

MORAY FIRTH RENEWABLES ADVISORY GROUP (MFRAG) MEETING MINUTES

Meeting	MFRAG Main Group	
Date	11 th June 2020	
Location	Skype call	
Attendees	SAMS	Ben Wilson (BW) [Chair]
	Marine Scotland Licensing Operations (MS-LOT)	Gayle Holland (GH)
	Marine Scotland Science (MSS)	Jared Wilson (JW), Marion Harrald (MHa), Ross Gardiner (RG), Kirsty Wright (KWr)
	Marine Scotland Planning & Policy (MS-PP)	Janelle Braithwaite (JB)
	Scottish Natural Heritage (SNH)	Erica Knott (EK), Chris Eastham (CE)
	Fisheries Management Scotland (FMS)	Alan Wells (AW), Keith Williams (KWi)
	BOWL	Joe Deimel (JD), Mark Mulqueeney (MM)
	Moray East	Carlotta Gradissimo (CG), Chris Newman (CN)
	Royal Haskoning (Moray East ECoW)	Alexia Chapman (ACh)
	Moray West	Sarah Edwards (SE), David O'Sullivan (DO)
	APEM	Marc Hubble (MHu), Ashley Cordingley (ACo)
Actions	<ol style="list-style-type: none"> 1. JD to issue 2019 BOWL aerial survey report to group when finalised. 2. BOWL will discuss with MSS whether there would be interest in MSS acoustic monitoring for sandeels being carried out alongside BOWL sandeel surveys. 3. APEM (MHu and ACo) will finalise hard substrate sampling methodology, BOWL will forward this to group and then set up a call to discuss. 4. INSITE proposal to be circulated again to the group. 5. Interested members of the group to participate in discussions on updated research proposal. 6. JB to provide information to SE on MSS cumulative assessment project. 7. EDPR to issue Doodle poll for mid-late July MFRAG-O meeting 8. JB to forward papers on biofouling to JD. 9. EDPR to organise next MFRAG main group meeting. 	

1. Introductions and Purpose of Meeting

Introductions made.

2. Review of Minutes of Meeting from previous meeting (20th November 2019)

KWi noted that minutes should ensure that name abbreviations are unique to the different participants – minute takers will ensure this is done

Status of Actions from previous meeting:

1. MS-LOT to make final amendments to ToR as discussed and upload to Marine Scotland website.
[Done – uploaded to Marine Scotland website.](#)
2. BOWL to provide copy of pre-construction aerial surveys results to MSS.
[Carried over – JD will send report to JW.](#)
3. MSS to confirm suitable vessel for acoustic monitoring for BOWL sandeel surveys.
[JD will discuss with MSS.](#)
4. BOWL to set up group call to discuss strategy for benthic survey and send survey scope to SNH.
[MHu will finalise survey scope, JD will issue to MFRAG and set up a call to discuss. EK and MHa confirmed interest in joining a call \(See section 3.2 of these minutes\).](#)
5. BOWL to provide report on findings from biofouling survey and strategy for removal to group.
[JD will provide this to group when initial draft completed, for discussion with MFRAG prior to finalisation of approach.](#)
6. Bowl to look at SSE projects in English waters and see how biofouling is addressed and update the MFRAG group at the next MFRAG meeting.
[Done – JD informed group that there is minimal biofouling \(seaweeds\) at Greater Gabbard, the SSE site off the Suffolk coast. This may be due to increased water turbidity at this site compared to the BOWL site.](#)
7. MSS to discuss with JB requirement for biofouling evidence maps (ScotMER).
[MHa noted to group that a paper based on a Swedish site shows there is enrichment of biological communities under the site. However, this was based on evidence from tidal projects. MHa suggested incorporating monitoring of seabed into research programmes where possible. GH – this is a new scenario \(not previously investigated\), will be picked up for future consenting rounds.](#)
8. Impacts of biofouling removal on marine mammals and ornithology to be considered at next MFRAG sub-group meetings. [JD Note – discussion continues in Section 3.2 of these Minutes]
[JD – APEM are finalising methodology for BOWL benthic survey \(currently planned for September 2020, Covid-19 restrictions permitting\) which will include monitoring of biofouling. BOWL have looked into at mechanisms for capturing marine growth as it is removed from infrastructure, however suitable technology for use in open sea on complex large-scale structures has not yet been developed.](#)
[MHa – Has a colleague in the Netherlands who has been looking at a suction device for this.](#)
[MHu – Survey design assumes transects covering area up to 50 m from scour protection.](#)
[JD to confirm where proposed 50 m monitoring zone originated.](#)

EK – do APEM have any thoughts on what would be a good monitoring strategy? Could the current seabed monitoring zones (50m) around the nominated jackets be extended? This to be included in the benthic survey scope.

AW - SEPA have lots of experience monitoring benthic impacts from seabed enrichment around fish farms. Possible guidance from there on 50 m monitoring zone. MHu to check.

AW – how will MSS / SNH be considering biofouling for future projects?

GH confirmed biofouling will be covered in impact assessments for future projects.

EK – BOWL and APEM to look at the 50 m monitoring zone and provide detail on this in method statement for benthic survey.

BW – parallels with investigations by SAMS into oil and gas decommissioning.

EK – BOWL to keep ME and MW in loop as may be relevant also for these projects.

MHu – if APEM prepare a Method Statement in the next couple of weeks can MFRAG provide comments soon after then? [JD note 08/07/20 – Method Statement is being finalised, and will be issued to MFRAG shortly]

EK – scope for benthic survey / monitoring also to include consideration of effects on seabed of marine growth removal.

9. MSLOT to confirm herring surveys not included in BOWL PEMP Condition.

Confirmed.

10. JW to provide update on INSITE proposal and possible links to fisheries once result announced in March 2020.

JW provided an update to the meeting – proposal was not successful in application for funding under INSITE. SNH are interested in investigating alternative funding sources for the proposals (see Section 6 of these minutes).

11. Developers to lead on discussions on strategic research at next meeting.

A full-group discussion on strategic research (including developers) was carried out (current meeting), this worked well. Action effectively closed-out.

12. Developers to update PEMP to include links to relevant ScotMER evidence maps and data gaps.

Group discussed requirements of this – most useful will be for the relevant data gaps to be noted in the PEMP monitoring descriptions that may be related to these gaps.

BOWL will prepare final draft PEMPs (wind farm and transmission assets) including text on linkages to ScotMER, to discuss with JB and GH.

Moray West to include section in introduction to PEMP on how monitoring surveys link to ScotMER and existing data gaps for specific receptor groups. Also consideration for Moray East (although PEMP complete – reference to be added for PEMP updates).

13. MFRAG secretariat to issue Doodle poll with potential dates for next MFRAG meeting (possibly end of May 2020).

Done (current meeting).

3. BOWL Project

3.1 BOWL project update

JD provided project update - Covid-19 restrictions have required adaptations to Operations & Maintenance working practices at Beatrice. A tactical service approach is being followed, with only essential tasks being undertaken. Required statutory inspections are also underway.

Actions	None
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3.2 BOWL monitoring update

JD informed group that the 2019 aerial bird survey report will be completed soon. BOWL will issue to group when finalised.

JD provided update on 2020 monitoring programme:

2020 aerial bird survey postponed to 2021 due to Covid-19 restrictions.

Site reconnaissance for tagging at great black-backed gull cliff-top colonies at East Caithness Cliffs postponed to 2021 due to Covid-19 restrictions. It is now planned to carry out feasibility investigations for netting great black-backed gulls at sea (within the BOWL arrays) at the same time.

Desk-based investigations have started into using new AI image analysis techniques for puffin monitoring.

Sandeel surveys scheduled for November 2020, cod surveys scheduled for February/March 2021. BOWL will discuss with MSS whether there would be interest in MSS acoustic monitoring for sandeel being carried out alongside these surveys.

Subsea surveys for engineering checks (including scour and marine growth monitoring) scheduled for summer 2020.

Benthic surveys now rescheduled from June 2020 to September 2020, due to Covid-19 restrictions.

MHu explained that for site characterisations, September surveys are acceptable. During grab sample analysis, juveniles would be separated from adults. Asked group if September survey would be accepted, and for future years, whether June or September surveys would be preferred?

MHa thought a September survey would be ok, and that this could be acceptable for future survey years.

MHa asked to look at the results of June v September and take a decision based on that for future years but is not opposed to it being September. This was backed up by JW.

JW advised that a further discussion be had once 2020 survey results are received. MHu explained that samples should be processed, and results available, a couple of months after surveys.

MHu provided further information on hard-substrate (jacket) monitoring; an ROV will travel from the top of the jacket down to the base, and then out to 50m along the seabed, recording HD video – would freeze-frame from HD video be acceptable for stills imagery? Explained that ROV would be stabilised to give as clear an image as possible.

<p>JD informed the group that marine growth removal strategy was so far informed by engineering studies carried out in 2019. JD also advised that depending on the location of the marine growth on the turbine jackets, it could be either 50mm or 100mm in thickness before it would need to be removed.</p> <p>JD advised that OTM structures that have anti-fouling paint applied are not experiencing marine growth to the same extent and therefore would encourage wider use of the product on future projects.</p> <p>ACo further explained that the ROV will halt while any imagery from which stills are derived is taken.</p> <p>MHa confirmed this would be acceptable.</p> <p>APEM (MHu and ACo) will finalise hard substrate sampling methodology, BOWL will forward this to group and then set up a call to discuss.</p> <p>JD advised that the bio-fouling removal would not be required annually. With the evidence currently at hand it suggests a removal programme may be required at each turbine every 2-3 years, but this may be revised when further survey data is available.</p>	
Actions	<ol style="list-style-type: none"> 1. JD to issue 2019 BOWL aerial survey report to group when finalised. 2. BOWL will discuss with MSS whether there would be interest in MSS acoustic monitoring for sandeels being carried out alongside BOWL sandeel surveys. 3. APEM (MHu and ACo) will finalise hard substrate sampling methodology, BOWL will forward this to group and then set up a call to discuss.
4. Moray West Project	
4.1 Moray West project update	
<p>SE provided a Moray West project update – see accompanying slide deck.</p> <p>Note change of logo to differentiate the Moray East and West projects.</p>	
Actions	None
4.2 Moray West monitoring update	
<p>SE noted that the Moray West PEMP has a requirement for socio-economic monitoring.</p> <p>EK recommended that this work be kept separate from MFRAG discussions, although the group would be interested in receiving updates.</p> <p>GH has a colleague (Kate Barclay) who can help advise on socio-economic assessments.</p>	
Actions	None

5. Moray East Project	
5.1 Moray East project update	
CG and CN provided a Moray East project update, including the Missing Salmon Project – see accompanying slide deck.	
Actions	None
5.2. Moray East monitoring update	
CG explained that UXO noise monitoring has been incorporated into piling monitoring, with results hopefully available for the next MFRAG meeting.	
Actions	None
6. Strategic Research	
<p><u>INSITE proposal</u></p> <p>EK explained that not much feedback had been received on why the University of Aberdeen INSITE proposal had been unsuccessful. However, this a valuable research idea, using an ecosystem approach. It would make sense to work on the proposal a bit more, to submit as an East Coast ScotMER project for alternative funding (such as the Crown Estate Enabling Actions Programme). Would look for a proposal that all can support; would the developers in principle support involvement?</p> <p>EK - the current thinking is to try to gain 100% funding from alternative sources and not developers, but it may be required as a back-up.</p> <p>JD confirmed that BOWL (subject to JV-board approval) and SSE more widely, would support involvement.</p> <p>BW – is this ORJIP related? EK – doesn’t think so at this point, but all funding options can be looked at.</p> <p>MHa – would be helpful to send INSITE proposal around the group again.</p> <p>EK – will require some discussions to look at any required amendments to the proposals, and to decide what questions the research should address. MFRAG will be involved in these discussions.</p> <p>DO – at a recent FLOWW meeting, Crown Estate mentioned they’re keen for new ideas to come through for submission to the Enabling Actions Programme.</p> <p>EK – SNH have had initial discussions with Crown Estate, they are interested, as this has UK-wide relevance.</p> <p>SE – Moray West would be interested.</p>	

CN – as CN and CG haven’t been involved in previous INSITE discussions, they’ll discuss with Catarina Rei and then get back to the group.

General

SE – Moray West are at the start of their monitoring work. For their pre-construction aerial surveys, is there scope for input into work that could be strategically useful to the industry, such as LIDAR measurements of flight height?

JB – MSS are preparing a project on cumulative assessments, including LIDAR studies. There may be scope for Moray West to participate. JB will provide further information to SE, and JW and Tom Evans would be good contacts on this.

EK – this is a positive discussion, could encourage participation in collective monitoring, potentially with funding from other sources.

JB – is meeting with ScotMER ornithology group. Would better visibility on what developers can participate in be helpful to the group? SE – yes, that would be very helpful.

Actions	<ol style="list-style-type: none"> 4. INSITE proposal to be circulated again to the group. 5. Interested members of the group to participate in discussions on updated research proposal. 6. JB to provide information to SE on MSS cumulative assessment project.
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7. Plans for next MFRAG-MM and MFRAG-O meetings

General discussion on relationships between MFRAG main and specialist groups. SE noted that sub-groups are very useful for more detailed discussion of specialist topics.

CN – current main Moray East focus for MFRAG-MM is analysis of noise data. Moray East are setting up a call with Paul Thompson and GH to discuss how results are written up; would like to have next MFRAG-MM meeting in August to allow time for write-up.

GH – would welcome comments from MFRAG-MM on how write-up is carried out.

CN – good approach would be to have the call with Paul Thompson and GH first, and then plan the best date for a MFRAG-MM meeting, for further discussion on write-up.

SE – Moray West are flexible on date, as the piling strategy will be their main discussion point, and this is flexible time-wise.

GH – could be good to have MSS and SNH in initial call, then have MFRAG-MM meeting following results presentation.

SE/EK – this could also be a good approach for the Moray West piling strategy.

JD – suggested mid-late July for next MFRAG-O meeting; secretariat will issue Doodle poll.

Actions	7. EDPR to issue Doodle poll for mid-late July MFRAG-O meeting
8. AOB and close	
<p>JB – has found some papers on biofouling; will pass to JD.</p> <p>SE – EDPR will organise next MFRAG main group meeting (potentially October/November)</p>	
Actions	<p>8. JB to forward papers on biofouling to JD.</p> <p>9. EDPR to organise next MFRAG main group meeting.</p>

List of Abbreviations	
BOWL	Beatrice Offshore Windfarm Limited
FLOWW	Fishing Liaison with Offshore Wind and Wet Renewables Group
INSITE	Influence of man-made Structures In The Ecosystem
Moray East	Moray Offshore Windfarm (East) Limited
Moray West	Moray Offshore Windfarm (West) Limited
MFRAG	Moray Firth Regional Advisory Group
MFRAG-MM	Moray Firth Regional Advisory Group – Marine Mammals Subgroup
MFRAG-O	Moray Firth Regional Advisory Group – Ornithology Subgroup
MS-LOT	Marine Scotland Licensing Operations Team
MSS	Marine Scotland Science
ORJIP	Offshore Renewables Joint Industry Programme
ScotMER	Scottish Marine Energy Research (previously SpORRAn)
SNH	Scottish Natural Heritage
ScotMER	Scottish Marine Energy Research
SpORRAn	Scottish Offshore Renewables Research Framework (now ScotMER)
UoA	University of Aberdeen
WDC	Whale and Dolphin Conservation