



Appeal Ref No. AP12-18/2019

Aquaculture Licences Appeals Board



Final Version 08/08/2022

Technical Advisor's Report



Summary

Description	Aquaculture licence appeal against the decision of the Minister of Agriculture, Food and Marine to grant an aquaculture licence to Kush Seafarms (T06/513A and T06/360A) and grant to Shamrock Shellfish (T06/35A and T06/106) and refuse an aquaculture licence to Kieran Lyons (T06/364A) and Shamrock (T06/254A and T06/495A) in Kilmackilloge Harbour, Kenmare Bay, Kerry
Licence Application	T06/364A; T06/35A; T06/106; T06/254A; T06/495A; T06/360A T06/513A
Appeal Reference	Kilmackilloge AP12-18/2019
Department Reference No.	T06/364A; T06/35A; T06/106; T06/254A; T06/495A; T06/360A T06/513A
Applicant	Kieran Lyons, Sean McCarthy C/o Shamrock Shellfish Ltd, John Harrington C/o Kush Seafarms Ltd,
Ministers Decision	To grant an aquaculture licence to Kush Seafarms (T06/513A and T06/360A) and to Shamrock (T06/35A and T06/106) To refuse an aquaculture licence to Kieran Lyons (T06/364A) and Shamrock (T06/254A and T06/495A) in Kilmackilloge Harbour, Kenmare Bay, Kerry
Technical Advisor	Marie Louise Heffernan CEnv, MCIEEM, MSc Aster Environmental Consultants Limited www.aster.ie <i>Maps reproduced under OSI Licence number EN 0070910</i>
Site Inspection	11/04/2022

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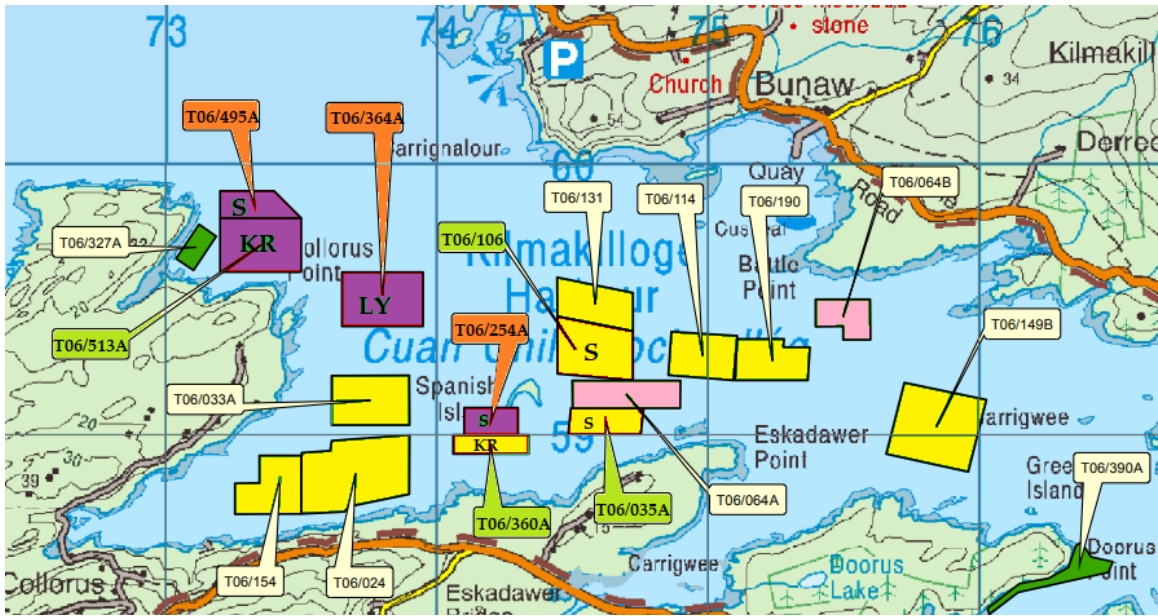
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1.0 General Matters / Appeal Details

1.1 Licence Application and Ministers Decision

Location of Sites Appealed: Kilmackilloge Co Kerry

Appeal Number	Reference number	Applicant Name	Applicant Address	Minister for Agriculture, Food and the Marine decision	Code for Map
AP12	T06/364A;	Kieran Lyons	Eyeries, Beara, West Cork	To refuse to grant licence	LY
AP13	T06/35A	The Shamrock Shellfish Company	Killowen, Kenmare, Co. Kerry	To grant the licence	S
AP14	T06/106	The Shamrock Shellfish Company	Killowen, Kenmare, Co. Kerry	To grant the licence	S
AP15	T06/254A;	The Shamrock Shellfish Company	Killowen, Kenmare, Co. Kerry	To refuse to grant licence	S
AP16	T06/495A	The Shamrock Shellfish Company	Killowen, Kenmare, Co. Kerry	To refuse to grant licence	S
AP17	T06/513A	Kush Seafarms Ltd	O'Shea House, New Road, Kenmare, County Kerry, Ireland	To grant the licence	KR
AP18	T06/360A	Kush Seafarms Ltd	O'Shea House, New Road, Kenmare, County Kerry, Ireland	To grant the licence	KR



Map 1: Mussel Farming in yellow (current active areas) , Mussel cultivation in purple (new applications). Orange labels are the appeal areas refused and green labels those granted. Note green box intertidal shellfish and pink salmon farming

1.2 Appeal Details

Appeal Number	Reference number	Date Appeal Received:	Location of Site Appealed
AP12	T06/364A	15/10/2019	Kilmackilloge Bay
AP13	T06/35A	25/10/2019	Kilmackilloge Bay
AP14	T06/106	25/10/2019	Kilmackilloge Bay
AP15	T06/254A;	25/10/2019	Kilmackilloge Bay
AP16	T06/495A	20/10/2019	Kilmackilloge Bay
AP17	T06/513A	30/10/2019	Kilmackilloge Bay
AP18	T06/360A	30/10/2019	Kilmackilloge Bay

1.3 Name of Appellant (s):

Include full names and addresses

Appeal Number	Reference number	
AP12	T06/364A;	Kieran Lyons Eyerics, Beara, West Cork
AP13	T06/35A	Kush Seafarms O'Shea House, New Road, Kenmare,. County Kerry, Ireland
AP14	T06/106	Kush Seafarms O'Shea House, New Road, Kenmare,. County Kerry, Ireland
AP15	T06/254A;	The Shamrock Shellfish Company Killowen, Kenmare, Co. Kerry
AP16	T06/495A	The Shamrock Shellfish Company Killowen, Kenmare, Co. Kerry
AP17	T06/513A	Save Killmackilloge Bay C/O Hawker, Loughnacreen Lauragh, Co. Kerry
AP18	T06/360A	Ross Shellfish, Daly and Shamrock Peta House Kenmare Co. Kerry

1.4 Name of Observers

These observers are in March 2020

Appeal Number	Reference number	Observers
AP12	T06/364A;	Save Kilmackilloge Bay C/O Hawker, Loughanacreen Lauragh, Co. Kerry
AP13	T06/35A	Save Kilmackilloge Bay C/O Hawker, Loughanacreen Lauragh, Co. Kerry
AP14	T06/106	Save Kilmackilloge Bay C/O Hawker, Loughanacreen Lauragh, Co. Kerry
AP15	T06/254A;	Save Kilmackilloge Bay C/O Hawker, Loughanacreen Lauragh, Co. Kerry
AP16	T06/495A	Save Kilmackilloge Bay C/O Hawker, Loughanacreen Lauragh, Co. Kerry
AP17	T06/513A	
AP18	T06/360A	Save Kilmackilloge Bay C/O Hawker, Loughanacreen Lauragh, Co. Kerry

1.5 Grounds for Appeal

Appeal Number	Reference number	Grounds for Appeal
AP12	T06/364A; Refused	<p>Negative visual impact. The proposed site is over 1 km from the road and so visual impact will be low from this proposed licenced area.</p> <p>Growth Rates The current (unauthorized) operation will cease if granted this licence and no overall increase in production is planned.</p>
AP13	T06/35A Granted	<p>Growth Rates This licence should not be granted as; 1. Overcrowding has already contributed to a significant decline in mussel growth rates and reduction in mussel quality in the harbour. 2. High densities employed by one farm will adversely affect other farms nearby and could result in reduced overall yields</p> <p>Disease Higher densities present a greater risk of disease.</p> <p>Training certification The licence should not be granted to a company with inadequate certification or training</p>
AP14	T06/106 Granted	<p>Growth Rates This licence should not be granted as; 1. Overcrowding has already contributed to a significant decline in mussel growth rates and reduction in mussel quality in the harbour. 2. High densities employed by one farm will adversely affect other farms nearby and could result in reduced overall yields</p> <p>Disease Higher densities present a greater risk of disease.</p> <p>Navigation Threat to navigation</p> <p>Training certification The licence should not be granted to a company with inadequate certification or training</p>

AP15	T06/254A Refused	<p>Fairness of Licencing</p> <p>There are questions in respect transparency and fairness of the licencing system. One farm has over 50 ha of existing granted sites whereas the applicant (and appellant) has only 6ha.</p>
AP16	T06/495A Refused	<p>Preferential treatment of one operator</p> <p>The appellant claims a lack of consistency as this 2.5 ha site is next to site T06/513A a six ha site that got approval from the Minister</p> <p>Conflict of interest</p> <p>The appellants states that Bord lascaigh Mhara, who carried out the carrying capacity report, have preference shareholding in Kush Sea farms Ltd and there is a conflict of interest in their recommendations.</p>
AP17	T06/513A Granted	<p>Fishing Impacts</p> <p>The appellants state that the site proposed is over traditional fishing grounds.</p> <p>Carrying Capacity</p> <p>Overstocking of the harbour with mussels will threaten livelihood of existing mussel farmers.</p> <p>Visual</p> <p>The appellants state that this site can be seen from the Wild Atlantic Way signature point</p> <p>Navigation</p> <p>The appellants state that this site impedes main navigation route into the harbour and use of this site as a bolthole in poor weather</p> <p>Tourism</p> <p>This bay is used by Kenmare diving club and used by scuba divers, pleasure craft, kayakers and as an anchorage for a visiting yachts</p>
AP18	T06/360A Granted	<p>Fairness of Licencing</p> <p>The appellants state that this site has been farmed by Kieran Lyons for 17 years and it appears unjust to give this area to Kush Seafarms.</p>

All the information submitted has been consulted and processed to aid in decision making. This above is a short summary of this material.

Issues

The issues in the case of the appeals are as follows

1. Transparency of the process to grant/refuse licences
2. Carrying capacity of the Harbour/growth rates
3. Navigation Channels
4. Visual Impact
5. Tourism
6. Fishing impacts
7. Certification and training of licence holders

1.6 Minister's submission

Section 44 of the Fisheries (Amendment) Act 1997 part 2 states that "The Minister and each other party except the appellant may make submissions or observations in writing to the Board in relation to the appeal within a period of one month beginning on the day on which a copy of the notice of appeal is sent to that party by the Board and any submissions or observations received by the Board after the expiration of that period shall not be considered by it"

No submissions are enclosed from the Minister or any other party in light of this appeal.

1.7 Applicant response

This section should reflect accurately any response received from the applicant in response to a request for a submission under Section 44 of the Act.

Appeal Number		Summary of information submitted
AP12		No response as the appellant is the applicant
AP13	Response by applicant	<p>Carrying Capacity Shamrock Shellfish Ltd has no greater or less density of lines than other farms in the harbour.</p> <p>Safety Shamrock has a good safety record.</p>
AP14	Response by applicant	<p>Carrying Capacity Shamrock Shellfish Ltd has no greater or less density of lines than other farms in the harbour.</p> <p>Safety Shamrock has a good safety record.</p>
AP15		No response as the appellant is the applicant
AP16		No response as the appellant is the applicant
AP17	Applicant comments	<p>Fisheries This area is not used by local scallop fishermen,</p> <p>Carrying Capacity The site will not starve other mussel farms inside the harbour of nutrients. Tidal flows outside the harbour are strong and Phytoplankton plentiful.</p> <p>Local Kush Seafoods is very much a local business.</p> <p>Yachts</p>

		<p>The point has been made that the location would deter visiting yachts from berthing in the harbour, however, no evidence has been submitted to support this.</p> <p>Impact on Tourism</p> <p>Impact on views from mussel farms is small, especially now that battleship grey barrels are used. In fact mussel farms at Kenmare are quintessentially part of the local character</p>
AP18	Kush Seafarms Ltd Applicant response	<p>Legal Framework</p> <p>According to the Applicant the appeal argues that the appeal against the grant of licence for site T06/360A suggests that the licence should be revoked and given instead to Kieran Lyons, illegally operating this site for a number of years Section 4 of the Fisheries and Foreshore (Amendment) Act. 1998 (Updated and revised January 2019). This Act confirms that no one who has been operating without a licence may subsequently be granted one on application.</p>

2.0 Oral Hearing Assessment

Following Section 49 of the Fisheries Amendment Act 1997 an oral hearing may be conducted by the ALAB regarding the licence appeals.

Having reviewed the Ministers File, correspondence from the appellant/applicant/ Department of Agriculture, Food and the Marine and carried out a site visit, there is sufficient evidence in this technical report to make a clear decision in relation to the appeal. As a result, it is felt that an Oral Hearing is not required in this case.

An oral hearing was requested for T06/35, T06/106, T06/364 and T06/513

No hearing was requested for T06/254, T06/495, T06/360

3.0 Minister's file

Following Section 43 of the Fisheries Amendment Act 1997 the following documented items were sent to the ALAB from the Minister and were reviewed:

	AP12	AP 13	AP14	AP 15	AP16	AP 17	AP18
	364a	35a	106	254	495	513	360
1. Copy of the Application Form with maps, charts, co-ordinates and drawings	28/3/2018	24/04/18	24/04/18	11/5/2018	29/05/2018	5/04/2018	5/4/2018
2. Copy of the Appropriate Assessment Report including Annex I and Annex II	1/9/2019	1/9/2019	1/9/2019	1/9/2019	1/9/2019	1/9/2019	1/9/2019
4. Copy of submission to the Minister	19/09/2019	19/09/2019	19/09/2019	19/09/2019	19/09/2019	19/09/2019	19/09/2019
5. Copy of relevant observations from technical advisors	14/02/2019	4/02/2019	4/02/2019	12/2/2019	14/02/20018	4/02/2019	15/02/2019
6. Copy of objections at Public Notice	None	None	None	None	None	None	None
7. Copy of the Ministers decision	24/09/2019	24/09/2019	24/09/2019	25/9/1019	24/09/2019	24/09/2019	24/09/2019
8. Copy of Notification to the Applicant of Ministers Decision	24/09/2019	24/09/2019	24/09/2019	25/9/1019	24/09/2019	24/09/2019	24/09/2019
9. Copy of the advertisement of Ministers Decision	No	No	No	No	No	No	No

4.0 Context of the Area numbers

4.1 Physical descriptions

Kilmackilloge bay is located south-west of Kenmare town some 20km away. It is a deep, drowned glacial valley. The bay faces north west and is sheltered from the prevailing south westerly wind and opens up into the Kenmare River which is, despite the name, seawater at this point.



Map 1: Kilmackilloge Bay (Bing Maps)

Population

Kenmare town is a reasonably sized settlement with a population of 2,376 people according to the 2016 census. The area of the town is 3.092 km² Area with a population density of 768.4/km² (1).

Weather

Valentia is the nearest weather station some 35km North west has a mid-oceanic climate. Relatively speaking it is a wet part of Ireland with a Long Term average (LTA) of 1557.4mm of rain on average a year. As can be seen from the charts below the temperature is mild throughout the year normally ranging between 7.2 and 15.3 degrees (2).

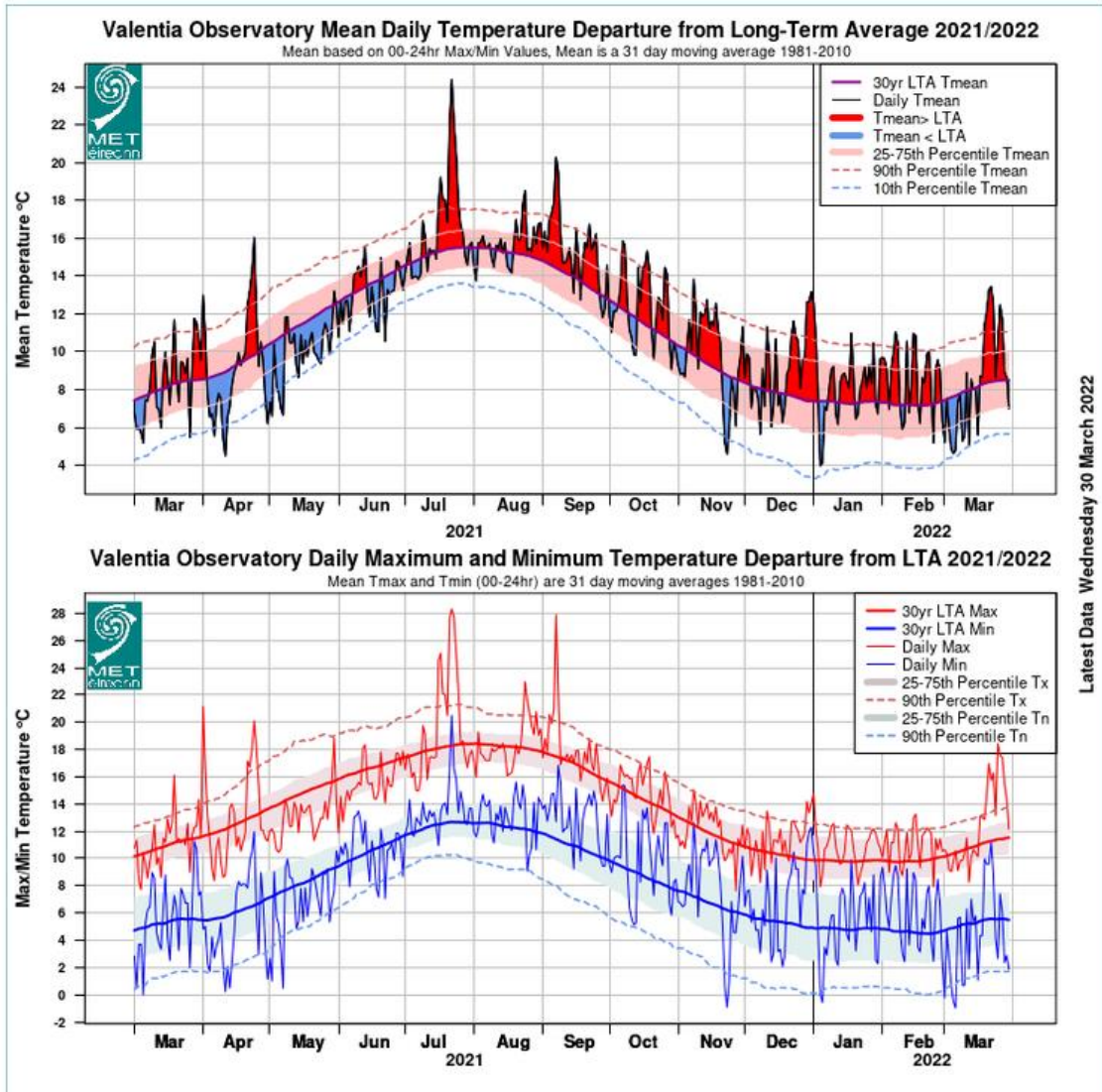
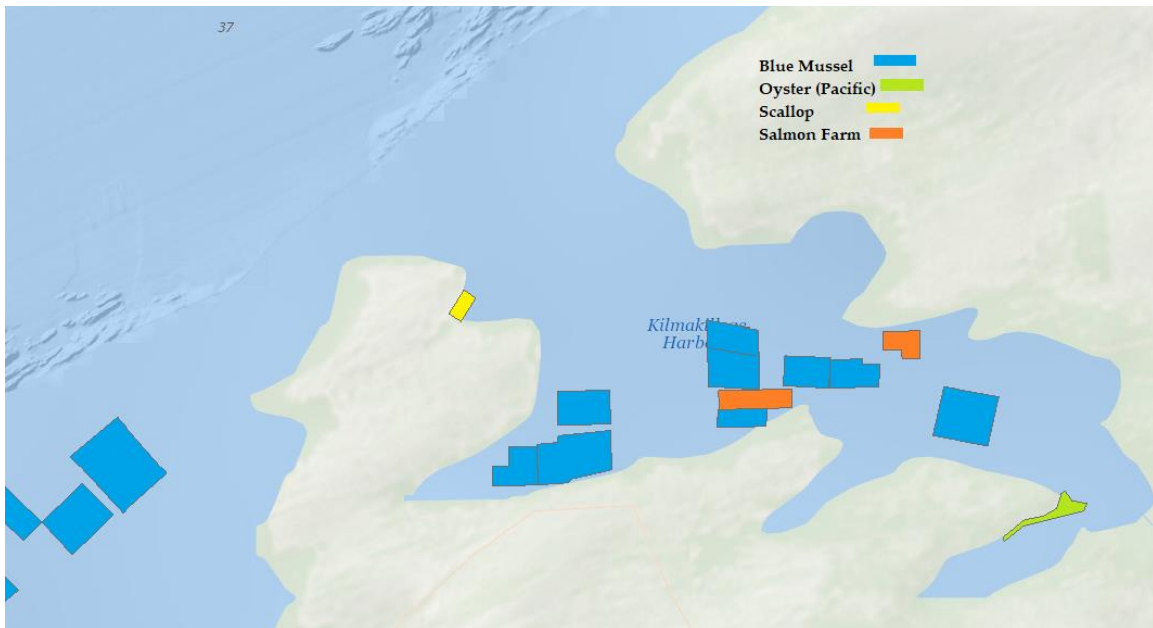


Figure 1: Temperature Data Valentia Weather station

4.2 Resource Users

Aquaculture Activity

According to the Marine Institute Maps there are licences for Blue mussel cultivation, scallop cultivation, oyster cultivation and salmon farming in the bay. It would appear that the scallops and oysters are not being farmed at present but the licences have just been renewed and these activities are likely to restart.



Map 2 Aquaculture Activity in Kilmackilloge Bay (Source Marine Institute)

The area is dominated by Blue Mussel cultivation which has been in place since the 1970s (5).

Inshore and Offshore Fishing

The main angling activity is dredge fishing and pot fishing for shrimps is mapped by the marine institute throughout the entire area (3,4,5).

Angling

There is some shore angling off Bunna at the mouth of Kilmackilloge for coalfish, conger, mackerel, pollock and ballan wrasse. The shore near Lauragh within the inner bay is fished for Lugworm and clams (3,4,5).

Leisure Users of the water body & surrounding area

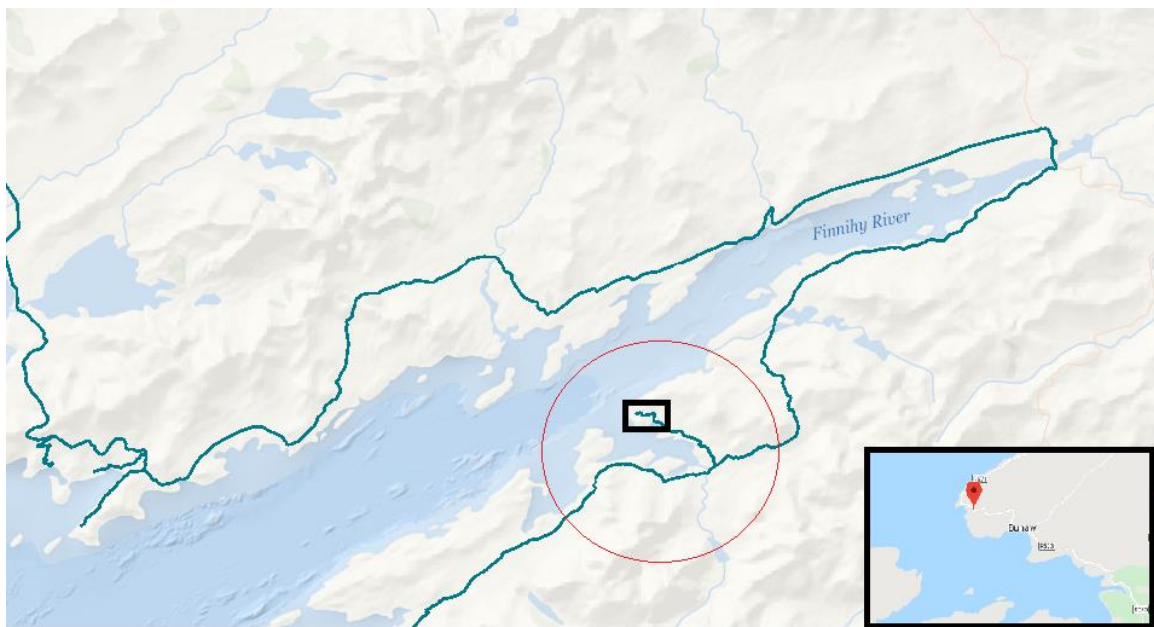
The bay is used by a small number of recreational yachts and other small boats which can be seen moored in the inlets of the bay. Recreational diving is also a feature of the outer bay area.

Tourism

According to Failte Ireland the south west of Ireland is the most visited place for tourists with the greatest revenues outside Dublin with 30% of holidaymakers heading here (6,7,8).

Kilmackilloge Bay is on the Wild Atlantic Way with a notable spur up the eastern side of the harbour This point is a marked Kerry Wild Atlantic Way Discovery Point called “Kilmackilloge Viewpoint”

Kilmackilloge Viewpoint has views over the Beara peninsula and Kenmare river. In 2019 Failte Ireland recorded 3.4 million overseas tourists on the Wild Atlantic Way and 5 million domestic visitors (7)



Map 3 Wild Atlantic way route (insert of signative point from Failte Ireland) main map source Marine Institute

Agricultural Activity

The land in this area of Kerry is very rich and productive. In 2010 the CSO carried out a detailed agricultural census by rural district. The data from the CSO 2010 in relation to Kenmare area which encompasses Kilmackilloge is as follows.

In the 056 Kenmare, Co. Kerry district the total area farmed is 2786ha. The vast majority of this at 2430ha is pasture and rough grazing with around 350ha grown for hay or silage. The area is dominated by mixed grazing with 1352 cattle and 5718 sheep recorded in the 2010 census.

Total numbers of people working on the farms are 76 with only 17 of these landholders under 44 years old.

4.3 Environmental Data

Water quality and the Water Framework Directive

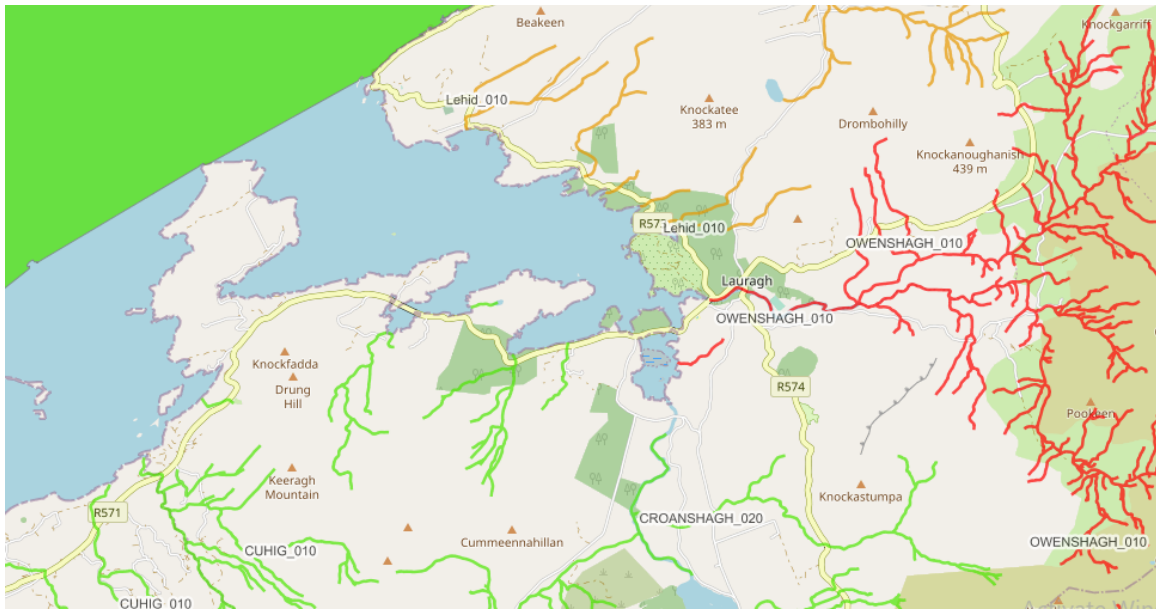
The EU Water Framework Directive (2000/60/EC) requires all Member States to protect and improve water quality in all waters so that we achieve good ecological status by 2015 or, at the latest, by 2027. The Directive requires that management plans be prepared on a river basin basis and specifies a structured method for developing these plans.

These are called River Basin Management Plans (RBMP's). RBMPs are plans to protect and improve the water environment. They are prepared and reviewed every six years. The first RBMPs covered the period 2010 to 2015. The second cycle plan covers the period 2018-2021 and was published by the Government on 17 April 2018.

The South Western River Basin District (SWRBD) River Basin Management Plan 2011 – 2015 covered the implementation of the Water Framework Directive (WFD) (2000/60/EEC) for the south-west coast of Ireland

Kilmackilloge Harbour has one substantial river entering the bay called the Owenshagh River and several smaller ones. All are classified as WFD status poor (see map below). High water quality is green (not at Risk), under review is yellow and poor quality "at Risk" is red. Kenmare River itself is considered a coastal waterbody "not at Risk"

The Owenshagh (code_010) also has a High Status Objective but it deteriorated to Good status in the 2013-2015 monitoring cycle and is therefore considered "AT RISK". Kerry County Council advised that agriculture is not intensive here so it is unlikely to be a significant pressure. There is some natural woodland in the lower reaches and peat is also present. There is a question over whether this river should be required to reach High status; if Good status is acceptable here then it is likely Not at Risk. There is elevated arsenic in the groundwater in the Owenshagh_010 region due to natural reducing conditions. The Owenshagh River was classified as High status in the 2007 -9 and 2010-12 periods with it dropping to good in the 2010 to 2015 cycle. Killmackilloge harbour is classified as a transitional water body and "not at risk"



Map 4: Water quality in the Kilmackilloge Bay Catchment (Source EPA Maps)

A requirement of the Water Framework Directive (2000/60/EC) is that benthic macro-invertebrates must be sampled from nominated coastal and transitional waters at least twice within a river basin cycle (6 years) in order to classify these waterbodies (12)

The Infaunal Quality Index (IQI) multimetric (developed by the UK-Ireland Benthic Invertebrate subgroup of the UK-Ireland Marine Task Team) is used to evaluate the marine benthic macro-invertebrate ecological quality element of the Water Framework Directive. It describes the ecological status based on soft sediment infaunal communities.

As required by the Water Framework Directive the IQI range has been divided into the following groups so as to determine biological status.

1. BAD/POOR
2. POOR/MODERATE
3. MODERATE/GOOD
4. GOOD/HIGH

All samples taken in Kilmackilloge were of good/high value (16)

Shellfish Flesh Monitoring Programme

Sea-Fisheries Protection Authority (SFPA) carries out a number of functions, including protecting and conserving fisheries resources for long-term use; promoting compliance with sea-fisheries legislation; and ensuring seafood safety. They sample the bays and classify them according to the finding of sampling.

Shellfish production areas in Ireland are categorised based on the level of treatment that shellfish require prior to being sold. The best category (Class A) is where shellfish can be sold directly with no pretreatment. Class B requires purification for 48 hours, while Class C is the lowest category and requires the shellfish to be relayed in clean water for a two month period

Shellfish flesh classifications are carried out under the European Communities (Live Bivalve Molluscs) (Health Conditions for Production and Placing on the Market) Regulations, 1996 (S.I. No. 147 of 1996)).

Kilmackilloge for Blue Mussel has a Seasonal A classification from 01 Oct to 01 June and this reverts to Class B at other times

There is no mention on SFPA website.(11) of oysters or scallops it is assumed that this cultivation is not currently active. These licences have recently been renewed.

4.4 Statutory Status

Nature Conservation Designations Natura 2000 are sites designated under the Habitats Directive. There are two types Special Areas of Conservation (Habitats and species) and Special Protection Areas (birds)

Special Area of Conservation

Kilmackilloge bay lies within the Kenmare River SAC Site Code 002158,



Map 5: Map of designated Natura 2000 at Kilmackilloge Bay (Source NPWS.ie)

Special Areas of Conservation are prime wildlife conservation areas in the country, considered to be important on a European as well as Irish level.

The Habitats Directive lists certain habitats and species that must be protected within SACs. Irish habitats include raised bogs, blanket bogs, turloughs, sand dunes, machair (flat sandy plains on the north and west coasts), heaths, lakes, rivers, woodlands, estuaries and sea inlets. The 25 Irish species which must be afforded protection include Salmon, Otter, Freshwater Pearl Mussel, Bottlenose Dolphin and Killarney Fern (13).

Kenmare River SAC Site Code 002158, is Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

- [1160] Large Shallow Inlets and Bays
- [1170] Reefs
- [1220] Perennial Vegetation of Stony Banks
- [1230] Vegetated Sea Cliffs
- [1330] Atlantic Salt Meadows
- [1410] Mediterranean Salt Meadows
- [2120] Marram Dunes (White Dunes)
- [2130] Fixed Dunes (Grey Dunes)*
- [4030] Dry Heath
- [5130] Juniper Scrub
- [6130] Calaminarian Grassland
- [8330] Sea Caves
- [1014] Narrow-mouthed Whorl Snail (*Vertigo angustior*)
- [1303] Lesser Horseshoe Bat (*Rhinolophus hipposideros*)
- [1355] Otter (*Lutra lutra*)
- [1365] and Common (Harbour) Seal (*Phoca vitulina*)

Special Protection Areas

There are two Special Protection Areas for birds within 20km of Kilmackilloge. These are Beara Peninsula SPA (Site code 004155) located at 10km South west and Iveragh Peninsula SPA (site code 004154) located at 20km west.

The Beara Peninsula SPA is designated to protect Fulmar and Chough. It is one of the most important sites in the country for Chough, with a breeding population of international importance. It also supports a nationally important population of Fulmar.

The Iveragh Peninsula SPA is of ornithological importance as it supports an internationally important population of Chough and is the second most important site in the country for this species. The site also supports nationally important populations of Peregrine and three species of breeding seabirds Guillemot, Fulmar and Kittiwake. It is designated to protect these four bird species.

These sites are designated to protect Chough, Peregrine, Fulmar, Kittiwake and Gullimot.

4.5 Protected Species

Birds

The data is extracted from Biodiversity maps (14). A polygon was generated to cover the area of Kilmackilloge bay to reveal what birds of relevance or conservation importance were known from the area. .

These birds as listed below are ones relevant to the application such as offshore divers, gulls and predatory birds. Only records in the last 25 years since 1997 are included.

Bird	Birds of Conservation Concern -	Annex I Eu Habitats
Arctic Tern (<i>Sterna paradisaea</i>)	Amber List	Annex I Bird Species
Black Guillemot (<i>Cephus grylle</i>)	Amber List	
Black-headed Gull (<i>Larus ridibundus</i>)	Red List	
Black-legged Kittiwake (<i>Rissa tridactyla</i>)	Amber List	
Brent Goose (<i>Branta bernicla</i>)	Amber List	
Common Goldeneye (<i>Bucephala clangula</i>)	Amber List	
Common Greenshank (<i>Tringa nebularia</i>)	Amber List	
Common Guillemot (<i>Uria aalge</i>)	Amber List	
Common Kestrel (<i>Falco tinnunculus</i>)	Amber List	
Common Pochard (<i>Aythya ferina</i>)	Amber List	
Common Redshank (<i>Tringa totanus</i>)	Red List	
Common Sandpiper (<i>Actitis hypoleucos</i>)	Amber List	
Common Tern (<i>Sterna hirundo</i>)	Amber List	Annex I Bird Species
Eurasian Curlew (<i>Numenius arquata</i>)	Red List	
Eurasian Oystercatcher (<i>Haematopus ostralegus</i>)	Amber List	
Eurasian Teal (<i>Anas crecca</i>)	Amber List	
Eurasian Wigeon (<i>Anas penelope</i>)	Amber List	
European Golden Plover (<i>Pluvialis apricaria</i>)	Red List	
European Shag (<i>Phalacrocorax aristotelis</i>)	Amber List	
Goosander (<i>Mergus merganser</i>)	Amber List	
Great Black-backed Gull (<i>Larus marinus</i>)	Amber List	
Great Cormorant (<i>Phalacrocorax carbo</i>)	Amber List	
Great Northern Diver (<i>Gavia immer</i>)		Annex I Bird Species
Hen Harrier (<i>Circus cyaneus</i>)	Amber List	Annex I Bird Species
Herring Gull (<i>Larus argentatus</i>)	Red List	
Lesser Black-backed Gull (<i>Larus fuscus</i>)	Amber List	
Little Egret (<i>Egretta garzetta</i>)		Annex I Bird Species
Little Grebe (<i>Tachybaptus ruficollis</i>)	Amber List	
Mallard (<i>Anas platyrhynchos</i>)		
Mediterranean Gull (<i>Larus melanocephalus</i>)	Amber List	Annex I Bird Species
Mew Gull (<i>Larus canus</i>)	Amber List	
Mute Swan (<i>Cygnus olor</i>)	Amber List	

Table 1 Birds recorded using Kilmackilloge Bay (Biodiversity maps)

Continued overleaf

Northern Gannet (<i>Morus bassanus</i>)	Amber List	
Northern Lapwing (<i>Vanellus vanellus</i>)	Red List	
Peregrine Falcon (<i>Falco peregrinus</i>)		Annex I Bird Species
Razorbill (<i>Alca torda</i>)	Amber List	
Red Knot (<i>Calidris canutus</i>)	Red List	
Red-breasted Merganser (<i>Mergus serrator</i>)		
Red-throated Diver (<i>Gavia stellata</i>)	Amber List	Annex I Bird Species
Ringed Plover (<i>Charadrius hiaticula</i>)	Amber List	
Sand Martin (<i>Riparia riparia</i>)	Amber List	
Sandwich Tern (<i>Sterna sandvicensis</i>)	Amber List	Annex I Bird Species
White-tailed Eagle (<i>Haliaeetus albicilla</i>)	Protected Species: Wildlife Acts	

Table 1 Birds recorded using Kilmackilloge Bay (Biodiversity maps)

The birds shaded in darker grey are all diving birds/ducks which are likely to dive in the proposed aquaculture area.

Otter-

Otters *Lutra lutra* are designated under Annex II EU Habitats Directive. There is a record of 4 Otters within Kilmackilloge bay from the Biodiversity Ireland maps in April 2017 these counts were recorded during the Mammals of Ireland survey 2016-2025. The habitat in the bay is suitable for Otters.

Seals

Common Seal (*Phoca vitulina*) are protected under Annex II EU Habitats Directive and there is a record on biodiversity Ireland of 25 individuals sighted in Kilmackilloge Bay in September 2013. This is an important site for seal haul out and breeding. The mapped seal locations are to the east of the mussel appeals.

Cetaceans

The seas around the South West are ecologically very rich and known for large numbers of whales and dolphins. These records (table 2) presented below are post 1995 and were collected by the Irish Whale and Dolphin Group Cetacean Sightings (15).

Record	date	Database	significance
Common Dolphin (<i>Delphinus delphis</i>)	11/09/2006	IWDG Cetacean Strandings Database	Protected Species: EU Habitats Directive Wildlife Acts
Dolphin species	24/07/2017	IWDG Cetacean Strandings Database	
Dolphin species possibly Harbour Porpoise	05/01/2020	IWDG Casual Cetacean Sightings	

Table 2: Post 1995 sightings of Dolphins within Kilmackilloge Bay

4.6 Statutory Plans

Kilmackilloge is not the subject of a statutory plan in its own right but is covered under the most recent County Development Plan for Kerry

Kerry County Development Plan 2015 - 2021 Plean Forbartha Chiarraí 2015 – 2021

Note the Kerry County Development Plan 2022 – 2028 is currently in preparation and at public consultation stage. The 2015-21 plan has the following relevant objectives

Section 8.4 Fishing / Aquaculture

Our ocean wealth will be a key element of our economic recovery and sustainable growth, generating benefits for the County. Not alone fishing, but fish distribution, processing, aquaculture and related activities generate significant levels of employment and remain an important resource for the County which has potential for further sustainable development. Aquaculture is the farming of aquatic organisms such as fish, shellfish and even plants(4). It is essential that a balance is achieved between generating a sustainable and economically viable industry on the one hand and complying with EU policies and quota on the other hand. The Council will support the sustainable development of the operations of the fishing and aquaculture industry while protecting and preserving the biodiversity and ecosystems in our oceans, so they can continue to provide essential monetary and non-monetary goods and services. In recent years there has been a decline in the marine fishing industry due in part to the EU quota restrictions. However there has been an expansion in the aquaculture and secondary sectors of the industry as a whole and overall fishing remains an important and vital sector in the economy of the County. Aquaculture and food processing both have the potential to continue to expand in the County, while opportunities for the development of a service industry exist particularly in South Kerry with approximately 300-400 Irish and foreign fishing vessels operating off the coastline. The Council recognises the importance of the industry as a whole to the economy of the County and will continue to play a supportive role to ensure fishing and aquaculture is managed and assisted where necessary. In addition to commercial fishing and aquaculture the aquatic environment (marine, estuarine and freshwater) supports smaller scale fishing and angling activities. The protection and support of water quality, habitat etc as natural resources necessary to safeguard these activities is therefore of importance.

Natural Resources

NR-20 Support and promote the sustainable development of the **aquaculture** sector in order to maximise its contribution to employment and growth in coastal communities and the economic well being of the County, while ensuring environmental protection through the implementation of the objectives and Development Management, Guidelines and Standards of this Plan

NR-27 Support the sustainable development of marine aquaculture and fishing industries and its diversification at appropriate locations having regard to the requirements of the EU

Water Framework Directive, the relevant River Basin Management Plans, the Habitats Directive, the integrity of the Natura 2000 network and visual amenity

Ports, Harbour & Piers

RD-41 Sustainably develop and improve ports, harbours, piers, slipways and associated shore facilities and access, at appropriate locations. This includes those that can be shared by leisure, tourism, fishing, renewable energy and **aquaculture** and where it can be demonstrated that the development will not have significant adverse effects on the environment including the integrity of the built, natural or cultural heritage.

4.7 Man-made heritage

National Monuments Service data of recorded National Monuments in the area was accessed in respect of man-made heritage and the map is presented below is of the closest monuments located to Kilmackilloge bay and thus licence application areas. Only National Monuments within 100m of the shoreline are presented on Map 6 below (12)



Map 6: National Monuments in the vicinity of Killmackilloge Bay (Reproduced under OSI Licence number EN 0070910)

1.0 National Monument Record Reference KE108-012e

Townland: COLLORUS

Description: In rough pasture, on a N-facing slope near the S shore of Kilmackilloge Harbour. A circular area (4.2m E-W; 4m N-S) defined by a drystone wall (T 0.5m; H 0.4m at E). The lower courses of the wall consist of large stones which protrude above the blanket bog. Outcropping rock forms most of the internal ground surface. There is further outcropping rock on the downslope externally to the N and NW.

2.0 National Monument Record Reference KE108-063---

Class: Bridge

Townland: ESKADAWER

Description: A road bridge (Wth c. 6.1m; long axis NW-SE) spanning the tidal mouth of the river where it enters Kenmare River.

3.0 National Monument Record Reference Reg. No. KE108-043002-

Class: Standing stone

Townland: CASHELKEELTY

Description: In a coniferous forest, to the S of the Castletownbere-Kenmare road. This standing stone (0.65m x 0.27m; H 1.92m), which is on the edge of a linear stony scarp, is roughly rectangular in section and plan and is orientated E-W. Another standing stone (KE108-043001-), on a different orientation, stands c. 4m to the SW.

4.0 National Monument Record Reference CO078-034KE108-016----

Class: Four poster

Townland: REENKILLA

Description: In a coniferous wood, on the W side of the small landlocked island of Knocknacappul on the S side of Kilmackilloge Harbour. Four upright stones form a quadrangle and are accompanied by a monolith (1m x 0.65m; H 0.75m), which stands 13.3m to the N.

5.0 National Monument Record Reference Reg. No. 20907804 KE108-068----

Class: Bridge

Townland: LAURAGH LOWER, REENKILLA

Description: Road bridge spanning the mouth of the Croanshagh River. Built of random rubble sandstone. Two segmental arches with rusticated voussoirs; low pointed cutwater on upstream and downstream sides of central pier.

6.0 National Monument Record Reference Reg. No. Lauragh School - Reg. No. 21310801

Date: 1860 - 1865

Original & Current Use: school

Detached five-bay single-storey schoolhouse, dated 1862, with single-bay single-storey gabled projecting porch to centre. Extension to rear to south-east, built 1998. Pitched slate

roof with clay ridge tiles and rendered chimneystack having ashlar quoins below roofline. Painted rendered walls with exposed ashlar quoins and limestone carved name and date plaque. Limestone ashlar lintels, sills and reveals to replacement timber windows. Limestone door surrounds with chamfered reveals to replacement timber boarded doors, approached by limestone steps. Rubble stone retaining wall to road.

7.0 National Monument Record Reference Reg. No. 20907809 KE108-009----

Class: Souterrain

Townland: DERREEN (Glanarought)

Description: In a wooded area, on Grinneen Island near the SE shore of Kilmackilloge Harbour. A partly blocked entrance (L 0.6m; H 0.2m) is situated 0.9m below ground level on the W side of a path leading to the seashore. The underground passage between the entrances is earth-cut with a curving roof and was, according to local information, used in the past by smugglers.

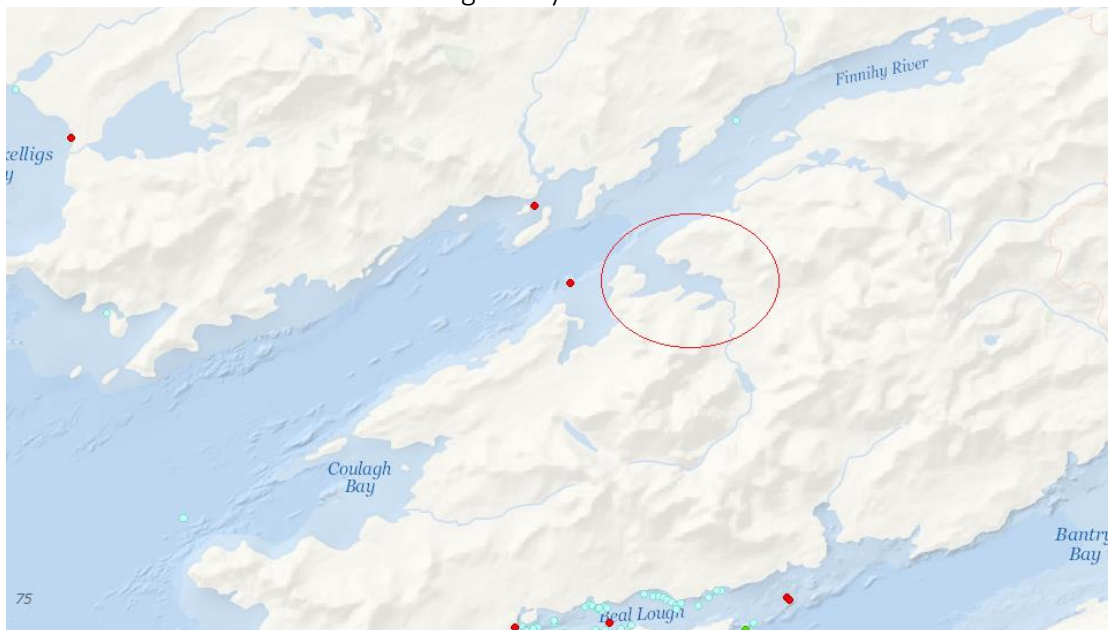
8.0 National Monument Record Reference Reg. KE108-005----

Class: Fish palace

Townland: KILMACKILLOGE

Description: This is probably one of the 'fish houses' indicated on a map of Kilmackilloge Harbour in Smith (1756)

Of more probable relevance to the appeals, especially in light of the comments, by National Monuments service (see Section 6.7) is the location of Shipwrecks. None are noted close to or within Kilmackilloge Bay below.



Map 7: Shipwrecks in Irish Waters (marine.ie marine maps)

5.0 Section 61 Assessment

Section 61 of the Fisheries Amendment Act 1997

states that “The licensing authority, in considering an application for an aquaculture licence or an appeal against a decision on an application for a licence or 11 revocation or amendment of a licence, shall take account, as may be appropriate in the circumstances of the particular case, of- (a) the suitability of the place or waters at or in which the aquaculture is or is proposed to be carried on for the activity in question, (b) other beneficial uses, existing or potential, of the place or waters concerned, (c) the particular statutory status, if any, (including the pro-visions of any development plan, within the meaning of the Local Government (Planning and Development) Act, 1963 as amended) of the place or waters, (d) the likely effects of the proposed aquaculture, revocation or amendment on the economy of the area in which the aquaculture is or is proposed to be carried on, (e) the likely ecological effects of the aquaculture or proposed aquaculture on wild fisheries, natural habitats and flora and fauna, and (f) the effect or likely effect on the environment generally in the vicinity of the place or water on or in which that aqua-culture is or is proposed to be carried on- (i) on the foreshore, or (ii) at any other place, if there is or would be no discharge of trade or sewage effluent within the meaning of, and requiring a licence under section 4 of the Local Government (Water Pollution) Act, 1977, and (g) the effect or likely effect on the man-made environment of heritage value in the vicinity of the place or waters.”

5.1 Site Suitability

The sites under appeal **are generally** suitable for the intended purpose for the following reasons:

1. The bay is already used for cultivation of Blue Mussels and according to MED. the site is located in relatively sheltered waters at the western side of Kilmackilloge Harbour. The hydrodynamic regime is suitable for this type of aquaculture.
2. The applicants have been farming mussels in the bay for over a decade.
3. The proposed development is not close to National Monuments in the area nor are there any recorded ship wrecks in the area.
4. Bunaw Pier is used by mussel farmers on a daily basis to access the sites in Kilmackilloge Harbour and carry out operations associated with the aquaculture industry. The pier is suitable as an access point for this site.

5.2 Other uses

Tourism/ Leisure /Recreation

The main activities regarding tourism leisure and recreation are in relation to the Wild Atlantic Way. There is a small amount of boating activity within the bay. The Kenmare dive centre operates in the outer bay area.

There is a **potential conflict** with boating with some applications (T06/495A , T06/513A and T06/254) according to the appellants.

Navigation

The Commissioners for Irish Lights commented on all applications. Here is a summary of their findings

			Commissioners of Irish Lights
AP12	T06/364A;	Kieran Lyons	There is no objection to the development from a navigation perspective
AP13	T06/35A	Shamrock Shellfish	According to the CIL The site encroaches on a navigable channel providing safe access to a safe haven anchorage in Kilmakilloge and Collorus Harbours. They go on to say "if the licence is renewed all structures must be clearly marked as required by the regulations and licensing permit conditions and to the approval of the Nautical Surveyor with the Marine Survey Office."
AP14	T06/106	Shamrock Shellfish k	According to the CIL The site encroaches onto a safe haven anchorage in Kilmakilloge Harbour not giving vessels area to swing. They go on to say "if the licence is renewed all structures must be clearly marked as required by the regulations and licensing permit conditions and to the approval of the Nautical Surveyor with the Marine Survey Office."
AP15	T06/254A;	Shamrock Shellfish	There is no objection to the development from a navigation perspective
AP16	T06/495A	Shamrock Shellfish	The commissioners of Irish lights would have reservations concerning the encroachment of this site onto a navigable channel. (Navigable channels including inter-tidal channels are considered to be the marine equivalent of "Rights of Way" on land). It is important to ensure that no navigable inter-tidal channels are impeded
AP17	T06/513A	Kush Seafarms	There is no objection to the development from a navigation perspective
AP18	T06/360A	Kush Seafarms	There is no objection to the development from a navigation perspective

There are **significant** issues with some of these applicants in respect of navigation on site.

Fishing/ bait digging

The pelagic and dredge fishing is mainly the areas to the north outside the bay and there is no mapped overlap with mussel cultivation areas according to the Marine Institute maps.

However, Dr Oliver Tully specifically noted overlap with application T06/513A. In other specific cases the SFPA has made note where such overlap occurs. This is tabulated below.

Pot fishing is carried out for lobster, crab and shrimp. Some of these areas are significant in respect of the area fished as mapped by the Marine Institute.

The inner bay at Kilmackilloge is intertidal muds and sands used for bait digging and clam collection. This area is outside the licence application areas and unsuitable for longlines due to the depth of water.

			Comments regarding Fishing or Bait digging by Sea Fisheries Protection Authority
AP12	T06/364A;	Kieran Lyons	The SFPA is of the view that this site is traditionally used for either shrimp or scallop fishing
AP13	T06/35A	Shamrock Shellfish Company	No comment SFPA
AP14	T06/106	Shamrock Shellfish Company	No comment SFPA
AP15	T06/254A;	Shamrock Shellfish Company	No comment SFPA
AP16	T06/495A	Shamrock Shellfish Company	The SFPA is of the view that this site is traditionally used for either shrimp or scallop fishing
AP17	T06/513A	Kush Seafarms	The SFPA is of the view that this site is traditionally used for either shrimp or scallop fishing The Marine Institute Oliver Tully specifically commented in licence application T06/513 “ Licencing of T06/513A is likely to result in spatial displacement of some fishing activity in the locality i.e. loss of fishing ground. The main effect is likely to be on shrimp fishing.”
AP18	T06/360A	Kush Seafarms	No comment SFPA

The proposed aquaculture appeal sites may **significantly impact** on fisheries of the area.

Man made heritage

The Department of Culture Heritage and the Gaeltacht ... “requires an appropriate underwater archaeological Impact Assessment to be carried out in advance to assess the totality of potential impact of applications on the potential cultural heritage. The underwater archaeological impact assessment should be carried out by suitably qualified and suitably experienced maritime archaeologist to be licenced by this department”

The department in its remarks commenting on the licencing of all types of aquaculture. Killmackilloge has no known underwater Archaeology and is outside any ship wreck sites. Mussel cultivation involves no disturbance of sediment, unlike scallop cultivation for example. In addition, mussel licencing results in deposition and it is thus unlikely to disturb archaeological remains. It is assumed that it is for these reasons that an archaeological report was not commissioned.

The proposed aquaculture sites will not **significantly impact** on the man made heritage of the area.

5.3 Statutory Status

County Development Plan

The main potential conflict with the Kerry County Development Plan is on Visual impact as per the two policies below;

RD-6 Ensure that all objectives and any development will not have significant adverse effects on the built natural or cultural heritage, residential or visual amenity.

NR-27 Support the sustainable development of marine aquaculture and fishing industries and its diversification at appropriate locations having regard to the requirements of the EU Water Framework Directive, the relevant River Basin Management Plans, the Habitats Directive, the integrity of the Natura 2000 network and visual amenity.

In addition, The Kerry County Development Plan (CDP) designates the scenic characteristic of the landscape adjacent to Kilmackilloge Harbour as Rural Prime Special Amenity in some parts and Rural Secondary Special Amenity in the remainder. The Kerry CDP indicates there are scenic routes surrounding Kilmackilloge Harbour.



Map 8. The map above is the visual amenity assessment map as prepared by DAFM . Yellow indicates visual impact zone.

In this case only the viewpoints from the R571 roadway from Kenmare to Castletownbere and the R573 roadway from Lauragh to Kilmackilloge, The Beara Way walking route passes to the south of Kilmackilloge Harbour were taken into account by MED.

There is a signature point on the Wild Atlantic Way to the east side of the mouth of the harbour with views to west and south west. This has not been assessed by MED. This viewpoint was raised by appellants in relation to these appeals.

According to the Marine Engineering Division “existing aquaculture has become embedded in the harbour and there is no new significant impact on the area due to the licencing of the existing activities” However they concede that where no activity has taken place before, there will be negative visual Impact.

		New Licence or Renewal	Marine Engineering Division
AP12	T06/364A;	Kieran Lyons	An increased visual impact is predicted
AP13	T06/35A	Shamrock Shellfish	This aquaculture has been in place for some time and has become embedded in the landscape.
AP14	T06/106	Shamrock Shellfish	This aquaculture has been in place for some time and has become embedded in the landscape.
AP15	T06/254A;	Shamrock Shellfish	This site will increase the level of activity in this part of the harbour and will lead to an increased visual impact.
AP16	T06/495A	Shamrock Shellfish	This site will increase the level of activity in this part of the harbour and will lead to an increased visual impact
AP17	T06/513A	Kush Seafarms	There is no significant visual impact due to this application
AP18	T06/360A	Kush Seafarms	The proposed site is visible from the R571 roadway from Kenmare to Castletownbere and the R573 roadway from Lauragh to Kilmackilloge, both of which are part of the Wild Atlantic Way and designated in the Kerry CDP as routes with Views and Prospects (Both Directions). The Beara Way walking route passes to the south of Kilmackilloge Harbour. The existing aquaculture in Kilmackilloge has been in place for some time and has become embedded in the landscape. There are currently two unauthorised 330m mussel longlines which are operated by another party at the location of this site. This site will not increase the level of activity in this part of the harbour as it will replace the existing unauthorised lines and thus will not lead to an increased visual impact

The Technical advisor generally agrees with the statement existing “aquaculture has been in place for some time and has become embedded in the landscape” as much of the mussel cultivation has been in place for over 20 years. The site was visited and the viewpoints photographed in relation to the appealed areas in particular the new areas

The new farms are

T06/364 A

T06/513

T06/495

T06/254A;

T06/360



Photo 1: View from the WAW signature point looking across at sites T06/513 T06/495 in a west south west direction indicated by the red arrow. Both of these two sites will be visible from the Wild Atlantic Way Signature Point



Photo 2: main road R571 looking towards the north Arrow is position of T06/364A

The site T06/364A will be visible from the main road but will blend to a degree with existing aquaculture



Photo 3: Photo taken from main road R571 looking towards the northeast. This farm is positioned in front of Spanish Island. Arrow indicates the position of T06/254 and T06/360 is to the right of the arrow. Both T06/254 and T06/360 are visible from the main road but are distance and will blend with existing aquaculture to a degree.



Photo 4: Bunaw Pier showing existing sites blending together in the distance. This is a Working pier with machinery associated with the mussel industry

Some of the proposed aquaculture sites are likely to **impact** on the Visual amenity of the area. In this case visual impact was not considered to be amongst the most important criteria for determination of these appeals and no site was recommended to be granted or refused an aquaculture licence solely on the basis of this criteria

Special Area of Conservation

Kenmare River is designated as a Special Area of Conservation (SAC) under the Habitats Directive. The marine area is designated for the habitats **Large Shallow Inlet and Bay, Reef** and **Submerged Caves**. 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 Maërl (corraline algae), seagrass and kelp reefs. The area is also designated for and supports significant numbers of Harbour Seal and Otter. Conservation Objectives for these habitats and species were identified by NPWS (2013a) 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 (2013b)

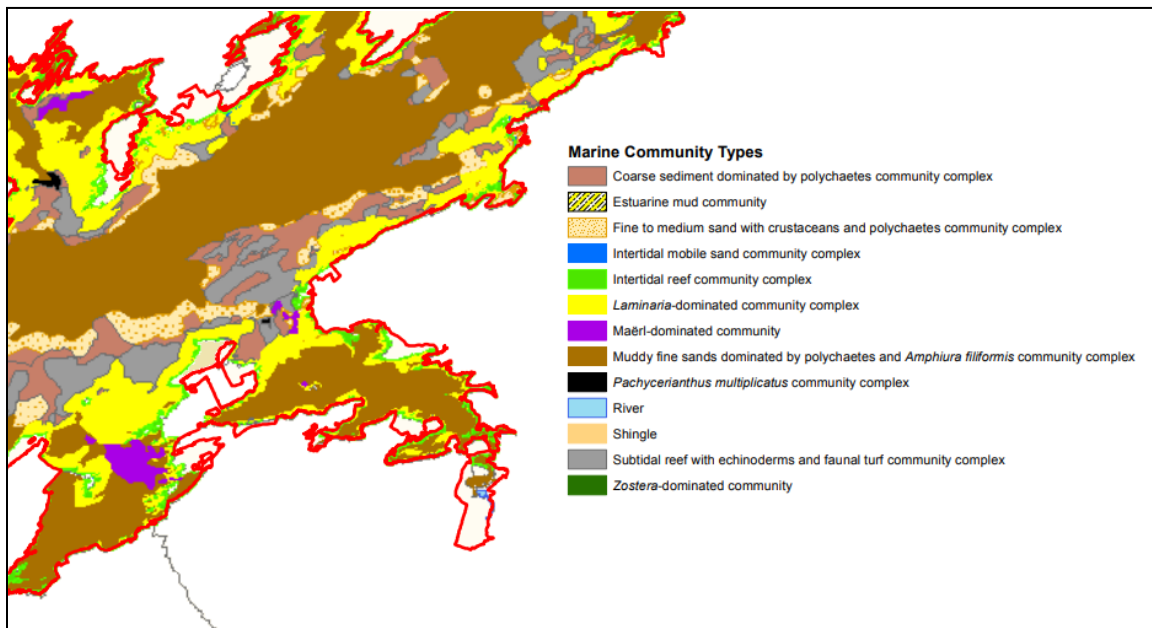
Relevant findings of the Marine Institute Appropriate Assessment

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 the Annex 1 habitats. The following (potentially relevant to this appeal) are the exceptions:

1. Maerl dominated community occurs in certain areas (Ardgroom and Kilmackilloge Harbours) which are outside of the Qualifying Interests for which the Kenmare River SAC was designated but are still within the SAC boundary. Maerl, the characterising species of this community, is listed as an Annex V species and as it is within the SAC boundary it must be afforded protection. Suspended mussel culture in Ardgroom Harbour overlaps this community type and is considered disturbing. As a key contributor to biodiversity and being sensitive to disturbance this community types is afforded a high degree of protection and no overlap with a disturbing activity can be tolerated.
Note: There is no overlap with the appeal sites and Maerl beds mapped by NPWS noted at Kilmackilloge bay
2. Aquaculture and 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. On this basis, the current levels of licenced aquaculture (existing) are considered non-disturbing to harbour seal conservation features. No conflict is noted for Kilmackilloge Harbour
3. The aquaculture activities proposed do not pose a threat to the Otter or migrating salmon in the Kenmare River SAC.

Following production of the Appropriate Assessment Screening by the Marine Institute there were comments from the Department of Culture Heritage and the Gaeltacht in respect of the content. The text presented is that of relevance to the appeal areas.

“There are no recommendations made for The Marine community types “muddy fine stands dominated by polychaetes and flora filiformis community complex and the two subtidal reef communities given that the spatial overlap of aquaculture, when considered in combination with fishing activity, is close to order exceeds the 15% threshold “

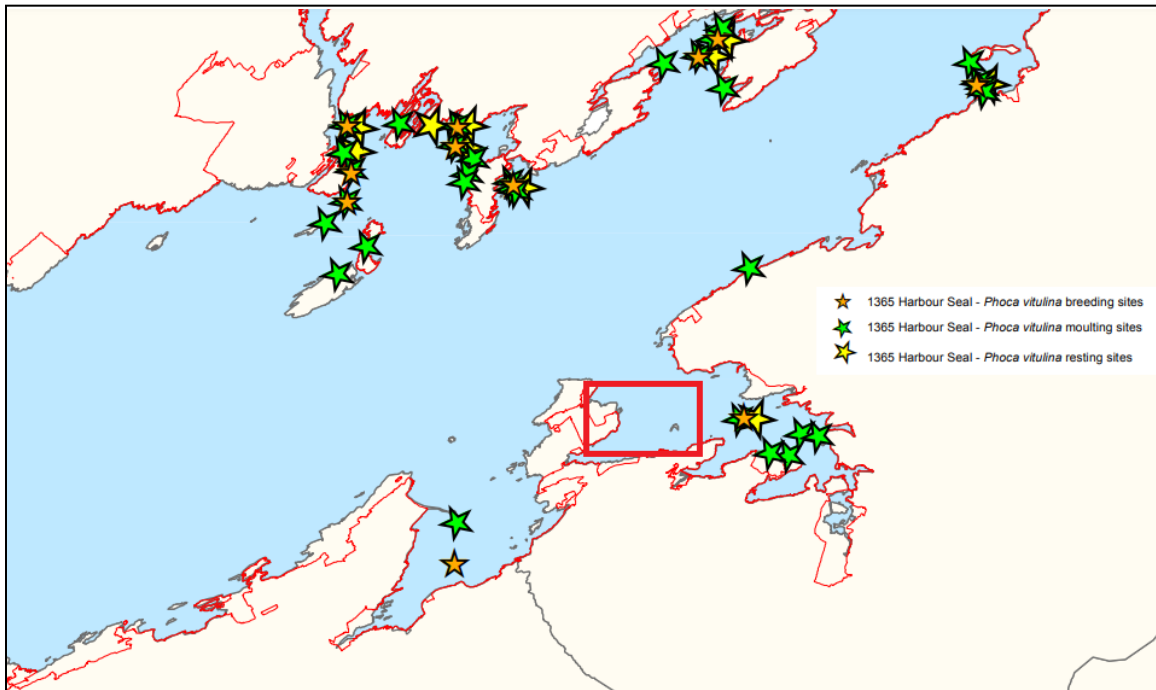


Map 9: Mapping of Kilmackilloge Bay by NPWS . Mudflats (brown) reefs (yellow)

Please note that it can be seen from the map above that Annex I: ‘mudflats and sandflats not covered by sea water at low tide (1140)’ is not listed as a qualifying interest for this site most likely due to the high fishing effort and aquaculture facilities in the area. Nonetheless they are noted as a sub part of “Shallow inlets and Bays” which is a qualifying interest for this site. The Appropriate Assessment covers all types of fishing activity within Kenmare Bay SAC. Mussel farming results in deposition of faeces and pseudofaeces. It is estimated by NPWS (Conservation objectives) that the area of reefs are 9196ha in Kenmare River. These are mapped in yellow at the entrance to the harbour and are relevant to sites T06/495 and T06/513 only.

The technical advisor anticipates that there will be **no significant impact** on the mudflats or reefs mapped as a result of grant of mussel farming in this area.

The Appropriate Assessment prepared by the Marine Institute states “ 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. On this basis, the current levels of licenced aquaculture (existing and renewals) are considered non-disturbing to harbour seal conservation features.”



Map 10: Mapping of Kilmackilloge Bay by NPWS stars show haul out and breeding sites for seals. Red is the area in which the appeal areas are sited.

The Department of Culture Heritage and the Gaeltacht in respect of the Appropriate Assessment Screening made the following comments. “In relation to the harbour seal qualifying interest at the site the terms “close proximity” and “immediate vicinity” by which the likelihood of man-made disturbance is concluded or unclear better defined within the assessment and its conclusions in order to provide an appropriate level of confidence around this attribute and it's associated target

According to the 2010 Harbour Seal survey Kenmare River in 2010 was the most important site in the country for this species at 324 individuals (NPWS, 2010). It can be seen from the Conservation Objective map that Kilmackilloge harbour itself is important for breeding and haul out. However, the aquaculture sites under appeal are in the outer bay area and the seal sites in the inner bay see map 10.

The technical advisor anticipates that there will be **no significant impact** on the harbour seal as a result of grant of mussel farming in this area.

Special Protection Area

There are two special Protection areas for birds within 20km of Kilmackilloge. These are Beara Peninsula SPA (Site code 004155) located at 10km South west and Iveragh Peninsula SPA (site code 004154) located at 20km west.

These sites are designated to protect Chough, Peregrine, Fulmar, Kittiwake and Gullimot. These birds are cliff nesters and the habitats within the SPAs are suitable for their nesting requirements. Chough feed in coastal grasslands and machair which is not associated with the Killmacillogue site. Fulmar Kittiwake and Guillimot are sea foraging birds and more often feed out at sea. They may feed occasional within the harbour. Peregrine falcon is a predatory bird which is wide ranging.

The proposed aquaculture site does **not have the potential to significantly impact** on the Natura 2000 Designated status of the area.

5.4 Economic effects

Review of the Irish Rope Mussel Industry in March, 2006 by PricewaterhouseCoopers found that “the average operating margin over the period 2003 to 2005 of 4.9%” They concluded “Overall profitability levels within the industry are low. ... Given that the price received from processors for mussels has remained constant for the last number of years (representing a price decline in real terms) and at the same time inflation has pushed input prices upwards (particularly for energy and labour), overall profitability at producer level has fallen significantly in recent years”

The licensing of proposed sites is likely to have a **non-significant positive effect** on the local economy of the area.

5.5 Ecological Effects

Section 61 (e) considers the likely effect that the proposed aquaculture operation would have on wild fisheries, natural habitats and the fauna and flora of the area.

The conclusion of the Appropriate Assessment is that

“The Licensing Authority is satisfied that, given the conclusions and recommendations of the Appropriate Assessment process, a decision can be taken in favour of licensing existing and proposed aquaculture operations in Kenmare River SAC, subject to the implementation of the mitigation measures outlined above and other licensing related considerations. 6 Accordingly, the Licensing Authority is satisfied that by not licensing overlaps with Zostera and Maerl and other sensitive communities the proposed licensing is not likely to have a significant effect on the integrity of Kenmare River SAC.”

The proposed aquaculture site does **not have the potential to significantly impact** on the Designated status of the area.

Other protected species

Cetaceans.

Although a variety of Dolphins are recorded in the harbour, the sightings are infrequent and no interactions are predicted. The proposed licensed site will have a **no significant negative** impact on these species.

Birds

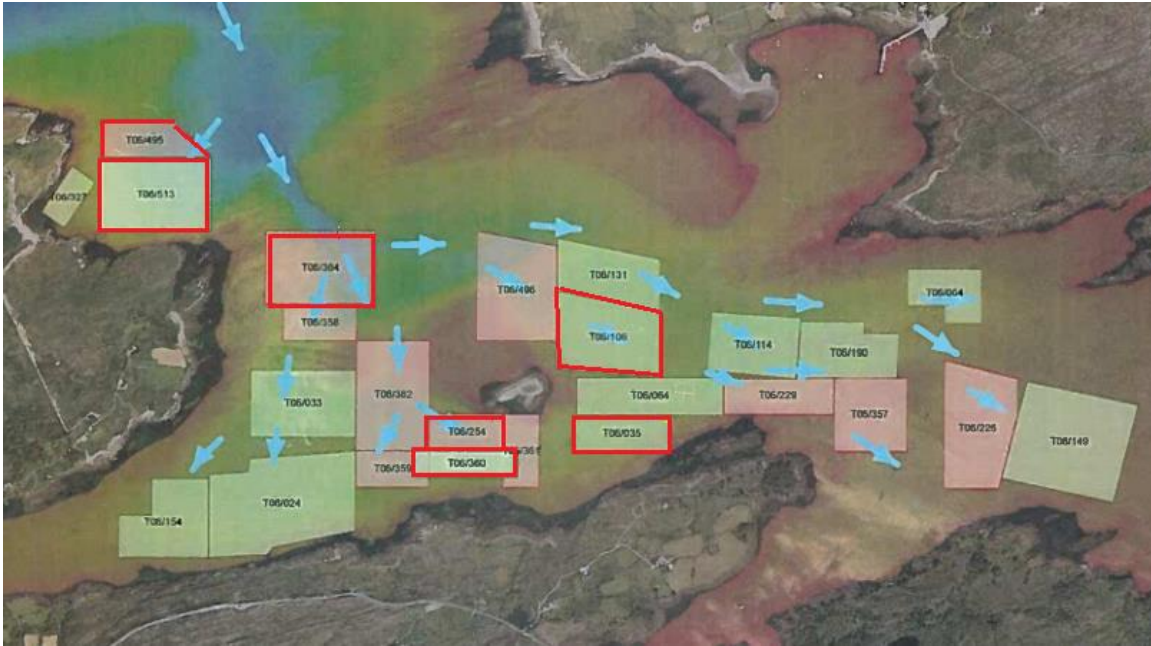
Divers, diving ducks, grebes and cormorants are recorded in the area and are likely to use the site for foraging. It is not foreseen that mussel longlines in this will have a negative impact on these birds. Predatory birds such as Peregrine, and Hen Harrier will not likely be impacted on as they forage on land.

The proposed licensed site will have no **significant negative** impact on these species.

Phytoplankton /carrying Capacity

Raphael Crowley of the MED states that “when taken with the existing salmon sites in the Harbour approximately 54.3 hectares in an additional 53.1 hectares have been applied for this part of the current licencing processed which if licenced would effectively double the licences in the harbour. Having considered all applications the MED recommends licencing in total 65.7ha and believe that the licencing of the remaining 41.7 ha of Mussel cultivation would have a significant negative impact on the area in terms of navigation, visual impact and production capacity. Marine Engineering division is of the opinion that the 11 listed mapped below (Map 11) should not be licenced

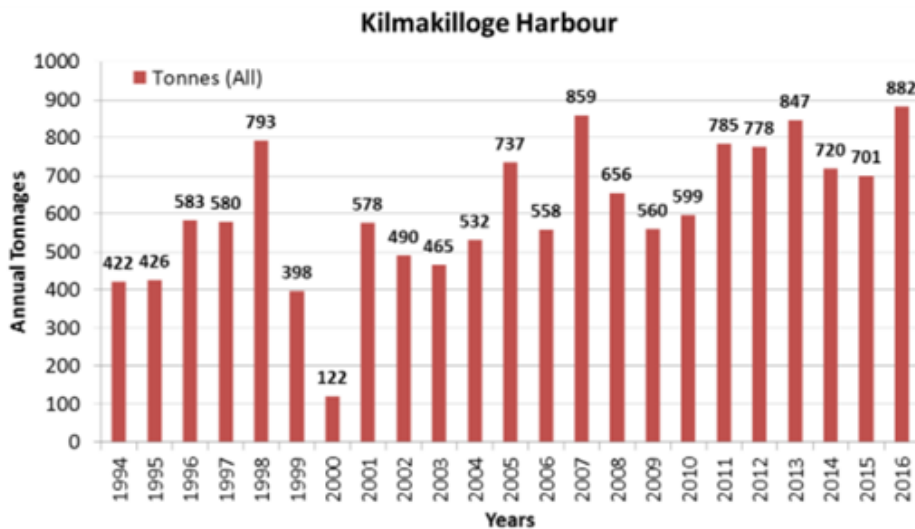
He goes on to state “In case of the impact cumulative impact the following of note. The carrying capacity of any site is dependant on a number of factors including stocking density of the site, availability of food i.e phytoplankton and the hydrodynamic conditions such as wave, climate and depth. The placing of extra new sites around existing sites can have a detrimental effect on existing sites this is well-documented historically in areas such as Bantry, Killary and Kilmackilloge itself. Mussels filter the water and an increase in mussel activity will reduce the available food for existing adjacent operations” The attached map shows the location of the new sites and highlights those that are likely to have a significant effect on the existing activity. New sites will restrict the flow of water and nutrients within the Harbour



Map 11 Green sites recommended by MED for Grant and Pink for refusal . The aquaculture appeals are outlined in red.

There was a carrying capacity study carried out by BIM (McCoy and O Carroll, 2017). It is acknowledged that the initial report failed to consider licence applications in the harbour . It is also recognised that BIM are a shareholder in Kush Seafarms one of the applicants and appellants for the sites under consideration.

However there is sound scientific evidence presented in the BIM report relation to phytoplankton availability in the harbour and this (not its interpretation) will be focussed on for the purposes of this report.



The BIM report notes that over a 22 year period, annual harvested tonnage in Kilmackilloge Harbour has been reported, with the last 7 years yielding around 700 to 880 tonne per annum.

“Phytoplankton depletion surveys through the mussel longlines showed a general decrease of average phycoerythrin and chlorophyll levels when following the tidal flow, particularly at 3 m depth which is the most active mussel feeding zone for droppers which average around 5 to 7 m in length throughout Kilmackilloge Harbour.

Previous scientific studies carried out in Kilmackilloge Harbour indicate that the flushing rates for the Harbour vary from three to four and half days depending on spring or neap tides. This has an influence on the amount of plankton available for filter feeding mussels and due to the enclosed nature of the Harbour and low water exchange at the bottom to middle of the water column means available food is over grazed, reducing growth rate and potentially damaging the environment overall. However, the surface velocities is increased by a factor of 4 to 8 when compared to the bottom and middle of the water column with some of the highest current flows recorded around Spanish Island. This good surface flow around this area could also provide good distribution of plankton feed.

Historically the sites located around Spanish Island have been known to be good areas to produce mature mussels within a shorter growout time to market. However, placing more longline structures in these areas could have an even bigger negative impact, reducing current flow and potentially collapsing an already fragile system”

According to the BIM report *“Prior to 1996 there was 58 hectares of mussel longline sites licensed in Kilmackilloge Harbour and this increased to 61 hectares in 1999 There are currently 37 hectares of active mussel longline sites waiting on renewal and 32 hectares of new applications (many of these sites were previously licensed) waiting decision”*

The technical advisor has sourced photographs from 1995 and more recently 2018. The amount of mussel visible in 1995 is estimated at 29.6ha. There may have been greater areas licenced but mussel farms by their nature are highly visible. This corresponds to the 400 tonnes approximately were harvested in that year indicative of a smaller industry than present.

The Geohive map is listed as 2011-2018 and although it appeared fairly accurate on site visit it may well have changed since. This was estimated at 43.5 ha and reflects broadly cultivation the areas mapped recently by MED.



Map 12: Mussel Cultivation visible on the 1995 Geohive aerial photo (29.6ha)



Map 13: Mussel Cultivation visible on the 2018 Geohive aerial photo (43.2 ha)

Many of the areas under appeal have been farmed for 20 years. Given this information the technical advisor agrees with MED general statement that licencing “New sites will restrict the flow of water and nutrients within the Harbour “

A BIM (2017) study describes the flows in the harbour based on data collected on incoming and outgoing tides in 2016 and 2017.

“Once the incoming tide enters the Harbour the water flow immediately hits a shallow shelf attached to the Western side of Spanish Island. This forces the main flow of water into two channels, one which travels directly East to the inner half of the Harbour ... whilst the other half of the flow is forced directly South through two shallow water channels west of the island

During the outgoing tide, the flow of water passes by sites (inner eastern bay) an E/ESE direction. The flow then meets the obstacle of Spanish Island again and splits into two channels. One channel stays on an ESE direction passing North of the island while the second flow of water moves quickly South of the island from an East direction through application sites (T06/254A), T06/312A and T06/360A. ...the flow swings up from the South through the channels on the West of the island and finally leaving the Harbour from a SSE/SE direction.”

The same applies to application T06/364A, which is at the mouth of the Harbour. As such, any development of this site would impact on all the sites in the Harbour (in respect of Phytoplankton availability.)

The BIM 2017 study specifically draws attention to Spanish Island “ *the introduction of additional longlines south off Spanish Island will need to be monitored closely to ascertain if they are potentially having a significant impact on neighbouring sites. BIM recommends that the amended sites (T06/360A and T6/312A) south of Spanish Island be limited to 2.5 longlines per hectare and reviewed in the next 2 to 3 years time.*

No evidence of this review has been presented

Note Although the Technical Advisor consulted the BIM reports on carrying capacity the science, and not the BIM conclusions, were used to make the determination. It should be note also that the appellants Kush Seafarms, Shamrock Shellfish and Save Killmackilloge bay all refer to overcrowding impacting on growth rates in the harbour with one appellant (Kush Seafarms) stating that “Overcrowding has already contributed to a significant decline in mussel growth rates and a reduction in mussel quality in the Harbour” The BIM report specifically states “At present Kilmackilloge is somewhat in a state of balance with 18 months growth cycles from seed to mature crop ready for market”.

The proposed aquaculture appeals have the potential to **significantly impact** the phytoplankton availability in the harbour.

5.6 Environmental Effects

The Environmental Impacts of this mussel cultivation were examined by Heffernan (1999) There are many ways in which the area immediately surrounding the mussel farm is affected by the cultivation

1. Water quality
2. Biodeposition and the benthos.
3. Competition for phytoplankton .

Biodeposition is the term given to the accumulation of faeces and pseudofaeces under the mussel beds. These biodeposits may impact on the water quality and the benthos. Mussels

may also stimulate primary productivity through biodeposition and may actually increase phytoplankton availability.

There is no data to show that current levels of aquaculture have negative environmental impacts at Kilmackilloge

Kilmackilloge harbour is classified under the Water Framework Directive as a transitional water body and “not at risk”. A further requirement of the Water Framework Directive (2000/60/EC) is that benthic macro-invertebrates must be sampled from nominated coastal and transitional waters at least twice within a river basin cycle (6 years) in order to classify these waterbodies(12).

The Infaunal Quality Index (IQI) multimetric (developed by the UK-Ireland Benthic Invertebrate subgroup of the UK-Ireland Marine Task Team) is used to evaluate the marine benthic macro-invertebrate ecological quality element of the Water Framework Directive. All samples taken in Kilmackilloge were of good/high value which is the highest category (16)

In respect of the Water Framework Directive both in reference to the infaunal quality and water quality these have been fully considered in respect of these appeals. There is no evidence that that these licences applications, if granted, would cause a deterioration of the status of this waterbody under the directive.

Competition for phytoplankton has been extensively covered in section 5.5. There is limited phytoplankton in the harbour and the mussel farms are currently reaching market size in 18 months which is an optimum time frame. However additional licencing is likely to increase time for mussels to mature to market size.

The proposed aquaculture appeals have the potential to have **environmental effects** on Kilmackilloge Harbour.

5.7 Effect on man-made heritage

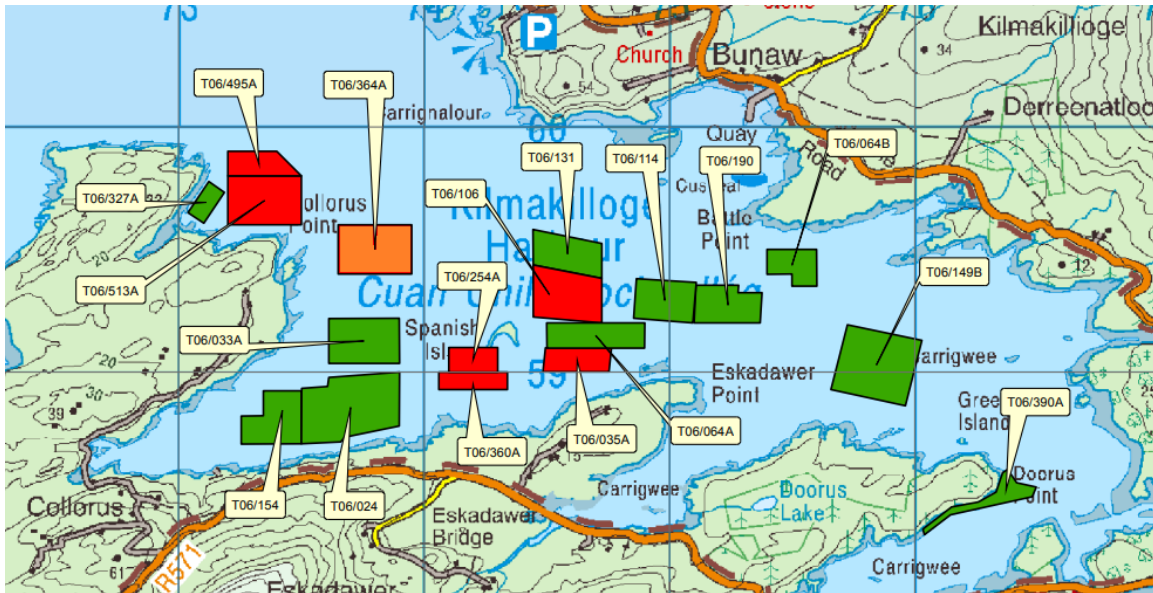
Although the area has a number of national monuments present the footprint of these licences do not spatially overlap these heritage sites. Also there are no archaeological ship wrecks in the area

The proposed aquaculture site will **not significantly impact** on known man-made heritage of the Area

5.8 Conclusion

A technical review was carried out by Aster Environmental Consultants Ltd in relation to an aquaculture licence appeal against the decision of the Minister of Agriculture, Food and Marine to and to grant an application to Kush seafood (T06/513A and T06/360A) and grant

to Shamrock (T06/35A and T06/106) and refuse an Aquaculture licence to Kieran Lyons (T06/364A) and Shamrock (T06/254A and T06/495A).



Map 14 Appeals areas are highlighted in red with T06/364 in orange

T06/364A Site Suitability

The commissioners of Irish lights had no objection to the site in terms of navigation. This site does appear visually to be potentially impeding access to the harbour as per appellants comments.

T06/364 Other Uses

There are concerns in relation to site T06/364 that this site is traditionally used for either shrimp or scallop fishing

T06/364 Statutory Status (County Development Plan)

The proposed development has a **potentially-significant impact** on the statutory status of the area for the following reasons;

Potential conflict with the aims of Kerry County Council Development Plan was identified. In respect of tourism and visual amenity. MED concluded increased visual impact from the main road R571. This site would also be visible from the Wild Atlantic Way signature point.

T06/364 Economic effects

There will be a **positive effect** on the economy of the area for the following reasons:
Licencing of aquaculture will secure jobs in the area.

T06/364 Ecological Effects

The proposed development T06/364 has a **non-significant impact** on the statutory status of the area for the following reasons. The AA screening for the SAC found no significant impact on the conservation status of the site would result from the development of this site.

T06/364 General Environmental Effects

There are **some potential significant** general environmental effects predicted as a result of the proposed development for the following reasons. Concern has been raised in relation phytoplankton availability to other farms given the position of this application should this be licenced and there is a recommended refusal by MED No other impacts were identified in terms of species, water quality or any other.

T06/364 Man-made Heritage

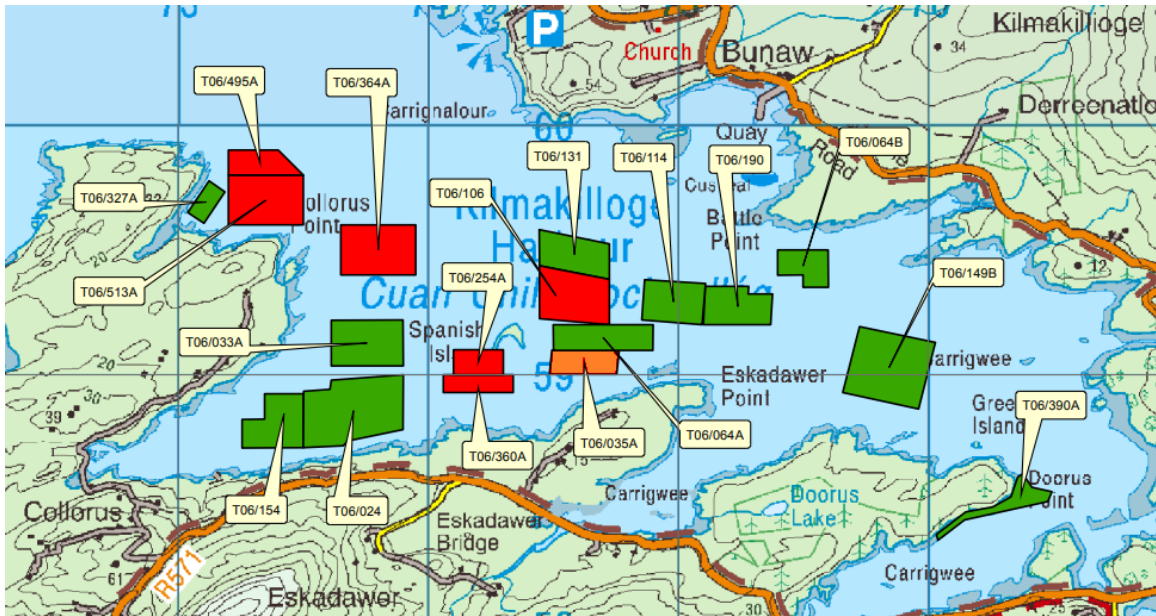
There is **no predicted impact** on the man-made heritage of value in the area as a result of the proposed operation for the following reasons. National monuments are situated outside the intertidal and subtidal area of the bay.

Summary T06/364

The issues raised by the various authorities in relation to T06/364A are as follows the area has been identified as a traditional shrimp or scallop fishery and its position many impact phytoplankton availability to other farms. Visual impact is also indicated.

Recommendation T06/364

The recommendation is to uphold the ministers decision to refuse to grant an aquaculture licence to Kieran Lyons for site T06/364.



Map 15; Appeals areas are highlighted in red with T06/35A in orange

T06/35A Site Suitability

The site is **unsuitable** according to the commissioners of Irish lights who stated that “The site encroaches on a navigable channel providing safe access to a safe haven anchorages in Kilmackilloge and Collorus Harbours. From a visual impact perspective. This aquaculture has been in place for some time and has visually become embedded in the landscape.

T06/35A Other Uses

There are no **concerns** in relation to site T06/35A in respect of the traditional fishing use of this area.

T06/35A Statutory Status (County Development Plan)

The proposed development has no **significant impact** on the statutory status of the area for the following reasons;

The MED consider that this aquaculture has been in place for some time and has become visually embedded in the landscape. No significant visual impact was identified. This location is to the east of Spanish Island and mussel lines in this location are hard to see from the main road due to the topography of the land.

T06/35A Economic effects

There will be a **positive effect** on the economy of the area for the following reasons: Licencing of aquaculture will secure jobs in the area.

T06/35A Ecological Effects

The proposed development T06/35A has a **non-significant impact** on the statutory status of the area. The AA screening for the SAC found no significant impact on the conservation

status of the Natura 2000 site Kenmare River SAC would result from the development of this site.

T06/35A General Environmental Effects

There are **no significant** general environmental effects predicted as a result of the proposed development for the following reason. No concern was raised in relation to phytoplankton availability to other farms should this be licenced. No other significant impacts were identified in terms of species, water quality or any other.

T06/35A Man-made Heritage

There is **no predicted impact** on the man-made heritage of value in the area as a result of the proposed operation T06/35A for the following reasons. National monuments are situated outside the intertidal and subtidal area of the bay.

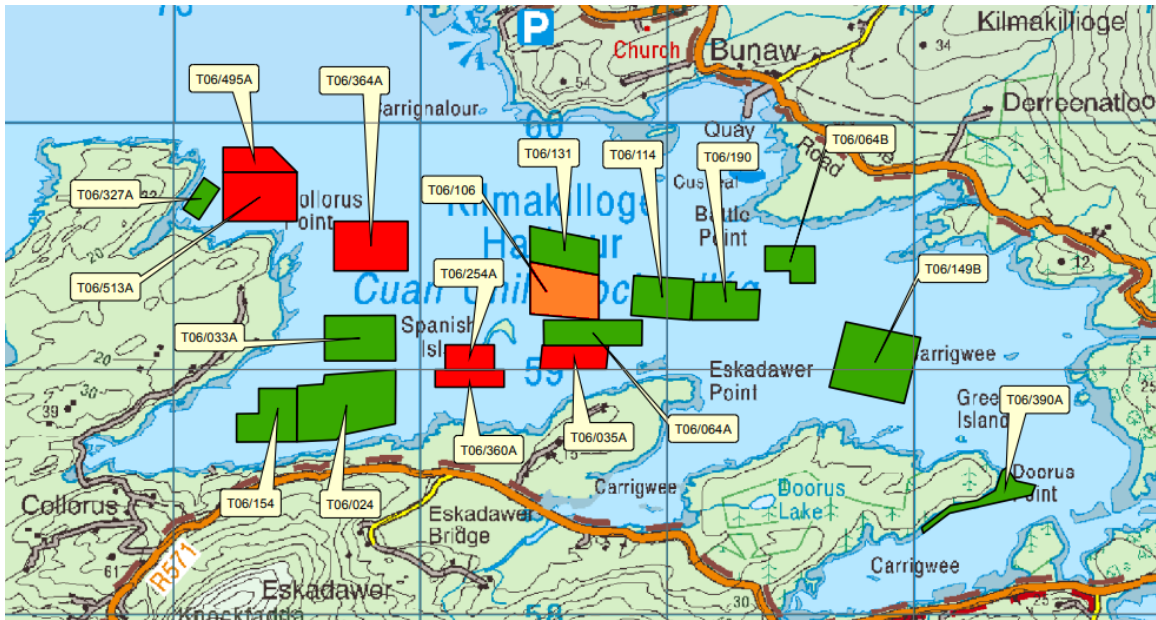
Summary T06/35A

The only issues raised by the various authorities in relation to T06/35 are a potential overlap with navigation channels. According to MED there are existing navigational aids within Kilmackilloge Harbour. MED recommends that the group navigational marking scheme (SUMS) is revised to take account of the reconfiguration of the aquaculture sites. The scheme should provide a safe system of navigation for all marine users.

ALAB expects that on the grant of the licence, the scheme will be revised in consultation with Kerry County Council, BIM, MSO and CIL. This site will be within the SUMS for Kilmackilloge Harbour.

Recommendation T06/35A

The recommendation is to uphold the minister's decision to grant a renewal of an aquaculture licence **to Shamrock Shellfish** for site T06/35A.



Map 16 Appeals areas are highlighted in red with T06/35 in orange

T06/106 Site Suitability

The site is **unsuitable** according to the commissioners of Irish lights who had stated that “Unfortunately based on the information supplied, we object to the application for a foreshore licence for the cultivation of mussels in the site associated with this application. The site encroaches onto a safe haven anchorage in Kilmackilloge Harbour not giving vessels area to swing. (Navigable channels including inter-tidal channels are considered to be the marine equivalent of "Rights of Way" on land).

T06/106 Other Uses

There are **no concerns** by SFPA in relation to site T06/106 in respect of the traditional fishing use of this area.

T06/106 Statutory Status (County Development Plan)

The proposed development has **no significant impact** on the statutory status of the area for the following reason. The MED consider that this aquaculture has been in place for some time and has visually become embedded in the landscape. No significant visual impact was identified. This location is to the east of Spanish Island and mussel lines in this location are hard to see from the main road due to the topography of the land.

T06/106 Economic effects

There will be a **positive effect** on the economy of the area for the following reasons: Licencing of aquaculture will secure jobs in the area.

T06/106 Ecological Effects

The proposed development T06/106 has a **non-significant impact** on the statutory status of the area for the following reasons; The AA screening for the SAC found no significant impact on the conservation status of the Natura 2000 site Kenmare River SAC would result from the development of this site.

T06/106 General Environmental Effects

There are **no significant** general environmental effects predicted as a result of the proposed development for the following reason. No concern was raised in relation phytoplankton availability to other farms should this be licenced No other significant impacts were identified in terms of species, water quality or any other.

T06/106 Man-made Heritage

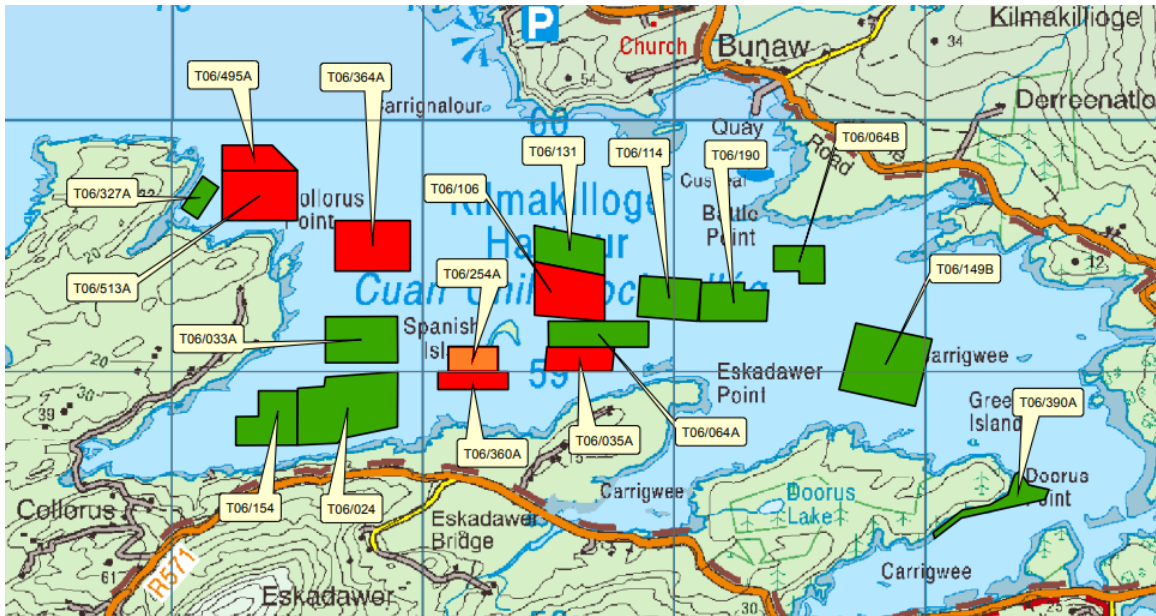
There is **no predicted impact** on the man-made heritage of value in the area as a result of the proposed operation as National monuments are situated outside the intertidal and subtidal area of the bay.

Summary T06/106

The only concern raised by the various authorities in relation to T06/106 are a potential issue with navigation channels. According to MED There are existing navigational aids within Kilmackilloge Harbour. MED recommends that the group navigational marking scheme (SUMS) is revised to take account of the reconfiguration of the aquaculture sites. The scheme should provide a safe system of navigation for all marine users. ALAB expects that on the grant of the licence, the scheme will be revised in consultation with Kerry County Council, BIM, MSO and CIL. This site will be within the SUMS for Kilmackilloge Harbour.

Recommendation T06/106

The recommendation is to uphold the ministers decision to grant a renewal of an aquaculture licence to Shamrock Shellish for site T06/106.



Map 17 Appeals areas are highlighted in red with T06/254 in orange

T06/254A;Site Suitability

The site is **suitable** according to the commissioners of Irish lights who had stated that they had no objection this licence on grounds of navigation.

T06/254A;Other Uses

There are no concerns by SPPA in relation to site **T06/254A**;in respect of the traditional fishing use of this area.

T06/254A;Statutory Status (County Development Plan)

The proposed development has some potential **significant impact** on the statutory status of the area due to visual impact. This location is to the west of Spanish Island and This development will be visible but to some degree would blend with existing aquaculture mussel lines in this location.

T06/254A;Economic effects

There will be a **positive effect** on the economy of the area for the following reasons: Licencing of aquaculture will secure jobs in the area.

T06/254A;Ecological Effects

The proposed development **T06/254A**; has a **non-significant impact** on the statutory status of the area for the following reasons the AA screening for the SAC found no significant impact on the conservation status of the Natura 2000 site Kenmare River SAC would result from the development of this site.

T06/254 General Environmental Effects

There are **potential significant** general environmental effects predicted as a result of the proposed development for the following reason. According to the BIM report *“Historically the sites located around Spanish Island have been known to be good areas to produce mature mussels within a shorter growout time to market. However, placing more longline structures in these areas could have an even bigger negative impact, reducing current flow and potentially collapsing an already fragile system”*.

The BIM 2017 study specifically says that sites around Spanish Island should have a lower stocking rate and should be monitored to see the impact on neighbouring farms. No evidence of this monitoring or review has been presented. The BIM 2017 data is used, referenced and interpreted by the technical advisor however, there is no reliance on the BIM conclusions in respect of this appeal.

MED recommended refusal of this licence application. No other significant impacts were identified in terms of species, water quality or any other issue.

T06/254A Man-made Heritage

There is **no predicted impact** on the man-made heritage of value in the area as a result of the proposed operation T06/254A for the following reasons;
National monuments are situated outside the intertidal and subtidal area of the bay.

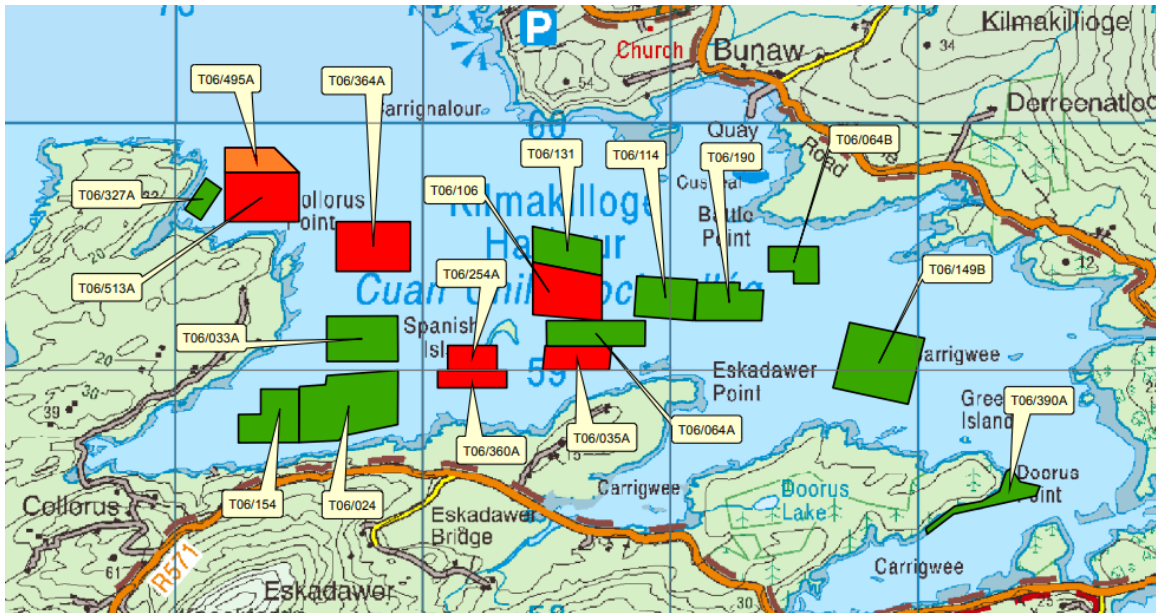
Summary T06/254A

The issues raised by the various authorities in relation to T06/254A concern phytoplankton availability and reduction in water flow to other longlines in this area of the bay. BIM (2017) specifically identified sites south of Spanish Island as requiring low numbers of long lines and being subject to review in terms of phytoplankton availability to other farms. No review has been forthcoming. Visual impact was also indicated as of potential concern.

Note: The technical advisor’s interpretation of the BIM data is independent and is not reliant on the BIM reports conclusions in respect of this appeal.

Recommendation T06/254A

The recommendation is to uphold the ministers decision to refuse an aquaculture licence to Shamrock Shellfish for site T06/254A.



Map 18 Appeals areas are highlighted in red with T06/495 in orange

T06/495A Site Suitability

The site is **unsuitable** according to the commissioners of Irish lights who “have reservations concerning the encroachment of this site onto a navigable channel. (Navigable channels including inter-tidal channels are considered to be the marine equivalent of "Rights of Way" on land). It is important to ensure that no navigable inter-tidal channels are impeded”

T06/495A Other Uses

There are **concerns by SFPA** in relation to site **T06/495A** ;in respect of the traditional fishing use of this area, specifically shrimp and scallop fishing.

T06/495A Statutory Status (County Development Plan)

The proposed development has some potential **significant impact** on the statutory status of the area due to visual impact. According to the MED “This site will increase the level of activity in this part of the harbour and will lead to an increased visual impact”. The Technical advisors noted that this site will also be visible from the WAW signature point.

T06/495A Economic effects

There will be a **positive effect** on the economy of the area for the following reasons:
Licencing of aquaculture will secure jobs in the area.

T06/495A Ecological Effects

The proposed development **T06/495**; has a **non-significant impact** on the ecological status of the area. The AA screening for the SAC found no significant impact on the conservation objectives of the Natura 2000 site Kenmare River SAC would result from the development of this site.

T06/495A General Environmental Effects

There are **potential significant** general environmental effects in respect of Phytoplankton availability under cumulative capacity impact and refusal is recommended by MED

The technical advisors noted that it is another 2.5 ha of mussel cultivation in a harbour where there is already significant mussel cultivation No other significant impacts were identified in terms of species, water quality or any other.

T06/495A Man-made Heritage

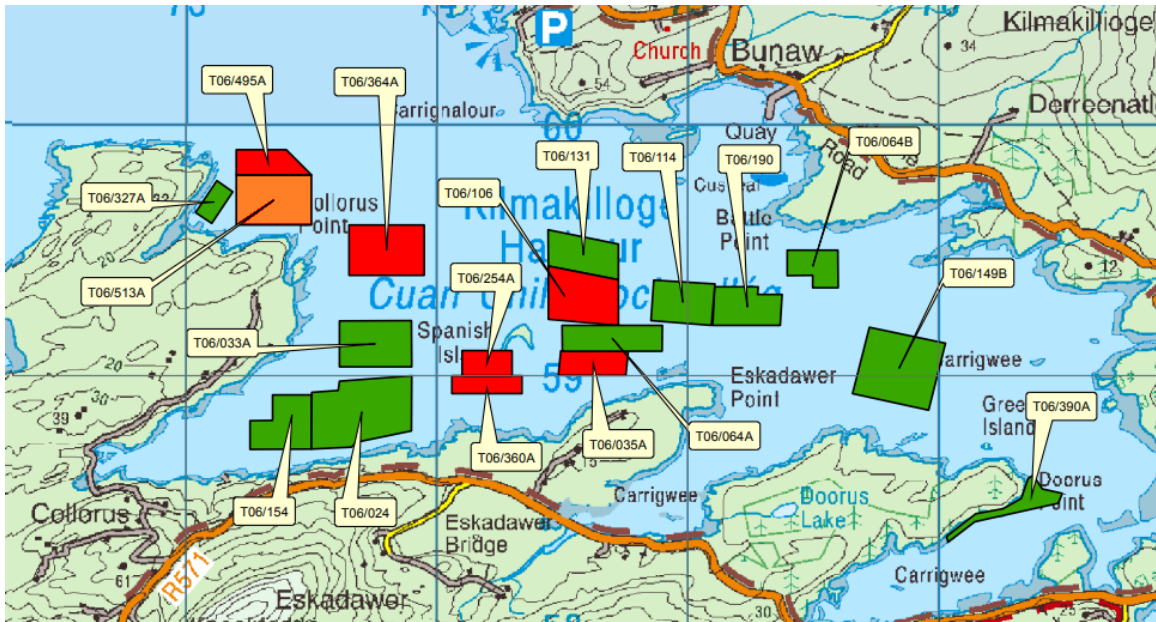
There is **no predicted impact** on the man-made heritage of value in the area as a result of the proposed operation T06/495A as National monuments are situated outside the intertidal and subtidal area of the bay.

Summary T06/495A

The issues raised by the various authorities in relation to new licence application T06/495A are as follows; significant navigation concerns, impacts on traditional fishing grounds, concern regarding phytoplankton availability to other farms and visual impact

Recommendation T06/495A

The recommendation is to uphold the ministers decision to refuse an aquaculture licence to **Shamrock Shellfish** for site T06/495A.



Map 19 Appeals areas are highlighted in red with T06/513 in orange

T06/513 Site Suitability

The site is **suitable** according to the commissioners of Irish lights who “have no objection to this licence” in terms of navigation. However, this is rejected by the appellant as they argue that it is a bolthole location, in poor weather, and is on the route past Collorus point into Collorus harbour.

T06/513 Other Uses

There are concerns by SFPA in relation to site T06/513. The SFPA is of the view that this site is traditionally used for either shrimp or scallop fishing. This potential conflict is recognised by the Marine Institute who also identify an impact and this viewpoint is reiterated by the appellants.

T06/513 Statutory Status (County Development Plan)

The proposed development has **significant impact** on the statutory status of the area for the following reasons; No visual impact was identified by MED. However, it is the view of the technical expert that this site will be highly visible from the WAW signature point which was not considered in the MED report. This is a designated Wild Atlantic Way viewpoint on the Kenmare River.

T06/513 Economic effects

There will be a **positive effect** on the economy of the area for the following reasons: Licencing of aquaculture will secure jobs in the area.

T06/513 Ecological Effects

The proposed development **T06/513** has a **non significant impact** on the ecological status of the area. The AA screening for the SAC found no significant impact on the conservation objectives of the Natura 2000 site Kenmare River SAC would result from the development of this site.

T06/513 General Environmental Effects

There were **no significant** general environmental effects in respect of phytoplankton availability identified. However, the technical advisor notes that it is another 6 ha of mussel cultivation in a harbour where there is already significant mussel cultivation and other smaller proximate areas have been refused on carrying capacity.

T06/513 Man-made Heritage

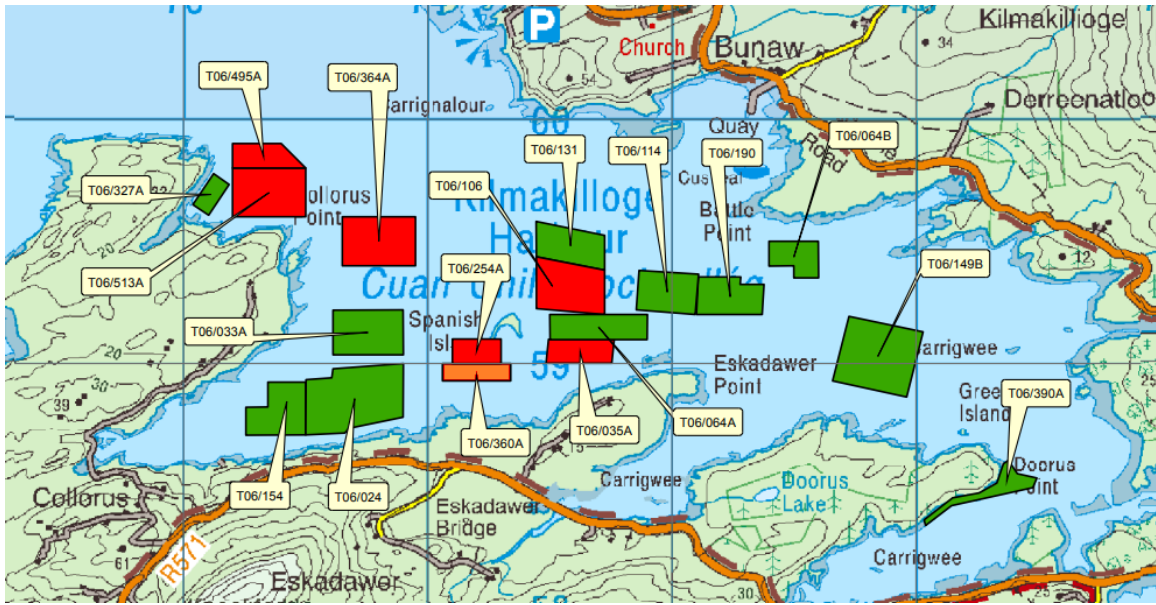
There is **no predicted impact** on the man-made heritage of value in the area as a result of the proposed operation T06/513 as National monuments are situated outside the intertidal and subtidal area of the bay.

Summary T06/513

The issues raised in relation to T06/513 are mixed views on navigation, concern over impact on fishing activities as well as concern regarding increased licencing and carrying capacity in the harbour. The technical advisor identified visual impacts in respect to the Wild Atlantic Way.

Recommendation T06/513

The recommendation is to overturn the ministers decision to grant an aquaculture licence **Kush Seaframs** for site T06/513. Refusal is recommended.



Map 20 Appeals areas are highlighted in red with T06/360A in orange

T06/360A Site Suitability

The site is **suitable** according to the commissioners of Irish lights who have no objection to this application.

T06/360A; Other Uses

There are no **concerns** by SFPA in relation to site either shrimp or scallop fishing

T06/360A; Statutory Status (County Development Plan)

The proposed development has **non significant impact** on the statutory status of the area for the following reasons. According to the MED the proposed site is visible from the R571 roadway from Kenmare to Castletownbere and the R573 roadway from Lauragh to Kilmackilloge, both of which are part of the Wild Atlantic Way and designated in the Kerry CDP as routes with Views and Prospects (Both Directions). The Beara Way walking route passes to the south of Kilmackilloge Harbour. The existing aquaculture in Kilmackilloge has been in place for some time and has become embedded in the landscape. There are currently two unauthorised 330m mussel longlines which are operated by another party at the location of this site. This site will not increase the level of activity in this part of the harbour as it will replace the existing unauthorised lines and thus will not lead to an increased visual impact

T06/360A Economic effects

There will be a **positive effect** on the economy of the area as Licencing of aquaculture will secure jobs in the area.

T06/360A Ecological Effects

The proposed development **T06/360a** has a **non-significant impact** on the ecological status of the area. The AA screening for the SAC found no significant impact on the conservation status of the Natura 2000 site Kenmare River SAC would result from the development of this site.

T06/360A General Environmental Effects

No other significant impacts were identified in terms of species, water quality or any other environmental effects in respect of Phytoplankton availability identified. There are **no significant** general environmental effects in respect of Phytoplankton availability identified. The BIM (2017) report does specifically mention interference of longlines with water flows around Spanish island in relation to phytoplankton. The BIM data is used, referenced and interpreted by the technical advisor however, there is no reliance on the BIM conclusions in respect of this appeal.

MED recommend a grant as it replaces existing unauthorised lines.

T06/360A Man-made Heritage

There is **no predicted impact** on the man-made heritage of value in the area as a result of the proposed operation T06/360A for the following reasons;
National monuments are situated outside the intertidal and subtidal area of the bay.

Summary T06/360A

The issues raised in relation to T06/360A are concern regarding phytoplankton availability. BIM (2017) specifically identified this exact site as requiring low numbers of lines and being subject to review in terms of phytoplankton availability to other farms. No review has been forthcoming.

Note: The technical advisor's interpretation of the BIM data is independent and is not reliant on the reports conclusions in respect of this appeal.

Recommendation T06/360A

The main issue raised in relation to licence application T06/360A is regarding phytoplankton availability to other farms. BIM specifically note that this farm requires monitoring and a specifically low number of lines due to the sensitivity of the area and the movement of waters around Spanish Point. Given this level of doubt the Technical advisor feels that a precautionary approach would be best and refusal is recommended. The recommendation is to recommend to overturn the ministers decision to grant an aquaculture licence **Kush Seafarms** for site T06/360A

5.9 Confirmation re Section 50 Notices

We confirm there are no matters which arise section 61 which the Board ought to take into account which have not been raised in the appeal documents, and therefore it is not necessary to give notice in writing to any parties in accordance with section 50 (2) of the 1997 Act.

6.0 Screening for Environmental Impact Assessment.

S.I. No. 468/2012 - Aquaculture Appeals (Environmental Impact Assessment) Regulations 2012.

This states

- 3) An environmental impact statement shall be submitted with all appeals (other than reviews where the Board is satisfied that there is no environmental impact for any proposed change) for aquaculture referred to in paragraph 2(a) and shall also be submitted where the Board determines that an application for aquaculture referred to in paragraph 2(b) would be likely to have significant effects on the environment.
- (4) The Board shall, in deciding whether aquaculture referred to in paragraph 2(b) would be likely to have a significant effect on the environment, have regard to the criteria specified in Annex III to Council Directive.

SELECTION CRITERIA REFERRED TO IN ARTICLE 4(3) (CRITERIA TO DETERMINE WHETHER THE PROJECTS LISTED IN ANNEX II SHOULD BE SUBJECT TO AN ENVIRONMENTAL IMPACT ASSESSMENT)

1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:
- (a) the size and design of the whole project;
 - (b) cumulation with other existing and/or approved projects;
 - (c) the use of natural resources, in particular land, soil, water and biodiversity;
 - (d) the production of waste;
 - (e) pollution and nuisances;
 - (f) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;
 - (g) the risks to human health (for example due to water contamination or air pollution).
2. The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:
- (a) the existing and approved land use;

(b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground; (c) the absorption capacity of the natural environment, paying particular attention to the following areas:

- (i) wetlands, riparian areas, river mouths;
- (ii) coastal zones and the marine environment;
- (iii) mountain and forest areas;
- (iv) nature reserves and parks;
- (v) areas classified or protected under national legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC; (vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;
- (vii) densely populated areas;
- (viii) landscapes and sites of historical, cultural or archaeological significance.

3. Type and characteristics of the potential impact The likely significant effects of projects on the environment must be considered in relation to criteria set out in points 1 and 2 of this Annex, with regard to the impact of the project on the factors specified in Article 3(1), taking into account:

- (a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected); (
- b) the nature of the impact;
- (c) the transboundary nature of the impact;
- (d) the intensity and complexity of the impact;
- (e) the probability of the impact;
- (f) the expected onset, duration, frequency and reversibility of the impact;
- (g) the cumulation of the impact with the impact of other existing and/or approved projects;
- (h) the possibility of effectively reducing the impact.

The relevant elements of the above are

- (a) the size and design of the whole project. This whole project should be seen as mussel cultivation within the harbour as a whole . Raphael Crowley of the MED states that “when taken with the existing salmon sites in the Harbour approximately 54.3 hectares in an additional 53.1 hectares have been applied for this part of the current licencing processed which if licenced would effectively double the licences in the harbour. Having considered all applications the MED recommends licencing in total 65.7ha and believe that the licencing of the remaining 41.7 ha of Mussel cultivation would have a significant negative impact on the area in terms of navigation, visual impact and production capacity.

- (b) The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to: Coastal zones and the marine environment where this project lies.
- (c) The EIA directive 2014 also refers to Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC;

Type and characteristics of the potential impact The likely significant effects of projects on the environment must be considered in relation to criteria set out in points 1 and 2 of this Annex, taking into account:

- (a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);
- (b) the nature of the impact;
- (d) the intensity and complexity of the impact;
- (e) the probability of the impact;
- (f) the expected onset, duration, frequency and reversibility of the impact;
- (g) the cumulation of the impact with the impact of other existing and/or approved projects;
- (h) the possibility of effectively reducing the impact.

Despite the fact that it is a relatively large mussel growing area within a Natura 2000 site designated for coastal and marine habitats given the nature of the impact from mussel farming the Technical advisor **dose NOT recommend a Screening for EIA.**

7.0 Screening for Appropriate Assessment.

The Marine Institute prepared a Screening for Appropriate Assessment for fishing and aquaculture activities within Kenmare River SAC. Comments were made by Department of Culture Heritage and Gaeltacht. This was addressed in section 6.3.

8.0 Technical Advisor's Evaluation of the Substantive Issues in Respect of Appeal and Submissions/Observations Received

The substantive issues were as follows	
Carrying capacity of the Harbour	The harbour is operating at equilibrium at present with good growth rates and time to market around 18 months. This is an optimum situation. Although there was a greater area licenced in the past, up to 61 ha according to the BIM report, the area actually used for mussel cultivation never reached that level. This concern of the appellants is valid and a precautionary approach is adopted in this report.
Transparency of the process to grant/refuse licences	This is not within the scope of this report
Navigation Issues	There are navigation issues in the harbour. The navigation existing licences for renewal can be addressed through navigation markers. However, navigation concerns are valid in respect of new areas which may be used as safe harbours in foul weather.
Visual Impact	There is a potential visual impact from existing farms and it is agreed that the existing aquaculture is "embedded" in the harbour. New licences will fill up blue areas in the view and specifically have potential to interfere with the Wild Atlantic Way signature point as the mouth of the harbour.
Tourism	The visual impact is linked to tourism and the same observations hold. There is also some potential overlap with recreational dive sites.
Fishing impacts	The Sea Fisheries Protection Agency commented on several of the applications that they had a potential to impact on traditional scallop and shrimp fisheries. This was reiterated by the appellants and is a valid concern
Training and Certification	One enterprise was identified as lacking training and certification in respect of mussel farming. This of is desirable but is not a condition of award of licence

It was concluded that the appeal was valid and the questions posed by the appellants have been fully addressed in this report.

9.0 Recommendation of Technical advisor with reasons and Considerations

Having carried out an inspection of the proposed site, reviewed the appropriate literature and in (accordance with Sections 59 & 61 of the Fisheries (Amendment) Act 1997 and reviewed the grounds for appeal.

The following is recommended

Recommendation T06/364

The issues raised by the various authorities in relation to T06/364A are; a potential issue with navigation channels and its position in respect of phytoplankton availability to other farms. Visual impact is also a concern and the area has been identified as a traditional shrimp or scallop fishery. The recommendation is to uphold the ministers decision to refuse to grant an aquaculture licence to **Kieran Lyons** for site T06/364.

Recommendation T06/35A

The only issues raised by the various authorities in relation to T06/35A are a potential issue with navigation channels. However, this appears to be easily resolved according to MED via a group navigational marking scheme (SUMS) The recommendation is to uphold the ministers decision to grant a renewal of an aquaculture licence to **Shamrock Shellfish** for site T06/35A. This is a renewal of an existing licence and no appeals were lodged relating to existing navigation issues from users of the bay.

Recommendation T06/106

The only issues raised by the various authorities in relation to T06/106 are a potential issue with navigation channels. However, this appears to be easily resolved according to MED via a group navigational marking scheme (SUMS) The recommendation is to uphold the ministers decision to grant a renewal of an aquaculture licence to **Shamrock Shellfish** for site T06/106. This is a renewal of an existing licence and no appeals were lodged relating to existing navigation issues from users of the bay.

Recommendation T06/254A

The issues raised by the various authorities in relation to new licence application T06/254A are visual impact and concern regarding phytoplankton availability to other farms due to a reduction in water flow The recommendation is to uphold the ministers decision to refuse an aquaculture licence to **Shamrock** for site T06/254A.

Recommendation T06/495A

The issues raised by the various authorities in relation to new licence application T06/495A are as follows; visual impact and concern regarding phytoplankton availability to other

farms The recommendation is to uphold the ministers decision to refuse an aquaculture licence to **Shamrock Shellfish** for site T06/254A.

Recommendation T06/513

The issues raised in relation to new licence application T06/513A are as follows; significant visual impact and concern regarding phytoplankton availability to other farms The recommendation is to recommend to overturn the ministers decision to grant an aquaculture licence **Kush Seafarms** for site T06/513. Refusal is recommended.

Recommendation T06/360A

The main issue raised in relation to licence application T06/360A is regarding phytoplankton availability to other farms. BIM specifically note that this farm requires monitoring and a specifically low number of lines due to the sensitivity of the area and the movement of waters around Spanish Point. Given this level of doubt the Technical advisor feels that a precautionary approach would be best and refusal is recommended with a caveat that this general area may be considered again in the future for a licence application subject to information becoming available. This also should apply to appeal number T06/254 . The recommendation is to overturn the ministers decision to grant an aquaculture licence **Kush Seafarms** for site T06/360A Refusal is recommended.

Technical Advisor: Marie Louise Heffernan Aster Environmental Consultants Ltd

Date: 08/08/2022

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