

NATIONAL MARINE BIOLOGICAL AQC SCHEME / BEQUALM
Meeting 24/01/2013
Meeting minutes

Attending: Tim Mackie (TM, Chair, NI EA), Mandy Prior (MP, Finance Manager, EA) Myles O'Reilly (MoR, SEPA), Claire Mason (CM, CEFAS representative), Richard Arnold (RA, Contractor), Carol Milner (CMi, Contractor representative), Astrid Fischer (AF, Technical Secretary SAHFOS)

Apologies: Keith Cooper (KC, CEFAS), Joe Silke (JS, MI), Raphael Salas (RS, MI), Clare Scanlan (CS, SEPA), Gavin McNeill (GM, AFBI)

1. Last Meeting Actions

1. Priorities paper outcomes from HBDSEG meeting

The priorities are still epibiota and zooplankton component development.

2. Phytoplankton

Action: JH to send the zooplankton questionnaire to Cathryn Cook. *Done*

3. PSA

Action: MP to forward details of labs which are overdue to JT. *Done*

4. Benthic Invertebrates

Action: JT to look to find a bigger venue for the benthic inverts workshop.

RA: We now have good facilities at Business Centre East in Letchworth, a whole floor can be set up there, I would guess enough room for 30 participants.

MoR: I assume that Thomson would waive the bench fee for the venue? Dove laboratory was a good venue but the bench fees have risen and made it too expensive.

CMi: Another option would be Millport Marine Station as they are struggling financially so may be able to do a deal.

MoR: Have used Millport before and is a good venue but would need to be wary of booking ahead only to find station closes before workshop.

TM: Are there microscope facilities at Thomson?

RA: Yes.

Action: JT will send a finalised time table out for the workshop.

RA: Has taken over from JT and given us an updated report.

5. Macroalgae

Action: JH to chase the Estonian lab to see if they are still interested. *Done*. They are participating in the RM-RT and OBM-RT Macroalgae ring tests. **New**

action AF to send information to MP.

Action CS to chase feedback from Emma.

6. Epibiota

Action: JH to organise a teleconference to discuss the development of this scheme component. *Done*.

7. Fish

8. AOB

Action: JH to send out examples of a best practice guide to Niall so that he can write a guide for saltmarsh mapping. *Done*.

MP: A first draft of the Saltmarsh mapping standards is near completion, and should be ready in three months time. TM to take this forward on his side.

Action: MoR to clarify how the AQC status actually appears in Merman for subcontracted labs by getting a Merman export of AQC status from a CMA that has used subcontractors. *Done*

Action: MoR to instruct BODC to export Summary of Merman AQC Results 1999-2008 to each CMA and CC these to MoR.

Action: CMAs each CMA to check Merman exports against Summary of CSEMP Own Sample Audit 1999-2008 and report any mismatches to MoR. **Action: MoR** to clarify if and how un-AQCed data can be accessed.

Action: MoR to amend the introduction to the Summary of CSEMP Own Sample Audit report to provide fuller explanation of the issues encountered.

MoR: These last few actions I have been unable to complete due to confusing anomalies within the data. With SEPA data, for example, 6 years of AQC data are missing and AQC data for 2014/2015 is already "Passed"! I want to modify David Hall's AQD Audit summary to make it more useful and to send a pass/fail status to all CMA's, for them to comment on and reply back. E.g. SEPA had failed on an occasion but there had been remedial action. **New**

Action MoR: to chase up agencies to see if they agree with the fail/pass on the audit reports for invertebrates.

It is also unclear why pre 1999 data has not gone in.

TM: is there any issue with ICES about the data having no QA flag?

MoR: this never came up.

TM: Had a request from Merman to see if we look into data formats about bio-effects.

CM: CEFAS does some work on imposex (sex change in dog whelks due to TBT pollution).

MoR: SEPA did this type of work before, together with MSS. Very few waters fail under the WFD, therefore there is no driver for this monitoring in SEPA.

Action: MoR to investigate a suitable venue for the Edinburgh meeting. *Done*.

Meeting

1. Priorities from HBDSEG

TM: David Johns (SAHFOS) has volunteered to be the temporary chair for NMBAQC, but is awaiting approval from Defra. The priorities of the HBDSEG remain the same, and gaps are identified by the Marine Strategy Framework Directive. Recent work by Jane Hawkridge revealed that there may be QA gaps for the monitoring of seabirds, seals and turtles.

2. Phytoplankton update

JS (via email): We completed the Phytoplankton Intercomparison exercise for 2012 with a 2 day workshop in Hillerod, Denmark on 3 and 4th December with

participants attending a training and discussion session. The outcome was very positive and we are just putting the finishing work on the Intercomparison 2012. Report which will be issued to participants and to committee to be put up on the Website.

3. PSA

CM: Although there is now QA for PSA, the workshop did not go into fieldwork practise. You normally do a 0.1m² grab for biology and a supporting grab for PSA which should be representative. Cefas does work offshore and therefore uses a different methodology to other labs who only sample inshore.

TM: Cross-linking of data is needed to resolve problems.

MoR: You have to focus on results and then set standards for AQC Pass/Fail. The PSA data has gone to Merman for years without AQC Pass/Fail on it. The UK Agencies are producing a new version of the IQI (Infaunal Quality Index) tool in which you can actually enter your own associated PSA data. From a scientific view we would advocate the use of real PSA data to support the WFD Invertebrate Classification. EA and SEPA will probably use their own real PSA data to work out the WFD Invert classifications, instead of the broad sediment categories used before. Hence for NMBAQC it will be more important to show that the PSA data used has passed a AQC standards..

TM: IQI results may respond more dramatically to the actual results. We need to see how the IQI component is driven by PSA data. If we are applying it to get a pass, but it is 30% out because of the inaccuracies in the IQI analysis, then it may pass the IQI classification out. The PSA should support the biology based on the sample.

CM: the pass/fail level will show the significance.

Action TM to forward copy IQI to CM.

Action CM to test IQI tool with different sediment compositions and come up with IQI levels of significance that we could then use to determine biological (IQI) significant limits for PSA ring test.

4. Benthic Invertebrates

RA: Has given us a report on the progress (attached).

Verbal update: There is still some ongoing work from year 18. There are 5 sets of own samples that need to be completed, everything else has been done.

For year 19 there has been an extension to the RT43 deadline until mid December, and 21 out of 24 labs have returned data, we have started analysis on this. We have also started on RT 44.

For LR17 4 out of 12 sets of specimens have been received and we are awaiting the others to come in.

For OS 50-52 we have received 21 out of 33 datasets, haven't started analysis of reporting on this yet.

For MB20 5 of 7 samples have been received. We have not started on analysis yet.

MoR: you should chase up the outstanding submissions.

RA: yes this is in hand. We have a protocol of 3 reminders, if nothing received after 3 reminders, the submission will be ignored.

Action RA to chase up outstanding submissions.

MoR: The RT42 bulletin has not been received. There were two taxa that were sent out for external expert review.

Action RA to look into this.

MoR: David had updated the taxonomic database (Version 3). This will not be on the web, as it is an incentive for participants to join the scheme. However, it should be sent out to current participants.

Action MoR to send taxonomic database to TM by email to see if this is an option to send it to participants.

5. Macroalgae

RT07 Rocky shore algae identification

- 7 labs subscribed in 2012, so far only 5 have subscribed for 2013, although 1 additional foreign lab had expressed interest in joining.
MP: CCW and EPA have recently signed up for this test.

OMC RT04 Macroalgal blooming and seagrass % cover

- 11 labs have signed up for this component; all but 1 are agencies. Last year 13 signed up, though only 12 submitted results.
MP: CCW also signed up for this test.

OMB RT04 Biomass

- 10 labs have signed up for this component, 1 more than last year. Again these are agencies.

Certificates

- Certificates of participation were requested by some participants. These have not been sent out before, but will be from this year. As largely the same labs are participating, they can also be sent retrospective certificates for year 18.

MoR: do they want the NMBAQC embossed stamp on these certificates? If so they will need to come to me for stamping.

MP: I have sent some examples to CS - they will decide what to use, but it needs to be sorted by the next meeting.

Action AF to contact Emma Wells and CS to chase up Macroalgal certificates.

Pass rates

- These have been discussed previously, and will be discussed further with the scheme operator in time for reports to be sent out.

WFD Biological Standards Consultation and Intercalibration

- BS Consultation – the UK is currently consulting on all of the biological methods used, which have changed in some way since 2009 or are new methods. These can be viewed via the UKTAG website, and the consultation finishes at the end of February. The drafting process threw up some anomalies between UK agencies, and these need to be discussed

and agreed through the Marine Plants Task Team and Marine Task Team. For newer methods such as seagrass and saltmarsh there are currently no fully agreed quality criteria. The saltmarsh method in the consultation only applies at present to England & Wales.

MoR: The WFD invertebrates (IQI tool), transitional water fish tool, and other WGFD tools are all on their website and worthwhile to look at.

- It was agreed that it would be sensible to host any lists of taxonomic literature on the NMBAQC website, as agreed at the last NMBAQC meeting.

Action AF to ask CS what she means with regard to taxonomic literature list as searchable list formats may be more complicated to produce.

- WFD Intercalibration – only TW fish and CW rocky shore macroalgae were approved in Phase 2 of intercal, and the Commission has given us more time to carry out further work. There is a meeting on 24th/25th January to discuss how this will be taken forward. (CS is at this meeting).

6. Epibiota

There are many contractors and agencies practising epibiota monitoring, including Seastar, Envision, JNCC, SEPA and CEFAS. When the questionnaire to gauge interest was originally sent out, 75% of the people showed interest thinking it was a training exercise, which shows the desperate need for QA in this sector. The idea is to 'survey once, use data many times'. We need to advocate best practise and set some fail/pass level.

TM: The level of expertise is also important, you should not try to identify below the level of what you can be certain off. You basically shoot some video, and then use a scoring matrix for that video.

AF: do the videos have a scale-bar in it?

TM: Some of the videos have a laser scale (you can identify size at all ranges), some have a ruler (you can only identify size close by). It is also important to know exactly where the sample is taken. Some methods include a transponder on the vehicle that sends a GPS signal to a responder aboard survey vessel. There are different levels of accuracy, and it can get real accurate (e.g. bathymetry measurements for hydrological centres) but at a cost.

TM: the same positioning issue is true for deploying grabs, e.g. slope on grab cable in shallow waters. It can also be a problem depending on the size of the boat and the place of the GPS on the boat, and the way the boat is lying in the water compared to the GPS receiver. Therefore there will also need to be an associated QA for sample collection. So far TM has had videos from CEFAS and JNCC.

Action CMi to send TM some videos and supporting assessment.

Action AF to start writing a 'Best practice' document using MESH guidelines.

7. Fish

See report by RA. Verbal update: RRT: 22 out of 24 sets are analysed, and results are being collated. RT samples are due out on 4th February, we are gathering the material together now. We are up-to-date on the fish component.

TM: there is now a WFD UK fish tool for transitional waters being developed by Trevor, based on NI dataset, which gives response to pressures. However, there is a chance for false positives (high status where it should be low) or false negatives (due to low biomass). There is a metric for key indicator species as required in Water Framework Directive (details are available on UKTAG website).

There is an outstanding need for a fish person on the committee of NMBAQC to replace Steve Coates who left (the EA) to form his own consultancy. The last NMBAQC Fish Workshop had to be cancelled as most of the prospective participants had already signed up to and alternative workshop organised by Steve Coates in his new consultant role! Agencies doing offshore fish work are focussed on commercial fish work and have shown minimal interest in fish QA to date but hopefully the upcoming need to monitor for the MSFD may change this viewpoint. **Action CM to ask a few fish people in CEFAS to see if they are interested in becoming involved in the NMBAQC.**

8. AOB

Action MP to reply to email from Andy Walker regarding access for AF to NMBAQC web site.

NMBAQC Information Note / Application form for Year 20 2013/14 and new timetable to be completed by April. **Action all to agree contributions and send to AF for inclusion.**

Fish workshop: Normally held every two years. Was cancelled last year due to coinciding with another fish workshop. **Action AF to gauge interest for fish and for macroalgae workshop in year 21.**

News items on web site. **Action TM to forward courses to AF.**

CMi: Some Cefas work has gone through the EU - has this QA not gone through NMBAQC?

TM: all contracts have a sentence in them saying QA should go through NMBAQC or a similar scheme.

CMi: Fugro is worried about the continuity of the scheme.

Action TM to send an email out to all participants to confirm continuity of the NMBAQC scheme.

Date of Next meeting - 18th April 2013 - Teleconference