithstanding that current levels of feral Pacific oyster recruitment in Galway Bay are considered relatively low operators will be required to increase their use of triploid oysters in order to mitigate the risk of successful reproduction. Licence conditions requiring that all new licences granted for Pacific Oysters in Galway Bay will be for the use of triploid seed only will apply.
- It is not proposed to licence intertidal oyster culture sites which are deemed to be disturbing to seal conservation objectives and where mitigation measures are not possible.
- Possible impacts to the Great Northern Diver have been removed, as it is not proposed to licence the specific sites in question..

- Licensing of the application sites near to the Sandwich Tern breeding colony the proximity of boat movements to high tide roosts should be restricted to avoid disturbance to roosting birds.
- The source of seed and any changes to the source of seed are to be approved by the Department of Agriculture, Food and the Marine in advance.
- A Licence condition requiring strict adherence to the identified access routes in order to minimise species/ habitat disturbance will be in each licence issued.
- A Licence condition will require full implementation of the measures set out in the draft Marine Aquaculture Code of Practice prepared by Invasive Species Ireland (e.g. <http://invasivespeciesireland.com/cops/aquaculture>).
- The movement of stock in and out of Galway Bay SAC/Inner Galway Bay SPA should adhere to relevant fish health legislation.
- A licence condition will require that all operators shall adhere to any recommendations that may arise in order to avoid adverse impacts on the integrity of the Galway Bay SAC/Inner Galway Bay SPA.
- The use of updated Aquaculture and Foreshore Licences containing terms and conditions which reflect the environmental protection required under EU and National law.

Overall Conclusion

The appropriate assessment and risk assessment finds that the majority of activities, at the current and proposed or likely future scale and frequency of activity are consistent with the Conservation Objectives for these Natura sites.

The Licensing Authority is satisfied that from a Natura 2000 perspective, given the conclusions and recommendations of the Appropriate Assessment process, along with implementation of the above measures that will mitigate certain pressures on Natura features, the proposed licensed activities are not likely to have a significant effect on the integrity of the Galway Bay Complex SAC and Inner Galway Bay SPA.

July 2020