

# NWIFCA Quarterly Meeting

## 9<sup>th</sup> December 2016: 11.00 a.m.

AGENDA  
ITEM NO.  
8

### SCIENCE AND SURVEY UPDATE: 1<sup>st</sup> September – 18<sup>th</sup> November 2016

**Purpose:** To provide an update on science and related work

**Recommendation:** i. approve the Byelaw 13A Closure at Heysham Flat;  
ii. approve the development of a Small Fish Survey programme.

#### 1. General

This quarter was dominated by cockle fisheries, bass management, research proposals, developing 'Small Fish Surveys' (SFS), and providing responses to numerous projects and development consultations. Ms Vause moved on to another position at the beginning of November.

An update of key areas of work carried out by the team over the past quarter is provided below.

#### 2. Bivalve Mollusc Working Group (BMWG)

BMWG discussed cockle survey results and management options on 10<sup>th</sup> October. Industry provision of acoustic ground discrimination and scientific dredge survey data in Morecambe Bay was agreed to be used with helicopter survey and data from Byelaw 3 permit holders. In future this should give improved data to assess mussel settlement as early in the season as possible.

TSB asked that notes of meetings with industry are circulated to members as soon as possible.

#### 3. Cockle and Mussel Fisheries

A full report on cockle and mussel surveys and stock assessments was given to TSB in November and posted on the website. A further survey of sub-tidal mussels has been carried out in the Solway since that report.

##### a) Cockles

Following completion of HRAs, a consultation by text message with permit holders, and TSB confirmation two cockle fisheries (Pilling Sands, south Morecambe Bay, and Leven Sands, north Morecambe Bay) were opened on Monday 7<sup>th</sup> November. These beds are being fished by low numbers of Byelaw 3 permit holders.

The majority of the stock on Flookburgh (Morecambe Bay) and North Penfold (Ribble Estuary) had not yet reached size, and therefore were not recommended for opening. These beds will be surveyed at the earliest opportunity in the spring and results reported back to Members and BMWG. A dense spat settlement was found and inspected at Leasowe on the Wirral, and again surveys will be carried out on this stock should it persist through the winter.

##### b) Mussels

**Solway Sub-tidal Mussels.** Two surveys of sub-tidal mussels in the Solway Firth from 'Solway Protector' were done using a small dredge and a 0.1m<sup>2</sup> day grab. These surveys gave an estimate of 3000 tonnes present and evidence of starfish at some stations. A Solway mussel stakeholder meeting in the New Year is proposed to discuss options. The survey report is Annex B.

#### 4. Heysham Flat Exclusion Zone

The Authority has more than 10 years' data on the extent of the reefs of the honeycomb worm (*Sabellaria alveolata*) on Heysham Skear. The reefs are a conservation feature of the Morecambe Bay SAC but vary greatly from year to year in size and area. The main factor causing reductions in the reef appears to be the extensive smothering of *Sabellaria alveolata* by mussel seed in many years. The Authority protects the reef from fishing every year with an exclusion zone preventing damage from seed mussel fishing activities. There has not in the recent past been a sized mussel fishery at Heysham as the seed has always been washed away by winter storms so no long term protection of the reef under byelaw has been required.

In 2016, the site has undergone more major change. The reef was almost completely destroyed by seed mussel smothering and larger mussels are continuing to survive through the autumn. In some places it is expected for mussels to reach fishing size (length 45mm) by spring.

Size mussel fisheries in the District are open so there is renewed risk of damage to the reef from fishing. This risk must be reduced with a closed area so that size mussel fishing at Heysham can be made compliant with an HRA which is acceptable to Natural England. In November 2016 TSB approved development of a Byelaw 13A closure. Figure 1 shows the proposed closed area and a collation of historical survey data of the reef area. A more detailed map of the historical data is provided in figure 2.

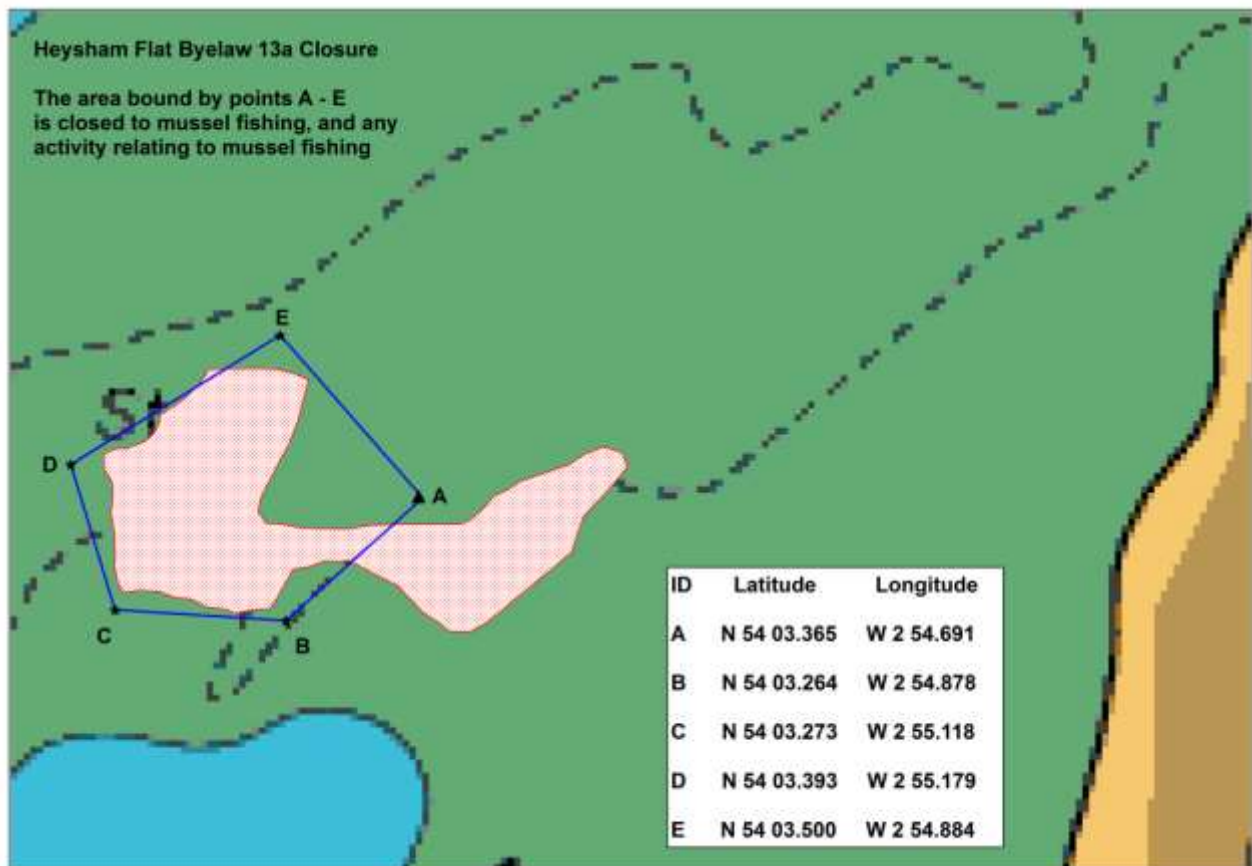


Fig. 1. Heysham Flat Byelaw 13A proposed exclusion zone (box A-E) and area where reef has occurred in recent years (pink) from historical data.

If agreed by the Authority, the closure '**No person shall remove, take or disturb any mussel within the closed area pursuant to Byelaw 13A**' will come into force as soon as possible and remain in place until 30<sup>th</sup> June 2017 when it will be reviewed.

**Members are invited to approve the proposed Byelaw 13A Closure at Heysham Flat to come into force as soon as possible after the meeting until 30<sup>th</sup> June 2017.**

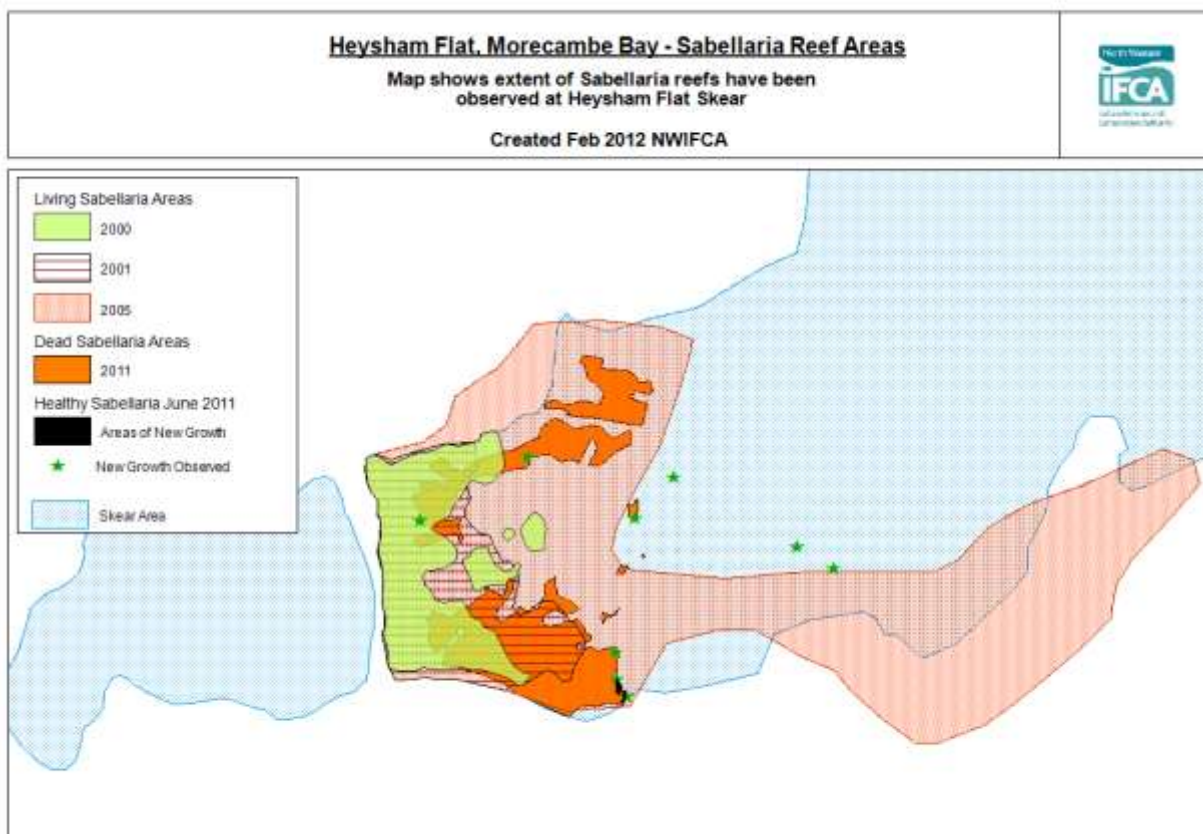


Fig. 2. Heysham Flat – historical mapping of *Sabellaria alveolata*.

## 5. Shellfish Liaison Group (SLG)

The Authority attends the District-wide SLG which meets six-monthly, to discuss shellfish hygiene issues. The group is run by local authority and port health and environmental health officers and attended by Environment Agency, Food Standards Agency, Cefas, government analytical labs, United Utilities and the shellfish industry.

The number of unsatisfactory results on the District's shellfish beds remains a matter of concern, as it is leading to temporary down-grading of classifications, and in some cases total prohibitions of harvesting from those beds. Many beds are class C or worse and the Authority has raised its concerns with agencies responsible requesting that the causes of contamination are investigated and action is taken to improve water quality.

## 6. Small Fish Surveys

### a) Background:

i. IFCAs are charged with managing all sea fisheries resources sustainably. The only exception is migratory fish which fall to Environment Agency (EA). The Authority must aim to understand for all species in the District, stocks, life stages, how each uses different areas and habitats and how species can be better protected and managed. SFS are important in developing this information resource.

ii. The NWIFCA District encompasses many estuaries, bays, rivers, saltmarshes which are used by juvenile fish as nursery areas. SFS cover many species, mostly non-migratory with some data collected on species such as salmon and eels. Therefore SFS are mainly the remit of IFCA although WFD requirements and migratory species are part of EA duties.

iii. In 2009-10, the national IFCA Technical Advisory Group (TAG) developed Standard Operating Procedures (SOP) using the range of knowledge and experience of similar work that had been conducted by the IFCAs, the EA and CEFAS Lowestoft. These SOP are increasingly

being used by other IFCA for SFS.

iv. EA undertake SFS in some estuaries in the District to address WFD requirements but SFS are not sufficiently comprehensive for IFCA requirements and have been cut in recent years. EA surveys are only undertaken in spring and autumn, and the frequency at some of the sites is likely to be reduced.

v. In 2016, Defra started reviewing bass nursery areas (BNA), looking at those which are needed, those which may be abandoned and proposals for new BNA. NWIFCA does not have data to contribute to this policy development and needs SFS to understand the status and trends of juvenile bass in the District.

#### **b) Developing SFS capacity in this Authority**

i. The EA Estuarine & Coastal Monitoring & Assessment SFS dataset has been shared with this Authority. EA have also assisted in training Science Officers to use their methodology.

ii. NWIFCA should conduct SFS to infill gaps and create a more comprehensive and widely available data set. NWIFCA surveys will focus on estuaries which are not surveyed by EA and conducting surveys throughout the year to detect any seasonal changes.

iii. The SFS fieldwork undertaken by the science team with the EA has shown that high quality useful data on small fish can be collected cost effectively. The equipment requirements, use of small boat and staffing can all be met from existing resources.

#### **c) Uses of the data**

i. SFS data should provide an indication of the recruitment patterns of a wide range of commercial fish species and the extent to which species use estuarine and coastal habitats.

ii. The Authority needs to better understand the use of estuaries in the District as nursery areas for bass and investigate the need for further protection of nursery habitat. The data will contribute to the national work by Defra on a bass nursery area review and the Cefas C Bass research project.

iii. Smelt are a conservation feature of proposed MCZ T3 sites: Solway, Wyre, Lune, and Ribble Estuaries. The Authority lacks data on how smelt use these estuaries and surrounding habitats. This aim links to proposed work out by NE and Wyre Rivers Trust.

iv. Data gathered will provide evidence on the issue of by-catch in the shrimp fisheries.

v. The work has support from Defra, Cefas, EA, Natural England and the other IFCAs.

**The Authority is invited to approve the development of a NWIFCA SFS programme.**

### **7. Marine Protected Areas in the NWIFCA District:**

#### **a) Marine Conservation Zones**

Tranche 2 - West of Walney MCZ – Recover Objective. Discussions with Defra, MMO and Natural England on proposed management are on-going. Known fishing activity data within the 0-6nm part of the site is being collated.

Tranche 3 – There will be consultation on 3 estuarine sites in the NWIFCA District: The Ribble MCZ, the Wyre / Lune MCZ, and the Solway MCZ. All 3 sites are proposed for designation to protect smelt (*Osmerus eperlanus*).

Smelt are shoaling fish, distantly related to the salmon. They live in the salty water of estuaries and around the mouths of rivers. During May to August the smelt come upriver to spawn in fresh water before then returning to the sea. Smelt are silvery-green in colour and usually around 20cm long, although they can grow to twice that length.

Threats to smelt populations include pollution and overfishing – smelt was once a delicacy and is now fished for pike bait. Smelt are also threatened by the loss of their habitat, especially spawning

grounds, which may be destroyed by silting or construction. They may also be prevented from reaching their spawning grounds because of weirs or other barriers.

Most of the recorded populations in Scotland are now extinct, as are a third of those from estuaries in England and Wales. Populations can recover in areas where several estuaries interconnect, as one can restock another. However, once smelt have become locally extinct from isolated estuaries (such as the Tyne), they will not return. JNCC (<http://jncc.defra.gov.uk/page-5667>).

Officers have been instrumental in facilitating discussion between fishers and Natural England colleagues, and in providing what fishing activity data we have for these sites.

Natural England is working on its draft advice to Defra on what activities, if any, require management at this stage. In the MCZ process all activities, not just fishing, are incorporated into the advice of how they do or may impact on conservation features. The latest discussions held with NE colleagues suggest that they do not anticipate that any fishing activities are currently considered to require management. Further understanding of how smelt use the estuaries is needed, and Officers are hopeful that data collected in the proposed Small Fish Surveys to be developed in the Science work will assist.

b) Review of Fishing Activities in European Marine Sites

**Table 1 updated 21st November 2016**

	Expected Total	Not yet started	Currently underway	Assessment complete and in final discussion with NE	Assessment complete and signed off by NE	On website and huddle
Non-occurring "Light" TLSE	11 + 4 working which will be combined <sup>1</sup>	0	0	0	11	(11)13/07/15
Non-occurring commercial activity currently recreational only	8 <sup>2</sup>	0	0	0	8	(8) 12/10/16
TLSE	13 <sup>3</sup>	0	0	1	12	(12)12/10/16
Joint assessments with MMO	1 <sup>4</sup> (inc. 4 gears)	0	1	0	0	-
Appropriate Assessments	12 <sup>5</sup>	0	6	1	5	(4) 12/10/16
<b>Totals</b>	45	0	7	2	36	-

Changes in figures are due to the following:-

- <sup>1</sup> Non-occurring light TLSE's added to 4 working documents which will be combined with original non-occurring for each site when review process has been completed. Reduced number of total assessments due to additional activities found to be non-occurring in the district.
- <sup>2</sup> Activities to have been thought to be commercial found to be recreational.
- <sup>3</sup> Decrease in TLSE due to expected TLSE going through to AA (netting activities).
- <sup>4</sup> Cross border site Liverpool Bay EMS with MMO - joint assessments.
- <sup>5</sup> Decrease in AA due to some activities being combined for a site (types of netting activities), (otter and beam trawl for fish).

Table 1 provides an update of the progress on the Review of Fishing Activities in EMS and the number of assessments carried out and left to be completed by the deadline at the end of December 2016. All assessments have been started. One (netting) has come back requiring additional input due to the release of the Solway SPA extension consultation. Six are underway and nearly ready for discussion with Natural England. None of the remaining assessments are

expected to conclude that management measures are necessary. All assessments are scheduled to be signed off by NE early in 2017.

A further six HRAs have been carried out on active fisheries since the last report. These include:

- seed mussel hand-gathering at Heysham Flat
- size mussel hand-gathering at Heysham Flat (in first draft)
- seed mussel dredge fishery north Morecambe Bay (South America)
- seed mussel dredge fishery Fleetwood
- cockle hand-gathering – Pilling Sands
- cockle hand-gathering Leven Sands

## **8. SPA Extensions to Protect Seabirds – Two Consultations Announced**

The Birds Directive requires EU Member States to protect birds and their habitats, in order to secure their survival and reproduction in their area of distribution. Article 4 requires that special conservation measures be undertaken for particular threatened birds (listed on Annex 1) and regularly migratory species, and these measures must include the designation of the most suitable territories as special protection areas for these species on land and at sea. In addition, Article 3 of the Directive requires more general measures to preserve, maintain or re-establish a sufficient diversity and area of habitats for all wild birds including through the establishment of protected areas and appropriate management of habitats. This means the Member States must protect areas of sea which seabirds use for activities they need to survive, including their feeding areas.

Defra and JNCC identified gaps in the network for foraging seabirds, and have issued proposals for filling those gaps. The following two SPA site extensions in the NWIFCA District are now out for consultation.

Liverpool Bay pSPA: The proposed extension involves both a geographic boundary change and additional species. The existing boundary is contiguous with the boundaries of The Dee Estuary SPA, Mersey Narrows and North Wirral Foreshore SPA, and Ribble and Alt Estuaries SPA.

The site will extend beyond 12 nautical miles at the northwest point of the existing boundary to Liverpool Bay SPA and also into Welsh waters offshore of the mouth of the Dee Estuary, and overlaps with the potential site for Anglesey Tern pSPA. There are also landward boundary changes proposed.

This consultation runs for 13 weeks from 9<sup>th</sup> November 2016 to 8<sup>th</sup> February 2017 and is run in accordance with the government consultation principles. Full details can be found: <https://www.gov.uk/government/consultations/liverpool-bay-bae-lerpwl-special-protection-area-extension-comment-on-proposals>

Solway Firth pSPA. The proposed extension involves a geographic boundary change, a name change and additional species.

The pSPA is a cross-border site shared with Scotland, and Natural England have been working in close collaboration with Scottish Natural Heritage (SNH) throughout the designation process. It was also jointly agreed that as the site lies mainly within Scottish waters, SNH will act as the lead Statutory Nature Conservation Body for the proposals and this consultation.

Science Officers have a number of comments to make on this consultation. It is very Scotland focused with little information about the English side of the proposed site. The Science Team will send a response to that effect which will be available to Members and Officers on request.

This consultation runs from 25<sup>th</sup> October 2016 to midnight on 17<sup>th</sup> January 2017 and seeks the views of all interested parties on the scientific case for the classification of the pSPA. <http://www.snh.gov.uk/protecting-scotlands-nature/protected-areas/proposed-marine-spas/>

## 9. Bass

**Defra Bass Nursery Area Review** will propose amendments to BNA, assess evidence, and outcomes from existing areas and identify new challenges. As yet no new BNAs or amendments have been identified for this District. A report is expected by the end of November.

**Proposed EC Bass Regulations 2017.** The following proposal goes to the December European Fisheries Council meeting to be finalised in January 2017. The proposal in summary is:

- I. Only vessels having a track record of bass catches by hooks and lines between July 2015 to September 2016 are permitted to take ten tonnes per year but with complete closure February to March 2017;
- II. 1% bycatch limit per day for trawls/seines with a 1 tonne per month limit;
- III. Recreational fishermen can take ten fish per person per month (with February and March catch and release only).

How track record will work requires clarification as sales notes do not record method of capture. There are also concerns about the feasibility of enforcing the recreational angling restriction.

IFCOs will be given the powers to enforce the measures through a new SI that will come in simultaneously with this regulation, which will resolve the previous Tech Con issues following the revocation of the old SI in error.

**C-BASS Research.** A one day Cefas workshop provided an update on bass challenges and current research of this project. Data gaps in each IFCA region were identified. The potential for bass research in the northwest will be explored with a view to expand and fund the C-Bass tagging study into our waters.

## 10. Development consultations

**NW Coast Connections.** National Grid work on routing options for 400KV cables from Moorside nuclear power station

The public consultation on the detailed design of the route started on 28<sup>th</sup> October and runs until 6th January 2017. The Press Release on the consultation, along with a link to information on a series of 30 public meetings, was posted on the NWIFCA website, was circulated with the November TSB papers and is attached as Annex A.

Ms Knott attended the public meeting in Heysham on 10<sup>th</sup> November and discussed the current proposal for a tunnel under Morecambe Bay with one islet, its position and possible designs. Four fishers attended along with National Grid's Fishery Liaison Officer (FLO). The main concern from fishers was the impact of a permanent obstruction to drift netting. The main concern of the Science Team is that the modelling carried out is accurate, and that the actual effects on the hydrodynamics, fish and invertebrate communities is studied thoroughly during and post construction. These concerns will be reflected in the Science Team's consultation response.

### Moorside Power Station - NuGen

Officers are monitoring potential impacts on fishers, fishing grounds and the marine and coastal environment. The EIA Quarter 2 Technical meeting was attended with fellow regulators to consider responses to technical notes produced by NuGen for the review of baseline evidence. This is to be incorporated into the EIA on Marine Ecology and Ornithology, Marine Water Quality, Marine and Coastal Processes.

A report was received on the circulating water system relating to migratory fish. It is unclear where marine non-migratory fish are being considered. Dialogue will continue to ensure non-migratory fish are considered and in design of the cooling system. Problems at Heysham Power Station in relation to large volumes of fish destroyed through the water intake must be avoided.

**Fleetwood Fishermen and Dong Energy.** As discussed at the NWIFCA meeting in September Officers have been in liaison with Fleetwood Commercial Fishermen's Group, Dong Energy and the MMO over issues surrounding survey and works for cable laying for the Walney windfarm extension and impacts on fishing activity. The Head of Enforcement has now taken over this role and attended a meeting with all parties on 20th October.

**Sefton Seascapes Conference.** An officer attended the Conference run by Sefton Coast Landscape Partnership, North West Coastal Forum and Sefton Council. Presentations and discussions focused on natural capital, ecosystem services, the importance and successes of partnership working and in preserving natural and landscape heritage.

**Mersey Sediment Management Group, Peel Ports, Liverpool** meeting received a report on maintenance dredge disposal sites. A revised and updated Maintenance Dredge Protocol is in preparation. NWIFCA should be consulted on a draft. Peel Ports have commissioned research to identify 'beneficial or alternative uses' for disposal of dredged material. This could include beach recharge, bird island or fish nursery habitat creation. The science team have requested to be consulted at an early stage to assist provision of information on fisheries activity to minimise interference with other legitimate users of the sea.

**Liverpool City Region's Coastal Designated Sites Evidence Strategy Workshop.** Ms Knott and Ms Carroll attended a two day workshop in Liverpool. The workshop highlighted the wealth of data available from a wide range of sources including industry, environmental consultants, NGO's, local government, and academic institutions. The workshop aim was to identify the sources of data and find an accessible data sharing mechanism.

#### **Celtic Seas Partnership Final Conference**

Ms Knott represented the NWIFCA at the third and final multi-national workshop of the Celtic Seas Partnership in Dublin, which was attended by representatives of all the national administrations across the Celtic Seas, as well as OSPAR and the European Commission. A lively conference covered a showcase of the Partnership's final outputs; investigation into ways of ensuring that the work developed together is sustained beyond the life of the project; a review of future scenarios and discussion over what they mean for the management of the Celtic Seas; an opportunity for identifying ways of continuing to work together at the Celtic Seas scale; and of putting questions to a panel of policy makers and experts.

#### **Other authorisations and MMO Marine Licence consultations this quarter:**

##### **Consultations:**

Burbo Bank Extension Mattress Remediation - protection of exposed cabling  
Walney Extension Offshore Wind Farm - Operations and Maintenance (O&M) Facilities at Barrow  
West Cumbria Mining Ltd - Offshore Exploratory Boreholes. Six boreholes have been licensed

**Science Officers**  
**28<sup>th</sup> November 2016**