

**Appropriate Assessment Conclusion Statement by the Licensing Authority for aquaculture activities in Gweedore Bay and Islands Special Area of Conservation (SAC)**  
**(Natura 2000 site)**

This Conclusion Statement outlines how it is proposed to license and manage aquaculture activities in the above Natura site in compliance with the EU Habitats Directive. Aquaculture licence applications, if approved, will be licensed in accordance with the standard terms and conditions as set out in the aquaculture licence templates. These are available for inspection at:

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

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

An Article 6 (Habitats) Assessment and specifically an Appropriate Assessment (Article 6 (3)) of aquaculture in Gweedore Bay and Islands has been carried out by the Marine Institute on behalf of the Department of Agriculture, Food and the Marine. The Appropriate Assessment assessed the potential ecological impacts of aquaculture activities in and adjacent to Gweedore Bay and Islands SAC. From an aquaculture perspective, the information upon which this assessment is based is the definitive list of applications and existing licences for aquaculture available at the time of assessment.

**Description of the Aquaculture Projects**

The projects involve the renewal of existing aquaculture activity and the licensing of new aquaculture sites within the Gweedore Bay and Islands SAC (twenty-five aquaculture sites in total). There are currently ten licensed sites within inner Gweedore Bay, focusing on the cultivation of the Pacific oyster on trestles in intertidal areas. In addition, there are currently thirteen new, applied for sites for oyster production within this SAC, ten at Gweedore Bay and three at Kincasslagh Bay. There is also a single, applied for site for the culture of clams/cockles intertidally on the seafloor in Kincasslagh Bay. An application for a trial licence for oyster production using floating bags in Gweedore Bay is no longer being pursued by the applicant.

**Description of Ecological and Environmental issues including Conservation Objectives for the SAC**

The Gweedore Bay and Islands SAC is situated on the west Donegal coast and is designated as a Special Area of Conservation (SAC) under the Habitats Directive. Conservation Objectives for this bay were identified by NPWS (2015a) and relate primarily to the requirement to maintain habitat distribution, structure and function, as defined by the characterising (dominant) species in these habitats. For designated species, the objective is to maintain various attributes of the populations including population size, habitats quality and the distribution of the species in the Bay.

**Conservation Objectives for Gweedore Bay and Islands SAC (001141)**

The Appropriate Assessment of aquaculture in relation to the Conservation Objectives for Gweedore Bay and Islands SAC is based on Version 1 of the objectives (NPWS 2015a - Version 1 March 2015) and supporting documentation (NPWS 2015b, 2015c and 2015d - Version 1 February 2015). The spatial data for conservation features was provided by NPWS.

## Qualifying Interests of the SAC

The SAC is designated for a number of habitats and species (NPWS 2015a), as listed in Annex I and Annex II of the Habitats Directive. The likely interaction between aquaculture activity and the conservation features (habitats and species) of the Gweedore Bay and Islands SAC were considered in the Appropriate Assessment. A screening exercise resulted in fifteen habitats and two species (listed below) being excluded from further consideration in the assessment as aquaculture activities (existing and/or proposed) do not overlap or likely interact with the particular features or species referenced:

- 1150 Coastal lagoons
- 1220 Perennial vegetation of stony banks
- 1395 Petalwort (*Petalophyllum ralfsii*)
- 1410 Mediterranean salt meadows (*Juncetalia maritimi*)
- 1833 Slender Naiad (*Najas flexilis*)
- 2110 Embryonic shifting dunes
- 2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes)
- 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)
- 2140 Decalcified fixed dunes with *Empetrum nigrum*
- 2150 Atlantic decalcified fixed dunes (*Calluno-Ulicetea*)
- 2170 Dunes with *Salix repen ssp. argentea* (*Salicion arenariae*)
- 2190 Humid dune slacks
- 21A0 Machairs (in Ireland)
- 3110 Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*)
- 4030 European dry heaths
- 4060 Alpine and Boreal heaths
- 5130 *Juniperus communis* formations on heaths or calcareous grasslands

The remaining habitats and species were considered in the Appropriate Assessment and could not be screened out, as follows:

- Constituent communities and community complexes recorded within the qualifying interest Annex 1 marine habitats (i.e. 1170 - Reefs), listed in NPWS (2014c) and consisting of:
  - Reef community complex,
  - *Laminaria*-dominated community complex;
- The Gweedore Bay and Islands SAC is designated for the Otter (*Lutra lutra*). The species is listed in Annex IV (a) of the Habitats Directive and is afforded strict protection.

## **Article 6(3) Assessment of Gweedore Bay and Islands SAC**

The function of the Appropriate Assessment is to determine if the ongoing and proposed aquaculture activities are consistent with the Conservation Objectives for the Natura site or if such activities will lead to deterioration in the attributes of the habitats and species over time and in relation to the scale, frequency and intensity of the activities. NPWS (2015a) provide guidance on interpretation of the Conservation Objectives which are, in effect, management targets for habitats and species in the SAC. This guidance is scaled relative to the anticipated sensitivity of habitats and species to disturbance by the proposed activities. Some activities are deemed to be wholly inconsistent with long term maintenance of certain sensitive habitats while other habitats can tolerate a range of activities. For the practical purpose of managing sedimentary habitats, a 15% threshold of overlap between a disturbing activity and a habitat is given in the NPWS guidance. Below this threshold, disturbance is deemed to be non-significant.

Disturbance is defined as that which leads to a change in the characterising species of the habitat (which may also indicate change in structure and function).

### **Screening of adjacent Natura sites for ex-situ effects**

There are three other SAC sites and one SPA site proximate to the existing and proposed aquaculture activities, as follows:

- Aran Island (Donegal) Cliffs SAC (000111)
- Rutland Island and Sound SAC (002283)
- Ballyness Bay SAC (001090)
- West Donegal Coast SPA (004150)

A preliminary screening was carried out on these adjacent Natura 2000 sites to establish the likely interaction with aquaculture activities based primarily upon the likelihood of spatial overlap. With the exception of the Harbour seal (*Phoca vitulina*) which is a designated species for the Rutland Island and Sound SAC, it was deemed that there are no ex situ effects and the qualifying features of the adjacent Natura sites were screened out.

The Appropriate Assessment concluded that the Harbour seal may migrate into the Gweedore Bay and Islands SAC and could interact with aquaculture activities. This species is therefore included as a feature in the Appropriate Assessment of aquaculture activities at this Natura site.

### **Findings of the Article 6(3) Appropriate Assessment**

In the Gweedore Bay and Islands SAC, of the twenty-four aquaculture sites to be considered (licensed and applications), there are four oyster production licensed sites that have spatial overlap with the habitat conservation feature (Reefs -1170). In addition, there are five new, applied for sites (also for oyster production) that have spatial overlap with the same habitat conservation feature (Reefs).

The Appropriate Assessment finds that the aquaculture activities, at the current and proposed or likely future scale and frequency of activity are consistent with the Conservation Objectives.

#### **Aquaculture and Habitats:**

**Reefs:** A full assessment was carried out on the likely interactions between existing and proposed aquaculture operations and the feature of the Annex 1 Habitat Reefs (1170). The likely effects of the aquaculture activities in terms of species, structures and access routes were considered in light of the sensitivity of two constituent community types recorded within the qualifying interest of Reefs, i.e. 'Laminaria-dominated community complex' and 'Reef community complex'. The 'Laminaria-dominated community complex' was shown to have no overlap with aquaculture activities and was excluded from further analysis.

The existing and proposed oyster culture activities are non-disturbing to feature (Reefs - 1170) including the conservation of the 'Reef community complex', based upon the scale of spatial overlap and the relatively high tolerance levels of the community types.

Furthermore, the risk posed by intertidal clam/cockle culture can be discounted, as it does not spatially overlap with conservation features and any impacts are likely to be confined to the footprint of the licence area.

**Machair:** The risk of the proposed access routes to the 'Machair' habitat in Kincasslagh Bay has been considered. The routes will follow existing tracks to the shore and new routes will not be created. All of the staging/storage areas will be on private property or on public piers and will not be located on any Annex 1 Habitat.

### **Aquaculture and Species:**

**Otter (*Lutra lutra*):** The likely interaction between the existing and proposed aquaculture activities and the Annex II Species Otter were assessed. The objectives for this species in the SAC focus upon maintaining the good conservation status of the population. The Appropriate Assessment found that aquaculture activities did not present a barrier to migration or to the freshwater attributes of the otter. The current levels of licensed shellfish culture and applications are considered non-disturbing to otter conservation features.

**Harbour Seal (*Phoca vitulina*):** An assessment of the effects of oyster production on the Harbour seal migrating into the Gweedore Bay and Islands SAC were also examined. The adjacent Rutland Island and Sound SAC is designated for this species. The objectives for the Harbour seal relate primarily to the requirement to maintain various attributes including population size and the distribution of the species. It is acknowledged in this assessment that the favourable conservation status of the Harbour seal has been achieved (NPWS 2013b, 2013c) given current levels of aquaculture production within both the Gweedore Bay and Islands SAC and the Rutland Island and Sound SAC. The current levels of licensed shellfish culture and applications within Gweedore Bay and Islands SAC are considered non-disturbing to the site specific Conservation Objectives for the Harbour seal within the Rutland Island and Sound SAC.

### **In-Combination Effects:**

A number of in-combination effects resulting from a range of activities such as fisheries (including pot fishing for lobster and crab), intertidal seaweed harvesting and pollution pressures were considered in the Appropriate Assessment. The conclusion is that none, when considered in conjunction with shellfish culture activities, will result in a significant disturbance to the conservation features of the Gweedore Bay and Islands SAC.

### **Introduction of non-native species:**

The existing and proposed oyster culture and the proposed clam/cockle culture may present a risk in terms of the introduction of non-native species such as the Pacific oyster (*Crassostrea gigas*) and the Manila clam (*Ruditapes philippinarum*). However, the risk of establishment is considered low for both non-native species in culture, given a number of factors, including lack of suitable habitat, intertidal culture and short residence times.

### **Conclusion**

The Licensing Authority is satisfied that, given the conclusions of the Appropriate Assessment process, a decision can be taken in favour of licensing existing and proposed clam/cockle and oyster culture operations in Gweedore Bay and Islands SAC.

Accordingly, the Licensing Authority is satisfied that the proposed licensing is not likely to have a significant effect on the integrity of the Gweedore Bay and Islands SAC.