

**NWIFCA Quarterly Meeting:
15th March 2018: 11.00 a.m.**

**AGENDA
ITEM
10**

**SCIENCE AND SURVEY UPDATE:
1st November 2017 – 31st January 2018**

Purpose: To provide an update on science and related work

1. COCKLE AND MUSSEL FISHERIES

As is usual at this time of year it has not been possible to carry out much in the way of cockle and mussel surveys due to lack of daylight over low water springs. Science Officers have been providing IFCOs with assistance in carrying out sample runs (for shellfish hygiene testing), which is a good opportunity to keep an eye on each of the fisheries. A summary of each fishery is given below – full details were provided in the report to February TSB.

i. Wirral - Leasowe Cockle Fishery

Fishing activity reduced to minimal levels during October and November after the densest area had been fished and effort moved to the Morecambe Bay beds. The need to review a closure as discussed at the last TSB was subsequently no longer required.

ii. Ribble Estuary - Penfold North

The bed was surveyed again on 8th November. Still extremely muddy and difficult to access it does still hold a high density of 2015 cockles which are mainly as yet undersize. The bed is due for survey again in March to see whether abundance has persisted and whether or not this extremely slow growing cockle has yet reached size.

iii. Morecambe Bay – Pilling Sands & Flookburgh / Leven Sands

Pilling Sands cockles

Spring surveys will give an indication of biomass remaining from the fishery, and whether there is an indication of new recruitment.

Flookburgh / Leven Sands cockles

Officers inspected the fishery on 30th November and had the opportunity to discuss how the fishery was progressing with gatherers. Cockles were still abundant across a large part of upper bed. A February survey will give an indication of biomass remaining, and whether there is any likelihood of an autumn fishery this year.

iv. All other cockle beds

There are no other commercial stocks at present, but Officers and IFCOs continue to monitor for spat settlement.

v. Dee Estuary – size mussel

Officers have carried out monitoring for the presence of the invasive non-native species Chinese Mitten Crab which is known to have populated the upper reaches of the Dee Estuary. Samples were taken and 80 crabs identified, all as shore crab, *Carcinus maenas*.

vi Morecambe Bay - Heysham Flat seed mussel

An inspection was carried out in January of Heysham Flat and Knott End skears. Some mussel of mixed sizes but mainly undersize remains on the lower reaches of the main skear and Knott End skear. It is very hard in to the bottom substrate with very little mussel mud remaining. There are areas of live *Sabellaria alveolata* which looks newly settled and infrequent older and live structures. It will remain to be seen whether both the remaining mussel and the worms become buried under this year's mussel settlement which would be expected to be seen from April onwards. Monthly inspections are being carried out.

vii. Morecambe Bay – South America / Falklands seed mussel

Inspections will resume once spat has been detected in other areas of the Bay.

viii. Morecambe Bay – Foulney and Low Bottom

Inspections are scheduled in for early March.

iv. All other mussel beds

There are no other commercial stocks at present, but Officers and IFCOs will monitor for spat settlement in spring.

Cold Weather Closures for Intertidal Fisheries

In line with Natural England advice which is included in the NWIFCA HRAs for cockle and mussel fisheries, the NWIFCA undertakes to close intertidal fisheries during periods of severe cold weather in order to minimise disturbance to wading birds, whose energy requirements and therefore feeding requirements increase.

Officers discussed with Natural England whether the cold weather during November and December 2017 would necessitate closure of the intertidal cockle and mussel fisheries. This also raised questions of when should a decision be taken. It was agreed that if possible good practice would ensure that closures occur prior to the cold weather setting in, not after; as it is during the cold weather that disturbance could pose the highest risk. For 2017, a decision was taken not to close any of the fisheries as the risk from fisheries was deemed extremely low or non-existent. The justifications for each fishery, mainly low level of effort, have been recorded.

In future during winter fisheries, if cold weather is predicted to be below zero for more than twelve hours a day for five consecutive days then an assessment of the risk to SPA features would be completed taking into account the fishing activity, and a decision made on whether to close any individual fisheries.

2. MARINE PROTECTED AREAS IN THE NWIFCA DISTRICT

The Senior Scientist continues to participate in the monthly national “Marine Protected Areas Management Working Group” conference calls, with colleagues from Defra, Natural England, IFCAs, MMO and EA.

a) Marine Conservation Zones

Tranche 2 - West of Walney MCZ – Recover Objective. Cross-boundary site from 4.3nm to beyond 12nm. MMO have carried out an informal consultation on its management options (Dec. 6th – 12th January). Three options are presented in the letter regarding bottom trawling within the MCZ.

Management Option 1 – Prohibition of all bottom towed fishing gear in the inshore section of the site. This option would involve prohibiting bottom towed fishing in the whole of the site inshore of 12 nm.

Management Option 2 – Partial prohibition of bottom towed fishing gear (zoned management). This option would involve prohibiting bottom towed fishing gear over the most ecologically sensitive features within the site. This would mean prohibiting bottom towed fishing over the sea-pen and burrowing megafauna communities, and subtidal mud features in the inshore sections of the site. No new management would be applied to the area of subtidal sand in the north east of the site.

Management Option 3 – Do nothing. This option would introduce no new restrictions on fishing within the MCZ.

MMO state that ‘at this time we do not believe that management option 3 ‘do nothing’ will meet the conservation objectives for the site. We are currently considering in more detail management options 1 and 2’.

Officers await the outcome of the informal consultation which presumably will result in the drafting of an MMO byelaw.

Tranche 3 – three estuarine sites Ribble MCZ, the Wyre / Lune MCZ, and the Solway MCZ have been discussed in the past. No further news has been received, although if the sites are taken forward for designation they will be announced in the next Defra MCZ consultation expected by spring 2018.

b) Assessment of Fishing Activities in Marine Protected Areas

Three assessments remain to be completed from the EMS Review. The assessment for beam and otter trawling in the Dee Estuary is awaiting Natural England response. HRAs for both netting and beam trawling in the Solway are on hold while we await the results of the extension to the Solway SPA. Work will soon begin on MCZ assessments for Cumbria Coast MCZ and Allonby Bay MCZ. Fylde MCZ and West of Walney MCZ assessments are being completed by the MMO with IFCA data (cross boundary sites).

c) NWIFCA MPA Monitoring and Control Plan

Further work has been carried out to provide a more complete draft of the NWIFCA Marine Protected Area Monitoring and Control Plan. This draft has been submitted to Natural England for comment, and they have agreed to the approach that NWIFCA are taking. A final version will be submitted to TSB for approval in May. In the meantime, in line with the draft Plan’s Review Schedule existing assessments for Drigg Coast SAC have been reviewed during January. The next sites due for review are: Dee Estuary HRAs in February; Liverpool Bay SPA (where an extension to boundaries and species has just been designated), Lune Deep and Shell Flat in March etc. The reviews will all be documented within the spreadsheet document.

d) St Bees Head SSSI – Netting and Bird Entanglement and Disturbance

The Code of Practice agreed by TSB will begin on 1st March. This is a voluntary ban on netting by both commercial and unlicensed fishers including intertidal nets around St Bees Head to reduce risk of entanglement of breeding seabirds during the critical time. A press release and notices on quaysides have been circulated. IFCOS and science officers will monitor for compliance of the Code.

3. NWIFCA NEW VESSEL

Science Officers liaise with the NWIFCA Master to co-ordinate best times to visit Holyhead Marine and provide input to the science area conversions onboard North Western Protector. The Senior Scientist aims to include a substantial part of the science workplan for the year ahead as time aboard our new asset installing the equipment, familiarising officers with it and exploring what can be achieved with it, and starting to collect data with the sidescan sonar and drop-down camera units. The aim is also to plan some cockle surveys from the vessel when dried out at low water.

4. SCIENCE WORKPLAN FOR 2018

In addition to existing workstreams the science team would like to develop new areas of work this year as shown below. Depending on emerging priorities it might not all be feasible in one year, in which case it will be carried over to 2019-20:

- i. Familiarisation with new vessel, and equipment on board. Identification of further equipment that is needed and drawing up priority / timeline of acquiring it. Start of surveying with new vessel (eg. Cockle surveys; ground discrimination using Olex for suitable mussel ground; drop-down camera work for crab and lobster stock assessments);
- ii. Crab and lobster stock assessments;
- iii. Whelk stock assessment and work on increasing MCRS – working with TAG and CEFAS;
- iv. Bass tagging with CEFAS;
- v. Nephrops creels – feasibility of fishers diversifying – working with NE and WLT (NE are submitting a further bid for extended funding to an existing small project);
- vi. Small fish surveys programme development;
- vii. Shrimp boats investigation into by-catch – continue work with fishers in Solway / Morecambe Bay;
- viii. Shrimp tractor – investigation into by-catch discards – working with fishermen.

Intertidal cockle and mussel surveys will be carried out to inform management, and new staff training will continue.

5. CRAB AND LOBSTER FISHERIES DATA

Prior to her leaving NWIFCA Ms Aitken conducted an in-depth piece of work into crab and lobster fisheries data held by NWIFCA. Commercial crab and lobster fishers landing to ports in the District supply returns forms on their activities to MMO, and NWIFCA receive a copy. Paper copies of data from 2006 – 2015 was stored in the Whitehaven office. Ms Aitken collated and digitised this data and set up a database to which current data can readily be added. She analysed the data and provided a report for TSB on historical activity as far as can be deduced from the returns reporting.

The report provides an overview of effort and landings from 2006 – 2016 and is available from the website: <https://www.nw-ifca.gov.uk/app/uploads/Agenda-Item-10-Annex-A-TSB-Annex-A-Crab-and-Lobster-Report-Use-of-Landings-Data-08-01-18.pdf>

6. TAG – IFCA TECHNICAL ADVISORY GROUP

TAG meetings continue to be very interesting and provide a forum for discussion and exchange of ideas, as well as identifying collaborative science opportunities. Conference this year (end of February) will focus on whelks – almost every IFCA has identified an increase in whelk fishing activity and there are widespread concerns over the EU minimum landings size (45mm) being too low, and that immature stock are being fished legally. Crab and lobster will also be on the agenda.

National research into the non-native American lobster (*Homarus americanus*) progresses. NWIFCA science team and IFCOs have been keeping a close watch on the situation as far as it is known in the

District, where occasional catches of this highly aggressive species are reported to us, and fishers are encouraged to take one for the pot and not return it to the sea, regardless of its size. Cefas are hoping to get the go-ahead from Defra for a new project working with fishers to define what is currently known by them about *H. americanus* and the different perceptions they have. Research is also underway into hybridisation whereby the non-native species is able to reproduce with native European lobster (*Homarus gammarus*) although it is thankfully believed that the off-spring is not viable.

7. BASS MEASURES 2018

Defra's position on the EU Bass measures 2018 as of 27th December 2017 were:

"Following the recent announcement about fishing opportunities agreed at this year's December Council the Marine Management Organisation (MMO) can confirm that Council Regulation (EU) 2017/127 will remain in place until the new regulation is published in the Official Journal of the European Union in January. As such, all current control measures, including the specific restrictions on fishing for Seabass, currently remain in force.

We will be publishing further guidance soon with information on what the council outcome will mean for both commercial fishermen and recreational anglers in 2018 and our plans for regulation of this".

8. NORTH WEST MARINE PLAN

The Senior Scientist continues to remain engaged with the NW Marine Plan development and attended the SIMCelt conference in Liverpool, and registered for a further workshop in Whitehaven in February.

There are numerous developments relating to energy production proposed or underway along our coastline. Officers are not only attempting to keep current with the wealth of work, but also to respond to the variety of consultations coming through on the potential for impact on the marine and coastal environments. In the wings are proposals for tidal barrages across the Mersey, the Wyre and the Solway, and a tidal lagoon off the Cumbria coast, plus the following:

9. PREESALL GAS STORAGE AND MARINE MONITORING GROUP

Officers met with Halite in early January to clarify the NWIFCA position and role for the development of the gas storage caverns and brine discharge and to again highlight the need for engagement with fishery stakeholders over the brine discharge off of the Rossall coastline.

The construction of the brine outfall was due to start this summer with first brine discharge around October / November. Halite state that the current position is that contractors have been appointed to proceed with land based work i.e. site access/haul roads this year with marine works - brine discharge outfall - currently scheduled for 6-12 months behind programme. The delay will provide opportunity to ensure due time and consideration are given for the EA to agree the detail of the brine discharge monitoring through the Marine Monitoring Group.

Public engagement is carried out through the CLP (Community Liaison Panel) which will act as a forum for stakeholder engagement. Halite state that the CLP is chaired by an independent consultant with no current or previous relationship to the Preesall UGS Project. The panel comprises a broad range of individuals who represent community/stakeholders including representatives of the fishing community. Halite Energy are not a member of the panel and any requests should be directed to the panel direct at: clp@halite.net. Most recent request was for a presentation from the EA on their updated modelling of the brine discharge. The Senior Scientist has attempted to encourage CLP to hold a fisher stakeholder specific meeting to help inform and allay fears.

The main focus of NWIFCA involvement now is to be fully involved in the Marine Monitoring Group, to ensure that real-time monitoring of the brine occurs to assess its conforming to the modelling, and if not, that immediate measures are in place to cease operations.

10. WEST CUMBRIA MINE

Cumbria County Council carried out a consultation on “Further Information submitted in relation to a Mineral County Matter Application for Planning Permission accompanied by an Environmental Statement” for the West Cumbria Mine application near Whitehaven. Although it is acknowledged that this kind of proposal may bring investment and jobs to the local economy, there remains a large number of issues of concern over the potential impacts to marine and coastal receptors. The NWIFCA response raised concerns including:

- that all marine and coastal areas in the locality should be assessed for risk not just MPAs;
- dewatering of (existing old) mine and discharge – subject to EA permit;
- position of the discharge pipeline and diffuser – subject to MMO Marine Licence;
- during construction - physical mobilisation (such as soil erosion, run-off and sediment deposition); disturbance of existing contaminated soils during earthworks or increased infiltration; leaching once the soil is removed and areas of open excavations are exposed;
- storm water discharge – subject to EA permit;
- offshore subsidence – impact on shoreline profile and wave heights;
- offshore subsidence – resuspension and dispersal of radioactive contaminants.

Details of the mine proposals can be found via an online search through:

<https://planning.cumbria.gov.uk/Disclaimer?returnUrl=%2F>

11. NUGEN – MOORSIDE NUCLEAR POWER STATION AND NORTH WEST COAST CONNECTIONS

There has been no recent word directly from NuGen over the new build nuclear power station at Moorside. However a search online provides this update from CEO Tom Samson:

“For the last year, there has been a huge amount of work taking place, in west Cumbria, Manchester, London, Tokyo, and Seoul, as NuGen and its current shareholder Toshiba to secure the future of the Moorside Project.... after months of talks, Toshiba has granted ‘preferred bidder status’ to KEPCO, South Korea’s largest electric utility company, for the acquisition of NuGen. We’ve come a long way from the uncertain early months of 2017, when events unconnected with the Moorside Project caused NuGen’s parent companies to take a decision to leave the project, and sell the company. Now, the certainty increases by the day as Toshiba, NuGen and KEPCO move steadily towards concluding a deal which will see the South Korean utility become the shareholder of NuGen”.

Officers will continue to keep a watching brief during the coming months.

12. MMO Marine Licence and other consultations this quarter:

MMO Marine Licence consultations

Rumbling Bridge Remediation
Walney 2 Composite O&M Licence
Dong Energy - Middleton Outfall

Other consultations

West Cumbria Mining Further Information - Regulation 22 Planning Request

Byelaw 1 dispensations

Maryport Aquarium Lobster Hatchery – berried hens for educational display
Wyre Rivers Trust – scientific survey

Meetings and Training attended this quarter

Dee Fisheries Management meeting with NRW, Welsh Government and EA
Wyre Estuary Group
Halite meeting with NWIFCA Science Officers
MMO EMFF Roadshow Fleetwood
Love My Beach – Lune Estuary
Solway Firth Partnership

**Science Officers
20th February 2018**