

**NWIFCA Quarterly Meeting:  
11<sup>th</sup> March 2016: 11.00 a.m.**

**AGENDA  
ITEM NO.  
11**

**SCIENCE AND SURVEY UPDATE:**

**28<sup>TH</sup> NOVEMBER 2015 – 26<sup>TH</sup> FEBRUARY 2016**

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

**Recommendation:** The report be received.

**Introduction**

1. This report is for information. No decisions from members are needed at this time.

**Staffing and Recruitment**

2. As is usual at this time of year, the large spring tides fall during the hours of darkness and so opportunities for intertidal surveying are very restricted. The quarter has seen the new Science Team members attending mandatory training courses, and receiving in-house training from Ms Knott and Ms Temple. Mr Haines has been mainly tasked with carrying out HRAs with Ms Temple as part of the EMS Review and progress on this work has stepped up apace. He has also been assisting science and enforcement officers in creating a new format for shore sightings recording that will fulfil both teams' remits, and incorporating GPS data.
3. Having an additional member in Ms Carroll is proving extremely useful in that some of the work that previously dropped down the do-to list can now be tasked to her to look into. Both new Officers are very welcome and valuable additions to the NWIFCA.
4. However there is change afoot in the Science Team again as sadly we are losing Sarah Temple to the south coast and the MMO. Sarah has been an extremely valuable member of the team and will be sorely missed. We wish her all the very best for her future.
5. Meanwhile it has been agreed to extend Abi Carroll's role into a permanent post, following the end of the 12 month Defra funding. We will be welcoming a new science officer during mid-March, and despite the challenges of managing a heavy workload with training a new team, the Senior Scientist is anticipating building the work of the team, and looking forward to developing projects around the sustainability of our District's fisheries.

**Bivalve Mollusc Working Group (BMWG)**

6. Meetings held in November and January resulted in a further draft Management Plan for mussel fisheries in Morecambe Bay. The Plan documents agreement reached at the meetings and work outstanding to complete the plan. Good progress has been made and the draft plan was taken to TSB for further work to be approved.
7. The development of cockle stocks in Morecambe Bay in 2015 with the potential for a fishery in 2016 means the group is now reviewing its representation to ensure cockle interests are adequately represented. The group proposes to develop an agreed management plan for cockle stocks in Morecambe Bay. An initial draft cockle plan has been circulated to Officers and will be sent to BMWG Members to open the discussion.

8. The group is working constructively and positively and the resulting management plans should provide a strong base for future management of stocks, to be adapted for other fisheries within the District. The next meeting of the group is scheduled for early April.

### Assessment of Fishing Activities in European Marine Sites

9. Excellent progress has been made by the Science Team over the past three months in carrying out HRAs for fisheries occurring within EMS, in accordance with Defra's Revised Approach. The deadline of December 2016 – by which time management measures, if necessary, must have been introduced – is looming. Mainly due to extremely low effort in addition to the highly dynamic nature of our coastal environment, the only fisheries that cause any potential concern are the cockle and mussel fisheries, and shrimp beam trawling (boat and tractor).
10. However, with the suite of measures already used by the NWIFCA to manage these fisheries, including those within the Management Plan agreed within the BMWG, it is not believed that additional regulation will be required. The final decision on this cannot be made until the HRAs have been conducted, and any continuing concerns will be taken to TSB.
11. The Science Team look forward to a time when this work has been completed as it consumes an inordinate amount time, and we can then focus on other issues around sustainability of our fisheries and areas of research we would like to develop.
12. Update of assessments carried out to date, and work yet to be completed is shown in the table below. Cockle and mussel fisheries undergo individual HRAs as and when they occur at the present time until Management Plans have been adopted per estuary.

	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	14	0	0	2	12	(11) 13 <sup>th</sup> July 2015
TLSE	37	11	4	18	4	(4) 16/12/15
Appropriate Assessments (inc. TLSE)	10	4	4	1	1	(1) 16/12/15
<b>Totals</b>	61	15	8	21	17	-

### MCZ – Tranche Two Designations

13. The Minister announced the second tranche of MCZ designations on Sunday 17th January. For the NWIFCA two sites in Cumbria were designated:
- Allonby Bay - Members will recall the Authority provided protection to the *Sabellaria alveolata* reef there by extending Byelaw 6 outside of the EMS to cover the proposed MCZ. This site has a 'maintain' conservation objective;
  - West of Walney co-located with the windfarm and a site that straddles the 6 – 12nm limit and so requires joint management with the MMO. This site has a 'recover' objective and was mainly designated for its muddy habitats and associated infaunal species.
14. Ms Knott has begun discussions through the monthly national MPA conference calls over what next steps need to be taken regarding West of Walney, and is awaiting further information.

15. All documentation relating to the new MCZs can be found on the Defra website: <https://www.gov.uk/government/collections/marine-conservation-zone-designations-in-england>

### **NORTH WEST COAST CONNECTIONS - NATIONAL GRID work on routing options for 400KV cables from Moorside nuclear power station**

16. Due to the flooding in Cumbria meetings planned for the last quarter were cancelled. The Senior Scientist attended a meeting on 27th January where it was made clear that the preferred routing option for Morecambe Bay was for a tunnel under the Bay. As reported previously this will not impact on the intertidal areas and could bring substantial income and employment to the areas (Barrow and Heysham) during construction. Further work from the NG engineers has finalised that only one ventilation / emergency islet would be required, and Ms Knott has been vociferous in calling for NG to fully consult with and inform fisheries interests about the survey work to be undertaken, the positioning, the size and design of the islet. A full public consultation is due to take place for the full route from Moorside into the Grid's network starting in May. Some issues of contention still remain, especially around the Duddon Estuary.

### **Moorside Power Station**

17. The Senior Scientist attends the quarterly meetings of the relevant (marine) EIA meetings with Environment Agency, MMO and Natural England colleagues, and helps to facilitate dialogue with fishermen. The main issue of concern at the present time for fisheries interests is the Marine Offshore Loading Facility (MOLF) which is basically a pier to allow the landing off construction materials for the new nuclear power station to be brought in by sea. No firm designs have been produced on this as yet.

### **Cumbria Wildlife Trust Marine Trainees Partnership**

18. The Science Team continue to progress the partnership working with the WLT Marine Trainees scheme. Two reports are in production this year - the annual *Sabellaria alveolata* condition and distribution monitoring report from Heysham Flat, and a pilot study into Bird Disturbance from hand gathering activity – again at Heysham Flat. Final versions once approved will be published on both agencies' websites.

### **Mussel Fisheries**

19. **Ribble Estuary:** Seafield Road – following HRA, authorisations were issued for the harvesting of undersize mussel in a limited area at the bottom of the bed. Activity levels were low and fishing was stopped during November due to high e-coli sample results following heavy rainfall. The authorisations were extended into January but fishing stopped due to erosion and scouring of the resource through the harsh weather.
20. An inspection was carried out on 25<sup>th</sup> February to gain information about how the bed has developed, and whether the predictions of scour and erosion were fulfilled. Although not the best tide to see the bottom reaches of the bed (1.4m LW) it was clear that the area below the demarcation posts had badly scoured, as had the upper bed which previously had appeared more stable and held small mussel.
21. **North Morecambe Bay** A very low level of effort of hand-gathering of size mussel has been carried out throughout the last quarter. Reports are that Foulney has suffered from erosion from the storms and Officers intend to inspect the area on the first opportunity, along with the Falklands bed to assess whether the size mussel has persisted there. Should any fishing activity be carried out these beds will be subject to HRA to ensure that there is no risk to the integrity of the EMS. The fisheries will remain open unless during the course of the HRA it is considered necessary for management measures to be introduced. This is in accordance with all other fisheries that are undergoing HRA within the District.

## **Cockle Fisheries**

22. As previously reported the majority of the cockle beds within the southern part of the District were subject to significant recruitment during the autumn. A programme of surveys is being scheduled in for spring to assess remaining stock across all beds, including the Solway. There is some concern that the high rainfall and influx of fresh water and lowering of salinity on the beds may have caused cockle mortalities. It is frustrating not being able to survey the beds for another few weeks due to constraints.
23. **Morecambe Bay – Leven Island:** Members will recall that the Leven Island cockle bed in north Morecambe Bay was surveyed three times by Officers last year, following direct observations by Ms Knott and Officer Dixon of large amounts of cockles. However all three surveys failed to show substantial stocks, possibly due to weather conditions. Industry has requested that the bed be open, and therefore a further survey was carried out in February.
24. A grid of 72 survey stations 250 m apart was generated covering an area 1.75 km x 2 km (350 ha). 67 of these stations in the grid were sampled, and an extra 7 stations were added nearer to the channel to ascertain the edge of the bed. Means were calculated including the zero counts in the extra points at the edge of the bed.
25. Mean size cockles = 10 per m<sup>2</sup> (min. 0 max. 38). Mean undersize cockles = 79 per m<sup>2</sup> (min. 0 max 458). Distribution of size and undersize cockles can be seen in below. The size cockles present were of the 2013+ year group. The 2015 age group dominated. Very few birds were observed throughout the survey, a small number of gulls were seen following the survey team.
26. Proposals to open a restricted fishery here have been presented to TSB and a full update will be brought to the Authority for this meeting.

## **Authorisations and consultations this quarter**

27. MMO consultations:
  - a) Seacombe Ferry Terminal Building 2015 Soffit Repairs
  - b) Network Rail - Ravenglass and River Mite estuary revetments
  - c) Port of Workington Maintenance Dredging 2016-2018
  - d) Network Rail - Brantsy to Parton Sea Defences
28. EA consultation: Mossband flood Embankment (Carlisle)

## **Meetings, workshops and courses attended**

- a) National MPA Conference Calls – monthly
- b) North West Coast Connections – Stakeholder Reference Group meeting
- c) National Grid – tunnelling option – marine topic meeting
- d) River Angling meeting - North West Angling Trust Fisheries Consultative Council, Lancaster
- e) National cockle review – meeting with Andrew Withers – NOC
- f) United Utilities – Anchorsholme outfall meeting
- g) Seal Survey at Walney with Cumbria Wildlife Trust Marine Trainees
- h) TAG national conference
- i) Coastal Futures - London
- j) IFCO Enforcement Training – Torquay
- k) ATV course
- l) MMO Fisheries Non-Enforcement course, Newcastle

**Senior Scientist**  
**29th February 2016**