Wales Land Management Forum (WLMF) Sub Group on Agricultural Pollution

Minutes

Title of meeting:

Wales Land Management Forum (WLMF) Sub Group on Agricultural Pollution

Location: Microsoft Teams Meeting

Date of Meeting: 21st March 2022

Present:

Zoe Henderson, NRW (Chair)

Bob Vaughan, NRW

Dennis Matheson, TFA

Marc Williams, NRW

James Ruggeri, HCC

Edward Davies, NRW

Chris Mills, WEL

Einir Williams, Farming Connect

Shane Thomas, Carmarthen Fishermen's Federation

Geraint Hamer, Welsh Government

Creighton Harvey, Carmarthen Fishermen's Federation

Chris Thomas, NRW

Fraser McAuley, CLA

Andrew Chambers, Welsh Government

Mathew Walters, Welsh Government

Sarah Hetherington, NRW

Sarah Jones, Dwr Cymru

Nichola Salter, NRW

Kate Snow, United Utilities

Gareth Parry, FUW

Additional Attendees Present:

Professor Paul Withers, Lancaster University (Item 3) Dr Shane Rothwell, Lancaster University (Item 3) Gareth Foulkes, Binnies (Item 4) Simon Clarke, Binnies (Item 4) Jenny Marshall-Evans, Binnies (Item 4) Rachel Sharp, Wildlife Trust Wales Karen Whitfield, Wales Environment Link Andrew Tuddenham, National Trust James Hitchcock, Radnorshire Wildlife Trust Georgia Arnot, NRW Polina Cowley, Welsh Government **Secretariat:** Bronwen Martin, NRW **Apologies:**

Rachel Lewis-Davies, NFU Cymru

Ruth Johnston, NRW

Bernard Griffiths, FUW

Charlotte Priddy, AHDB

Item 1 Introductions, Apologies and Declaration of Interest

- Zoe Henderson, NRW welcomed all to the Microsoft Teams meeting and noted apologies. Please note that the meeting is being recorded for the purpose of capturing the minutes and the digital file will be deleted once the meeting minutes have been approved.
- 2. No declarations of interest were raised in respect of Agenda items.
 - NB: All members of the group have completed declaration of interest forms already but should also declare if they have an interest in anything on the agenda.

- 3. Zoe welcomed the guests to this meeting including Professor Paul Withers and Dr Shane Rothwell (Lancaster University) and Simon Clarke, Gareth Foulkes and Jenny Marshall-Evans (Binnies). Additional WEL members have also been invited to listen to the RePhoKUs Project presentation, including representatives from Wildlife Trust, Radnorshire Wildlife Trust, Llais y Goedwig and National Trust.
- Fraser McAuley, CLA mentioned that the overview of the CLA nutrient neutrality guidance note is postponed until the next meeting because it is being reviewed prior to it being published.

Item 2 Review of Minutes

- 5. The Chair confirmed that once the meeting minutes have been reviewed and formally agreed by the group, they will be published on the NRW for the public to access. Therefore, it is important that the minutes are an accurate record of the meetings.
- 6. The group reviewed the previous meeting minutes from 21st February 2022. Comments were received from Creighton Harvey, CFF prior to the meeting. Creighton asked for paragraph 33 to be expanded to include comments in relation to the Panorama program. Creighton clarified that this would include reference to the fact that the farm was a Red Tractor farm, demonstrating the problem with farm assurance schemes in that certification can be meaningless (certification might be given but once the inspector leaves the farm there is no control over what happens on farm). Creighton also suggested that Bernard's comments regarding the program should also be included in the minutes.
- 7. No other amendments were received in respect of the February meeting minutes.

Item 3 Matters Arising

- 8. Zoe welcomed the group to discuss any matters arising from the previous meeting minutes or relevant documents.
- 9. Chris Thomas, NRW provided a brief verbal update on the Dairy Project. The Dairy Project has received an official extension and has been extended for 12-months to the end of March 2023. Currently, the primary aim is to recruit all of the vacant posts so that full speed can be resumed shortly. Zoe recalled that short term Government funding for these types of positions means it is difficult to retain people and this process is being looked at. Creighton agreed that it is not helpful that the project is funded on a yearly basis and suggested that it should be permanently funded. Agricultural pollution is not going to go away and farmers need help. Chris said the future of the project is looking positive.
- 10. Dennis Matheson, TFA asked about the status of the Welsh Government Frequently Asked Questions (FAQ) document, as it is still in draft form. Dennis also asked whether a replacement for Spencer Conlon, Welsh Government has been announced yet. Andrew Chambers, Welsh Government said one of the challenges regarding the Control of Agricultural Pollution Regulations is that they are still subject to Judicial Review (JR). The WLMF Sub Group has been asked this to comment on the draft FAQ, but some members of the of the group have not been able to bring forward their comments because of the ongoing JR process. As soon as that is resolved, the FAQ

can move forward and will then be published. Regarding Spencer, there is no news regarding a replacement yet.

Zoe and Creighton asked whether there was any news on the progress, status or timescale of the JR. Andrew was not in a position to comment on this matter.

Item 4 Presentation: RePhoKUs Project

Note: At the time of this meeting the data presented had not yet been published, therefore limited details are included within the minutes and a copy of the presentation slides was not circulated to attendees.

- 11. Professor Paul Withers and Dr Shane Rothwell (Lancaster University) joined the meeting to provide an overview of the <u>RePhoKUs Project Lancaster University</u> which aims to re-focus phosphorus (P) use in the UK food system in order to achieve sustainable phosphorus use and deliver valued ecosystem services such as clean water and biodiversity. RePhoKUs stands for 'resilience of phosphorus in the UK food system' (UK is spelled backwards) and has been a useful acronym because that is exactly what the project is all about; refocus.
- 12. Professor Paul Withers is a Catchment Scientist from Lancaster University and Dr Shane Rothwell is a Senior Research Scientist at Lancaster University. There is also another member of the team, Dr Kirsty Forber, who was unable to join the meeting this morning. This project also involves Leeds University and a sustainability group in Australia. Paul said this presentation will concentrate much more on the biophysical side of the project. This project has had quite an impact and is going to finish at the end of this month (March 2022).
- 13. The project is part of the UK Government's Global Food Security Program. The full project title is 'The Role of Phosphorus in the Resilience and Sustainability of the UK Food System'. The key objective is to better understand and develop ideas and ways to manage phosphorus more efficiently, sustainably and to increase resilience against any future threats. There are two key issues, one about the widespread water pollution of our rivers, lakes and coastal waters and the other one which is not mentioned so much, is issue of wasting a finite resource.
- 14. Paul explained that the UK does not have reserves of phosphorus of its own to rely on and most of our fertiliser is imported from Russia. The recent situation in Ukraine has highlighted how vulnerable the supply route could become and the price of phosphorus fertilisers has already shot up sharply in the last year. Therefore, as well as the potential pollution risk, the sustainability of maintaining the resource is really important.
- 15. There are three different scales to this project; the UK national scale, the regional scale (looking in more detail at Northern Ireland because they have specific water quality issues) and the catchment scale (three case study catchments). The three pilot catchments include the Wye catchment, the Welland Catchment and the Upper Bann catchment. They have held workshops and detailed nutrient mapping of those areas, as well as catchment analysis to understand how catchments managed the P input pressure.

- 16. There are three major strands to the work, the first one is understanding P dynamics of the food system, the second one is trying to understand how catchments buffer that P input pressure and third strand is understanding stakeholder adaptive capacity.
- 17. Shane started by looking at the UK national picture and showed a model of the UK food system. This was described as a National phosphorus flow analysis model showing all the phosphorus flows within the UK food system. Fundamentally the model maps P through every step of the food system (e.g., agricultural system, livestock system etc). Shane went on to describe the model in more detail.
- 18. Shane mentioned that the model quite clearly shows that the UK food system is dominated by livestock and the largest internal flow of phosphorus in our food system is contained in the manures that come from livestock and go into agricultural soils. The second largest flow is contained within the animal feed that goes into the livestock population and likely the third largest internal flow is actually not the grass it is either crop for silage, hay or grazed directly.
- 19. From a catchment perspective, Shane described the comparison exercise undertaken between the Wye catchment model and the Upper Welland catchment model including estimations of source apportionment.
- 20. Shane mentioned that the national picture suggests a huge surplus of P but by looking at a couple of different catchments there are contrasting pressures; one where there is a large agricultural surplus and one where it is in P deficit.
- 21. Shane described why system level pressure is really important from a regional (Wales, Scotland, Northern Ireland and England) and catchment scale.
- 22. Work has been undertaken in Northern Ireland looking at the relationship at different scales and water quality issues <u>Phosphorus stocks and flows in an intensive livestock</u> <u>dominated food system (Rothwell et al., 2020)</u>
- 23. Legacy phosphorus is P that has accumulated in the soil from past surplus fertiliser and manure inputs. Shane described how pot trials were undertaken to assess legacy P in 6 different catchment soils.
- 24. Regarding water quality issues, Shane discussed the analysis undertaken on soil samples from the Wye catchment by summarising the soil P status. These soils were from the English part of the catchment representing the red sandy, silty type soils which dominate this area.
- 25. Paul summarised some of the key messages (so far) from the RePhoKUs project.
- 26. Zoe thanked Paul and Shane for their presentation and opened the floor for discussion and questions.
- 27. Sarah Hetherington, NRW discussed the legacy issue and the potential to still accumulate phosphorus and asked whether they have explored opportunities relating to the inputs such as reducing P in animal feeds or processing manures. Paul said it is fundamental to reduce the inputs because then there would be less phosphorus recirculating within the system and therefore less to manage. With feeds, there has been some progress in reducing P inputs to livestock diets particularly with the pig and

poultry sectors and there has also been a shift in concepts in the ruminant sector. Regarding fertiliser, it is the same message for years – there is plenty of P in the soil, you do not need to keep putting on phosphorus fertilisers, especially when you have manures as well. Shane said it is a difficult balance because this change impacts farmer's businesses and livelihoods, we need efficient profitable farming but without the negative impact on the environment.

28. Rachel Sharp, Wildlife Trust Wales thanked Zoe for extending the invite to other WEL members and thanked Paul and Shane for their presentation and ongoing work. Rachel said this is very timely but wished that it was done 10 years ago because it is transparent for people who know the catchment that it is agriculture that is causing the pollution on the Wye. Rachel suggested that this is a key message which needs to be determine externally. Rachel said that NRW made a statement some years ago that they had not seen the connection between the pollution in the River Wye and agriculture and we know these are the two key things we need to tackle on the River Wye, and it is quite clear from the evidence that we have seen today that there are very straightforward key messages. Rachel asked Zoe whether they can we get a clarification statement from NRW that this is the cause. Zoe said this is not the place to speak on behalf of NRW as the Chair of the Wales Land Management Forum (WLMF), there is a tremendous amount of work ongoing, and the next presentation is all about water quality monitoring.

Bob Vaughan, NRW said NRW is working very hard not just phosphates, but on the whole nutrient management programme. We can see that there is an excess, but we need to be able to understand the whole process and look at the cause at the very beginning, not just try to solve the problem at the end of the pipe. Bob said NRW did not say the words that Rachel suggested, NRW has always said there is a link, but there are many parts that play into the problems, whether it is from urban, rural, or from water discharges (in the form of sewerage) or whether it is agricultural. The key thing is that there is no correlation between poultry and the things going on within our rivers, for example there are instances in the Wye where there are a lot of poultry units and the water courses locally do not fail and other areas where they do. We recognise there is a problem overall, but we could not pinpoint one particular type of activity causing the problem. NRW take this very, very seriously and are currently putting a huge amount of effort into understanding it and can then start to do something about it.

Rachel said we cannot be putting anymore phosphorus into this system and that the shock statement was that there is already eight years' worth of phosphorus on the land, even if you did not apply anymore. This is not about small changes, this is about a fundamental shift but perhaps we are about to see that in agriculture going forward in Wales because of the post Brexit consequence, the Australian trade deal etc. It is about enabling that change and making sure people can still make a sustainable living so that we can keep people on the land and actually get farmers to produce those public goods that people need. Rachel suggested that this is where the focus needs to be and mentioned that WEL are determined to work with the industry (including intensive poultry units) by having very constructive conversations with them and also with supermarkets.

Rachel said that the other key takeaway from today is that the UK is still importing phosphorus mostly from Russia and suggested that this is a crazy system where in a phosphate sensitive catchment like the Wye, we are still purchasing phosphate to add

to the issue and also increasing farm costs. Some real awareness within industry that there is almost this excess in the West and a need in the East (e.g., arable farming) and how we are going to start tackling these issues where we counterbalance.

Rachel reflected about the changes that are coming in agriculture and how we enable those because the reality in Wales is that we are exporting 95% of the sheep that are reared in this country and asked whether this is still the right thing to be doing in the Wye catchment but if not, then how do we replace that much needed farm income to keep people on the land. Shane said fundamentally, with the livestock challenge it comes down to logistics and the fact that when you have a high livestock density, have a lot of P in manure that exceeds your local phosphorus demand and you have a very bulky material that is very, very difficult to move that is the challenge we are facing.

- 29. Bob mentioned <u>Prosiectslyri Project</u> which is working on the principle of trying to strip/separate out nutrients and there are other systems out there who are looking at similar types of approaches by treating the material on farm (e.g., poultry litter or slurry from the dairy industry) to try and remove phosphates and nitrates which could then become a saleable product. Bob asked whether Paul and Shaun have come across that type of thing in their studies. Paul said they have not really looked at manure processing technologies in any great detail but are certainly aware of the keen interest in separating dairy slurry as there is ongoing work on this in Northern Ireland. In the Wye catchment, there is the anaerobic digestion route, but there is still the issue of what you do with it to actually process the digestate to recover nutrients. Paul suggested that Europe are much further ahead than the UK with on-farm systems as well as cooperative systems with groups of farmers. This is the next step in understanding the value of manures and what processing technologies can be taken forward to help find solutions to some of these problems.
- 30. Sarah Hetherington, NRW suggested as part of the work going forward, we need to understand where there is variability and where the actual impacts to water come from. Sarah asked Paul and Shaun whether they had some idea of the variability and whether there would be an opportunity to explore some of that variability at some point. Shane said the other services in the national model show that there is variability within particular sectors. Within the UK work, they have gone into much more detail for those processes, for example within the livestock box on that national model, they have created another model which sits within that which breaks down into the different livestock groups. It gives you a slightly more detailed set to understanding where the surpluses and inefficiencies are. Priorities can then be more targeted but having the initial conversations is fundamental.

Shane said water quality impacts from system level change are not going to be short term, it is going to be a long-term journey and it is important for people to understand that. Water quality monitoring is also very important in understanding what is having an impact.

Paul suggested that having good, fine resolution census data for the cropping sector (as well as livestock) such as a GIS layer that is spatially referenced would revolutionise some of the impact that we could make because for the first time, we would have a more accurate distribution of a problem across the catchment. Sarah mentioned that data sharing is something that NRW are keen on.

31. Chris Mills, WEL recalled that everyone is aware of the perceived problem, but this presentation has given us the opportunity to see that in a very positive way and going forward, it is really important that we take a very positive approach to this. The focus now needs to be on how we actually exploit the opportunities, whether that is around agricultural policy, around regulation or the commercial opportunities and ultimately a system change. Chris asked how we engage the people who are actually capable of bringing about system change, for example Government or those from the commercial side. Paul agreed and suggested the way forward is through stakeholder interaction, but academics also have a role to play in helping.

Item 5 Fresh Water Monitoring Review

- 32. Simon Clarke, Jenny Marshall-Evans and Gareth Foulkes (Binnies) joined the meeting to give an overview of NRW's Freshwater Monitoring Review. Prior to the meeting Simon and Gareth provided members with a background to their work on NRW's Fresh Water Monitoring Review, including some questions for members to have a think about and raise any concerns/opinions/comments.
- 33. Simon Clark is a Technical Director for Binnies and is one of the technical leads on the project. Jenny Marshall-Evans is one of the Projects Leads for Binnies and has a background in water quality and Water Framework Directive (WFD). Gareth Foulkes is assisting the project team to pull this review of freshwater monitoring together for NRW.
- 34. The aim of this work is to get an understanding of what the evidence needs are within NRW and from the wider stakeholders to then help to shape the future design of the monitoring program going into the future up to 2030. At the same time, Binnies are undertaking some other work for NRW looking at best practice elsewhere (e.g., monitoring program design and implementation strategy in some other countries) and will also be conducting a horizon scan (e.g., looking at what technology is out there for things like continuous monitoring).
- 35. Looking at NRW freshwater monitoring evidence needs up to 2030 through consultation with NRW staff and external stakeholders which will inform a review of Freshwater Monitoring Strategy. This work is mainly focusing on:
 - Freshwater chemistry
 - Freshwater ecology
 - Groundwater monitoring
- 36. Simon gave an update of the progress so far, including internal NRW discussions, reviewing existing information and an overview of some of the external conversations which have been conducted thus far.
- 37. The group discussed the evidence needs and what they need to know about the Freshwater Environment, using specific set questions as a prompt for the conversation:
 - What do you need evidence for?
 - What are your priority evidence needs?

- What do you need to know about the state of the water environment?
- What do you see as the major gaps in evidence and knowledge?
- What are the quick wins?
- What are the major pressures on the freshwater environment, and what are their consequences?
- How should freshwater monitoring be integrated with other environmental monitoring?
- 38. Zoe mentioned citizen science and asked whether this is an area we can do more with or encourage. Gareth said citizen science is something that NRW want them to look into but there are questions which arise when citizen science is discussed like what level of confidence would stakeholders have in it, where do they see it fitting in and how would data be shared.
- 39. Chris Mills asked about the exact ecological impact of untreated sewage from wastewater treatment plants and CSO's because there is a lot of concern about the input of potential pollution. Not much is actually known about this impact and given that the solutions to the problem require major investments, it seems this should be more of a focus. Simon said this process is ongoing through the review. There is an Impact Assessment phase as well, which looks at the micro invertebrates, water quality impacts and the aesthetic impacts of CSO discharges. This will lead to the next phase of coming up with some cost benefit solutions.

Chris said there is no doubt that this work will highlight lots of evidence needs, but NRW only has limited resources so it would be important to find out how can you most effectively monitor to identify what the issues are.

- 40. Fraser McAuley, CLA recalled that there have been two huge things happening in the world of farming in Wales in the last couple of years, one is the introduction of wider Control of Agricultural Pollution Regulations and the other is the new Sustainable Farming Scheme. It will be important to see what the impacts are of these new policies and whether they will potentially improve water quality.
- 41. Sarah Hetherington, NRW suggested that from the perspective of delivering long-term solutions, we also have to consider water quantity. We are not in a stable climate and are experiencing different weather patterns, therefore more evidence is needed around water quantity in order to assess the impact.
- 42. Ed Davies, NRW asked about the conversations they have had with other teams throughout NRW. Ed said from an environmental management perspective, in the past the issues experienced are not just from agriculture as a source but also from construction and housing. The impact of suspended solids and sediment entering the water course is very difficult for us when we are looking at cases to fully appreciate what the impact of those sort of incidences are and what a baseline level is because inevitably, they usually happen in periods of heavy rainfall when you would expect to see a level of discoloration in the water course anyway.

- 43. Zoe mentioned the importance of monitoring sediment and asked whether there might be a way to also monitor farm drains.
- 44. Bob discussed the inconsistency of data collection and quality of data. Bob suggested that if we are going carryout more citizen science, we need better standards to make sure that the data collected is consistent from one place to another. Fairly cheap devices have been developed to collect data but obviously the quality is never going to be as good as the more robust data collected on a national basis, although at least there is a correlation between the two so that you can pick out trends. When thinking about water quality, this should be across the catchment for example the interconnections between whatever ends up in the water course inevitably has started off somewhere else, so we need to make sure that we are monitoring and collecting data in a broader context rather than just specifically on water quality.
- 45. Sarah Jones, DCWW supported the comments about having a decent baseline to be able to monitor any improvements from. Regarding the DCWW Catchment Management work, Sarah said it is useful to be able to have sub catchment data which can be fed back to farmers so they can see the benefit of the improvements that they are making and encourage them to continue. Jenny said through the horizon scanning task, they are primarily focusing on sondes and sensors and the current technology available. Other work streams are thinking about aerial imagery, the use of drones and other technology and things that we could all be using to help inform that picture.
- 46. Paul agreed that one key thing is the lack of consistency at the monitoring sites because it is extremely important in terms of trend analysis, which is what they have been trying to do in some sub catchments. Paul explained that they started off with what looked like a good flow records and then suddenly came to a year where there were huge gaps which showed that the sampling was centred on the summer rather than the winter which totally disrupts the trend analysis. The detection limits have slightly improved but some of the detection limits in the in the older datasets are perhaps 20 micrograms per litre which is far too high. Paul said one of the key things that academics can do is to have a look at the flow concentration relationships (CQ analysis) because it tells you a lot about the sources of nutrients going into the system and how consistent they are. Paul suggested that total phosphorus is also important and often this is not measured. Total phosphorus should be monitored if you want to look at agricultural inputs and the P input pressure, you need to monitor total phosphorus because otherwise the link cannot be made.
- 47. Chris Mills mentioned that the EA did a recent review and asked whether Binnies have looked at that. Jenny said yes, they are talking to the EA about best practice as well. Chris also asked if Binnies have got a baseline for the total amount of resources that NRW puts into this area of work right now. Jenny said yes, they have a good understanding of what NRW undertake at the moment. Chris said there are aspects that citizen science can fill very well, particularly in terms of taking more samples and NRW will probably never have the resource to do the number of samples that could be achieved by getting other people to help.

Ed suggested that monitoring should be integrated with other environmental monitoring, or perhaps it would be good to look outside NRW to other public bodies and other bigger organisations that might be producing data sets and even farmers who are taking lots of soil samples.

- 48. Dennis recalled that it was interesting to hear that most of the phosphate pollution on the River Wye was from land drains and not surface drainage, but if there were not any land drains then the land would be waterlogged. Using remote monitoring to locate land drains might be helpful and how useful technology could be in pinpointing the most likely areas where pollution could occur. Dennis reminded the group of the cost and ideal installation locations of sondes.
- 49. Karen Whitfield, WEL suggested that by monitoring water quality, it is easier to apportion the causes and therefore easier to find solutions, but the initial monitoring is key.
- 50. Using sewage treatment works company data was identified as a quick win along with working with fishermen and anglers because they are out on the river everyday (e.g., Fly Life Partnership).
- 51. Simon concluded by summarising the next steps, including:
 - Report to NRW on Evidence Needs
 - Report to NRW on Best Practice Elsewhere
 - Report to NRW on Horizon Scan Sondes & Sensors
 - Review by NRW of the Freshwater Monitoring Strategy
- 52. The group was encouraged to contact the Binnies team with any further comments or feedback regarding the discussion.

AP March 01: Bronwen Martin, NRW to circulate the contact details of the Binnies team.

Item 6 CLA Nutrient Neutrality Guidance

53. Fraser McAuley, CLA asked whether this item could be put on the agenda for the next meeting because the CLA Nutrient Neutrality Guidance Note is currently under internal review.

AP March 02: Fraser McAuley, CLA to provide a brief overview of the CLA Nutrient Neutrality Guidance Note at the next meeting.

Item 7 Ammonia Update

- 54. Andrew Chambers, Welsh Government said there is a future programme of work coming their way relating to ammonia. Members of the group will be aware of the National Emission Ceilings Regulations 2018 which established commitments for reducing emissions of key atmospheric pollutants in the UK.
- 55. The National Emission Ceilings Regulations (NECR) establishes a UK National Air Pollution Control Program (NAPCP) which sets out how the UK can meet the emission reduction commitments established by the regulations.

- 56. Agriculture contributes significantly to two of those key pollutants included in the NECR and the regulations; ammonia and particular matter. Approximately 90% of ammonia emissions in Wales, are caused by agricultural production and approximately 60% of particular matter in the UK is linked to ammonia emissions.
- 57. The NECR established emission reduction targets for 2020 and 2030. The emission reduction target for 2020 was 8% from 2005 levels and 16% by 2030 from 2005 levels. The UK ammonium particular matter emission reduction targets for 2020 were predicted to be exceeded in March 2021. Under the regulations, this triggers a requirement for an update of the NAPCP. Welsh Government have been working with Defra and the other devolved governments to understand the implications for the NAPCP regulations.
- 58. Modelling to date suggests that under a business-as-usual scenario, we will also exceed the 2030 target. We need to act in respect for that in accordance with the requirements to update the NAPCP. The revised version will set out how the UK can meet those legally binding emission reduction commitments for 2030 and is set at a relatively high level.
- 59. Defra is the lead for this because it is a UK requirement because it is a UK target. Defra will be contacting stakeholders at the end of the month or early next month with details on a consultation to be held on the NAPCP in the Spring.
- 60. The emission reduction targets were established for good reason because ammonia emissions lead to acidification and eutrophication of habitats, and in Wales approximately 87% of sensitive habitats exceed critical loads. Atmospheric nitrogen compounds are a cause of premature death. It also represents a loss of valuable nutrients from manure.
- 61. Welsh Government intend to take this work forward with the WLMF Sub Group (subject to the groups agreement) because atmospheric conditions is an interest of this group as well as pollutant loadings to water. Andrew said he intends to provide the mailbox for this group to Defra for the consultation and hopefully that can be sent out to the members for this group to look at the issue.
- 62. Dennis mentioned that this issue came up a few years ago and ammonia was included in the Clean Air consultation.

Item 7 Any other business

63. Marc Williams, NRW gave a brief update on the NRW Constructed Wetlands Policy Position Statement which will be going live on the NRW website at the end of the month. Kate Snow asked a query around the treatment capacity ability in winter when the wetland is dormant. Marc said he would pass this query on to Ruth Johnston, NRW.

AP March 03: Marc Williams, NRW to circulate the short presentation on the Constructed Wetlands Policy Position Statement with the group.

AP March 04: Members to contact Marc Williams or Ruth Johnston, NRW with any queries regarding the Constructed Wetlands Policy Position Statement.

- 64. Dennis mentioned that Welsh Government published a communications programme on how The Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021 were going to be rolled out and one of the things for this year was a specific event for tenant farmers run by Farming Connect. Dennis asked whether this was still the plan. Matthew Walters, Welsh Government confirmed that it is still the plan to hold a tenant specific event at some point.
- 65. The next meeting is on Monday 25th April 2022, suggestion that this could be an inperson meeting (Covid situation allowing).

Close meeting