West Wales Nutrient Management Board (WWNMB)

Catchment Partnerships Workshop Engagement Event Report

2nd Oct 2025

Sir Benfro PCF Fforwm Arfordir
Pembrokeshire Coastal Forum

Bwrdd Rheoli Maetholion
Nutrient Management Board
TEIFI · CLEDDAU · TYWI

Prepared for WWNMB by Pembrokeshire Coastal Forum

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West Wales Nutrient Management Board (WWNMB) Catchment Partnerships Workshop
Engagement Event Report

2nd October

Location: Parc Dewi Sant, Carmarthen

Organisations in Attendance: Ceredigion County Council, Pembrokeshire County Council, Carmarthenshire County Council, Pembrokeshire Coastal National Park Authority, WWF Cymru, West Wales River Trust, Pembrokeshire Coastal Forum, Farming Connect, NRW, Dwr Cymru, First Milk, Puffin Produce, National Botanic Garden of Wales, Aberystwyth University, University of Wales Trinity Saint David, Welsh Government Future Generations Office, Save the Teifi, The Cleddau Project, Achub y Tywi, Laugharne Citizen Science Group, and individual members of the public.

Executive Summary

The event convened 60+ stakeholders from farming, community groups, NGOs, local authorities, statutory organisations, academia, regulators, and supply-chain businesses to discuss the evolution of Nutrient Management Boards (NMBs) into wider Catchment Partnerships, to explore catchment-specific priorities, and to encourage collaborative delivery for river restoration at speed and scale.

A clear majority supported transitioning to Catchment Partnerships (via a show of hands).

Session 1 - Stakeholders provided extensive, practical advice on communication, inclusion/governance, five-year outcomes/priorities, and stakeholder coverage.

Session 2 - Catchment deep-dives (Tywi, Cleddau, Teifi) through a spatial mapping approach highlighted current work, challenges, and opportunities - including governance, nutrient neutrality, citizen science, farm-level interventions, and potential for nutrient credit trading pilots. Stakeholders were also able to visit the citizen science and river projects exhibiting in the room.

Session 3 - The afternoon presentations shared best practice, future plans, and following open discussions emphasised soil health, riparian buffers, regenerative practices, supply-chain finance, evidence-led targeting, and a no-blame, collaborative culture.

Stakeholders highlighted that effective governance is critical to the success of Catchment Partnerships. All three areas are facing significant challenges, and each need their own dedicated partnership.

The Teifi was seen as a positive example through its Demonstrator Approach[1] with regular statutory-led meetings.

One key stakeholder highlighted that international best practice—set out by organisations such as the United Nations Economic Commission for Europe (UNECE), the European Union Water Framework Directive (EUWFD), the World Wide Fund for Nature (WWF), and the UK Catchment Based Approach (UKCBA)- emphasises the importance of integrated catchment management and the principle of subsidiarity. This "local-first" approach encourages decisions to be made as close as possible to the people, rivers, and landscapes they affect, while remaining connected to wider policy frameworks.

Multi-stakeholder collaboration, clear roles and responsibilities, transparency, open data, adaptive management, and long-term financing are also key to success and some stakeholders noted that "how these important issues will be solved was not clear at the meeting".

Governance was recognised not only as a technical and policy framework but also as a social process, requiring relationship building, facilitation, and trust to ensure meaningful and effective outcomes.

Methodology

The sessions were facilitated by Pembrokeshire Coastal Forum (PCF) with a focus on ensuring inclusive engagement.

> *PCF is an independent Community Interest Company with over 25 years' experience in stakeholder engagement and facilitation, supporting collaboration for the sustainable management of rivers, coast and ocean for future generations.*

To enable inclusive participation and capture both breadth and depth of views, PCF facilitated the sessions using a blended approach to ensure all stakeholders views were heard and recorded:

- Xleap[2] (anonymous input): Real-time, anonymous digital facilitation captured viewpoints from all participants and allowed participants to comment directly.
- Presentations, Open discussion & Q&A: Presentations and Chair led plenaries encouraged exchange and clarification.
- Paper & physical media: large catchment maps, post it notes, and flip chart notation supported inclusive hands-on participation.
- Facilitated tables - NMB team members and PCF facilitators were at each catchment table to support the groups to record all contributions.
- Post event feedback – Xleap session remained accessible to all, and open until 4 days after the event. Email feedback was encouraged to contribute further on any of the issues.

This combination balanced anonymity with dialogue, using technology and simple feedback mechanisms to build a shared understanding and inclusive feedback.

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[1] *"The Demonstrator Approach is a collaborative, multi-sector project led by Natural Resources Wales (NRW) to improve water quality and biodiversity in the River Teifi catchment through innovative solutions".*
[2] *XLeap is an online platform designed to support highly structured, collaborative workshops where groups can generate, organize, and prioritize ideas efficiently.*

Session 1 – Wider Catchment Partnership

Opening remarks from the Chair (Martin Samphire) outlined the case for transition from NMBs to broader Catchment Partnerships with an extended remit beyond nutrients.
Martin invited a show of hands in support of this work, and there was a clear majority in favour of the transition to broader catchment partnerships.

Helen Nelson - Director: Strategic Planning and Climate & Nature Future Generations Commissioner provided introductory remarks and keynote address on the state of our rivers and marine areas, the actions from the latest Welsh Government Rivers Summit, a need for change, partnership working, guided by the Well-being of Future Generations Act the 7 well-being goals delivered through the 5 ways of working (Collaboration, Integration, Involvement, Long-term, Prevention).

Martin provided an introduction to the first session, an explanation of the consultation to date and participants then split into groups to answer the following 4 questions:

Q1. How should we communicate so that everyone knows what is going on in the Catchment Partnership?

Participants emphasised the importance of clear, regular, multi-channel communication tailored to different audiences:

Digital platforms: Many wanted a dedicated online hub. "News page on the NMB website" and "get the nutrient management plans on the website" were early suggestions, with the caveat that the material should be digestible: "non-technical summary of the NMPs for farmers/agricultural land users." Several felt videos would be an engaging way to communicate better.

Social media & community channels: Opinions differed on Facebook - some saw value ("Facebook may work with some areas"), while others warned "remember many people do not want to use Facebook." A more expansive view was that "expand into local community groups - on Facebook, X, In My Area etc."

Face-to-face engagement: Trusted interactions were seen as vital. In-person discussion groups and with farmers' unions - at agricultural shows, for example. Others suggested "evening sessions in bars, village halls… e.g. slurry project at Gelli Aur."

Resourcing & strategy: Several called for professional support: "Four Rivers for Life have a press officer for communications. Consider resourcing a communications officer." Another stressed: "Create a communication plan & get some resource to put someone in post to deliver this."

Peer-to-peer & good news stories: Farmers wanted to hear from each other: "Information videos perhaps farmer-led will help engage." Profiling good practice was recommended: "Farmers - create an item linked to Ffermio Bro on S4C showcasing exemplar work."

Inclusivity & vision: Several contributions warned against top-down messaging: "There is a great need to get away from the us and them scenario." Another added: "What I liked about the Usk catchment website was that it talked of what WE can do to help. Otherwise, there will be no change."

In summary, participants called for a multi-layered communications strategy that combines digital tools with face-to-face contact, is backed by dedicated resources, and is co-created with stakeholders to ensure trust and inclusivity.

Q2. How would you like to have your say in the work of the Catchment Partnership? How can we make this inclusive and collaborative?

Regular, structured opportunities: "More frequent stakeholder meetings" and "catchment-based stakeholder meetings" were requested, but with a focus: "Want meetings that have a specific topic and focus, not just general river water meetings. Less generic, more targeted."

Grassroots-led governance: A strong theme was independence: "Governance should not be led by County Council - independent governance." One participant warned: "To get maximum engagement from the public, groups need to be non-council/government led. Grassroots led - with support if necessary."

Citizen science & community: Volunteers wanted recognition: "Citizen science vols need to know they are appreciated, encouraged to respond to their work, and know that the data they obtain is achieving real results."

Clarity & accessibility: There was a call for "a clearly defined contact" and "a live website to continually inform the partnership."

Resourcing participation: Farmers and young farmers needed support: "Set up sessions for young farmers - use them as a platform."

Avoiding overload: Some warned against over-complexity: "There needs to be an avoidance of too many different groups and sub-groups. Perhaps employing Task and Finish Groups to deliver specific projects."

Overall, participants emphasised that inclusivity requires independent, transparent governance, valuing citizen voices, and practical support to enable participation.

Q3. What would the ideal outcomes be after 5 years? And what would the priorities be if resources are limited?

Policy & regulation: "Policy change in Welsh Government to safeguard the rivers." Others added: "More stringent fines/consequences/policing of pollution of rivers - especially SSSI's. Unless NRW can deliver on enforcement, the existing legislation is worthless."

Farmer engagement & land management: "Engaging with farmers and seeing change happening on farm" was a recurring theme, with an emphasis on "peer-to-peer learning and action" and recognising that "No soil, no farmers, no food."

Data & evidence: "Having really good information and data on the state of the river — this is essential in order to get a change of policy."

Catchment officers & coordination: A repeated ask was for "catchment officers in post to coordinate activity within agreed priority catchments."

Finance & innovation: Ambition included "a pilot nutrient trading scheme up and running" and "private finance working together with public finance to deliver nature-based solutions."

Rights of nature & cultural change: Some went further: "Rivers and waterways are given rights as living bodies, with a guardian appointed to represent them."

If resources are limited, participants prioritised enforcement, farmer engagement, data systems and catchment officers, while keeping longer-term cultural and legal reforms in sight.

Q4. Is there anyone else who should be involved in the Catchment Partnerships?

Participants listed a wide range of stakeholders, from councils and statutory bodies to NGOs, universities, farmers' unions, retailers, fishers, ramblers, schools and creative voices. Some also suggested new approaches.

The table below summarises the stakeholders that participants suggested could be involved in the Catchment Partnerships. The list has been grouped into broad categories, with examples of specific organisations or roles where they were mentioned.

Category	**Suggested Stakeholders / Organisations**
Local authorities & statutory bodies	Carmarthenshire County Council, Pembrokeshire County Council, Ceredigion County Council, Lead Flood Authority, Community Councils, SAC Officers, Well-being & Future Generations scrutiny role, DEFRA
Regulators, utilities & ports	NRW (Natural Resources Wales), DCWW (Dŵr Cymru Welsh Water), Port Authorities (e.g. MHPA – Milford Haven Port Authority)
Catchment, rivers & conservation NGOs	Afonydd Cymru, WWRT (West Wales Rivers Trust), WWF, Pembrokeshire Coast National Park, PCF (Pembrokeshire Coastal Forum), The National Trust, Save the Teifi / Achub y Tywi, The Cleddau Project, Sea Trust, Dolphin Watch, Wildlife Trusts Wales (esp. Wales Beaver Project), RSPB, Vincent Wildlife Trust, Wales Wildlife Link, Campaign for National Parks, Natur am Byth, Plantlife, Buglife, Future Scapes project, Local Nature Partnerships (LNPs), Cwmarian
Farming, land management & representative bodies	NFU, FUW, CLA, Farming Connect, Nature Friendly Farming, Catchment Sensitive Farming Officer(s), Grassland societies, discussion groups, YFCs, Pembs Machinery Ring, Farm co-ops (e.g. CCF), First Milk (farmer co-op), Fishers / Fishermen's associations, Netmen's associations, Coracle groups (Tywi, Teifi)
Food system, retail &	Retailer representatives (e.g. First Milk, Castell Howell),

supply chain	Supermarkets (food systems actors), Food, Farming & Countryside Commission – Wales, Local food logistics & procurement leads
Citizen science, community & recreation	Local Citizen Science Groups, Ramblers, wild bathing groups, canoe/kayak groups, birding groups, Young people's voices (school councils, youth clubs, university groups)
Marine & coastal economy / projects	Seagrass project, Aquaculture and fishery businesses & reps, Tywi marshes saltmarsh grazed lamb producers, Cockle pickers
Education, research & expertise	Universities (esp. Aberystwyth University), Coleg Sir Gâr, UWTS
Health & public services	Health Board(s)
Finance & enabling partners	Financial institutions (Nationwide, Co-op), Private finance / impact investors for NBS
Governance & structure suggestions	Independent NRW board member appointed by citizens' assembly, Dynamic stakeholder map (adjust per project/sub-catchment), Task & Finish Groups for specific projects

Further comments on involving stakeholders:

"If the partnership is too broad, it might lose focus and direction."

Build on what exists: Preference to "build on the NMBs' foundations" rather than reinvent governance".

Project-specific involvement - Final stakeholder set should depend on the priority catchment/sub-catchment and the specific project goals; "identify needs first, then bring in the right actors".

Session 2 – Catchment Area Specific Feedback

Participants explored catchment-specific issues using maps and post it notes.

The table below summarises current work, challenges, and opportunities identified during the mapping exercise.

Tywi		
Current Work	Challenges	Opportunities
Wildlife-rich tributaries highlighted	Pollution pressures from dairy & slurry management	Sustainable Agriculture Scheme 2026
Citizen science water	Specific pollution incidents	Shared Prosperity Fund for

testing at Botanical Water Gardens (#8)	(Mekatek discharge, railway bridge pipe)	land managers
Cycle path development for monitoring & engagement	SSSI sites compromised	Llandeilo swing bridge bathing zone
Organic farming initiatives	Impacts from Llyn Brianne Reservoir on fish	Learning from other citizen science groups
	Lack of focus on water quality in gov/media	Support for monitoring/testing equipment
		Public awareness campaigns
		Engage artists for stewardship

Cleddau		
Current Work	Challenges	Opportunities
Pembrokeshire Nature Partnership projects	Water quality pressures (nutrients, sediments, hydro morphology)	Extend focus to marine SACs incl. Milford Haven
First Milk nutrient trading	Balancing food systems and farm diversity	SuDS through planting
Ffermio Bro farm interventions	Governance complexity risks	Biofertiliser trials & nutrient thresholds
Citizen science monitoring	Pollution issues (Whitty Hedge, Robuxton Water)	Supply-chain collaboration (WRAP, modelling)
4 Rivers for Life, Quality Bog project, LENs pilot	CAOP regulations ~47% compliance	Farm nutrient ecosystem services assessments
PCC biodiversity & mitigation scanning (#52)	Nutrient neutrality blocking planning apps (#57)	Networking via WWRT engagement officer
WWF Voices of the Cleddau	Growing size of dairy farms	Public/private blended finance models
WWF Wholescape development	Limited contractors in closed periods	Build on PCF initiatives (Ecobank, BRICs, Land & Sea for Nature)
PCF engagement / solution	Engagement fatigue from	Pilot nutrient trading

on terrestrial pressures and marine restoration	overlapping projects	scheme
		Risk-based approach to enable NBS finance
		Farm cluster groups in sub-catchments
		Farmer trust via unions/suppliers
		Mitigation actions on PCC-owned farms

Teifi		
Current Work	Challenges	Opportunities
First Milk data layer mapping	Funding gaps for small/regenerative farms	Welsh Soil Policy support
Citizen science monitoring (pollution clusters, tributary data)	Septic tanks and PTPs need addressing	WG small grants for riverbank restoration
NRW 'Teifi Fyw' initiative	Limited highway/biotic monitoring, funding gaps	Floodplain/wet meadow, ICWs, wetlands restoration
Monitoring using handheld/continuous devices, eDNA	Legacy phosphorus/sediment, climate change	Nutrient footprinting schemes
Regenerative farming benefits	Regulatory hurdles for ICWs	IBERS Resilient Crops research
Slurry management & small grant access	Slurry spreading in south catchment	Dŵr Cymru investment potential
Community outreach by local groups	Concerns over PFAS & microplastics	Learning from citizen science groups
	Land release for housebuilding risk	Scaling regenerative practices

Session 3 – Presentations and Panel Discussion

Chair: Martin Samphire

The afternoon session brought together speakers from across farming, food supply chains, NGOs and river trusts. Each gave a short presentation followed by an open discussion. Key contributions are summarised below.

Speaker 1 – Ieuan Davies, National Botanic Garden of Wales Farm Team

Presentation on the Botanic Garden's farm with 50 head Welsh Black cattle.

The farm is designed to be both economically viable and environmentally sustainable, with a strong focus on soil quality, fungi conservation, and water quality monitoring.

Volunteer groups support regular soil and water quality monitoring, and a dedicated lab allows detailed research.

Key question raised: how can this level of science and infrastructure be replicated across other farms?

The team emphasised the need to share scientific learning and resources with smaller farms, alongside increasing direct sales to improve profitability.

Farming practices include being fully organic, using natural fertiliser sources, growing out hedgerows, and experimenting with low-input systems.

Speaker 2 – Lee Truelove, First Milk – Head of Regenerative Farming

Shared First Milk's journey towards regenerative practices: progress has been made, but there is "still a long way to go."

Central focus on grazing systems, encouraging minimum grazing days, rotational systems, and improving soil structure and infiltration.

Data collection on farm inputs and outputs is vital to understand nutrient flows.

Partnership examples included:

Working with Princess Gate on flood attenuation and river re-meandering.

Collaborating with Coleg Sir Gâr to optimise slurry spreading times.

Highlighted the importance of peer-to-peer learning and nutrient foot printing, noting that around 9% of farms contribute 30% of excess nutrients, so targeting these is essential.

Raised concerns about a "cheap food culture" and lack of long-term food strategies, which perpetuate intensive systems.

Suggested regenerative bonus payment structures to reward change, requiring all farms to complete regenerative plans.

Quoted examples like counting dung beetles per cow pat as a low-tech but effective biodiversity measure.

Speaker 3 – Emma Adams, Puffin Produce & Pembrokeshire Creameries – Landscape Enterprise Networks (LENs)

Introduced the LENs model, which connects businesses and supply chains to co-fund landscape improvements.

In West Wales, 80% of fresh produce is sourced within 50 miles, strengthening supply chain resilience.

LENs pilots are underway on two Pembrokeshire farms, testing approaches to nutrient footprinting, reduced pesticides, and carbon sequestration.

Emphasised collaboration across farmers, supply chains and beneficiaries – funding collectively delivers a wider range of outcomes.

Puffin Produce and a local creamery are funding projects directly, alongside some support from DCWW.

LENs does not seek direct financial returns, but creates more resilient local businesses and landscapes.

Plans to extend footprinting beyond dairy into potato farming, though outdated software and consumer demand (e.g. high-impact potato varieties like Maris Piper) pose challenges.

The project prioritises local production, Welsh produce and community benefit over pure profit.

Speaker 4 – Jess McQuade, WWF – Wholescape Approach

Set out WWF's "triple challenge": balancing food production, climate action, and biodiversity recovery.

Described the wholescape/multiscape approach – integrating land, rivers, coasts and seas.

WWF is transitioning from development (2023–25) into a delivery phase, focusing on finance mobilisation.

Key priorities include:

De-risking action for farmers through long-term support.

Working with supply chains (especially dairy).

Building an evidence base for spatial planning.

Supporting community action and innovative projects.

Shared examples of collaboration with PCF, the Cleddau Project and citizen science groups, including detailed theories of change to align farmer support with supply chain finance.

Highlighted cultural and creative approaches (e.g. Literature Wales, "Cleddau Voices") to strengthen community engagement.

Speaker 5 – Callum Firth, People's Plan for the Teifi

A collaborative, creative project designed to capture community voices and perspectives on the river.

Initially worked with primary schools, later expanded to include parents, teachers, grandparents, and wider community members.

Over 300 people engaged, producing a multi-generational and cultural vision for the Teifi as the "Queen of Welsh Rivers."

Themes included heritage, identity, and the need to support small farms alongside stronger regulation.

Citizen science played a key role, providing data to guide discussions and working with farmers in a non-blame, solutions-focused way.

Community groups emphasised that regulators must do their jobs effectively, particularly on pollution enforcement.

Speaker 6 – Kate Winters, West Wales Rivers Trust (WWRT)

Outlined WWRT's mission to restore rivers, wetlands and lakes in partnership, while also engaging communities directly.

Activities include both technical river restoration and public-facing events to build awareness and care.

Stressed the importance of landowner collaboration to enable access for restoration projects.

Suggested reframing messages to focus on farm business benefits and optimal water management, rather than purely environmental arguments.

Called for more confident, informed conversations with farmers on issues like trees, livestock benefits, and soil health.

Noted the diversity of farm sizes and systems, requiring tailored advice.

Emphasised the role of knowledge exchange, peer learning, and trust-building.

Discussion Highlights

- Nutrient foot printing seen as essential, ideally rolled out across all farms. Debate continues over whether change should be incentivised or enforced.
- Discussion around "it's not the cow, it's the how" - management systems, not livestock numbers, determine nutrient outcomes. However, some argued for destocking based on evidence of soil loss and biodiversity decline.
- Concerns about cheap food culture undermining long-term resilience.
- Calls for a dedicated soil laboratory in Wales to support farmers with science-based decision-making.
- Nature finance opportunities are growing but need to be carefully managed to ensure the "right vehicles" for Wales, not just imported models from England/Scotland.
- NRW is exploring risk-based evaluation frameworks for nature-based solutions.
- Overarching theme: collaboration, trust, and moving from plans to delivery at scale.

Additional Feedback Post-Event:

Following the event, stakeholders were invited to provide additional feedback via the Xleap platform and email. Participants highlighted the critical importance of catchment governance, noting that it remained unclear in the plans.

Key points:

- Effective governance is essential for each river in the WWNMB, particularly for the Cleddau, which faces significant challenges.
- The Teifi demonstrates a positive governance model through its Demonstrator Approach, with regular statutory-led meetings.
- Best practice principles internationally (OECD, UNECE, EU WFD, WWF, CaBA) emphasise integrated catchment management, subsidiarity, multi-stakeholder partnerships, clear roles and responsibilities, open data, adaptive management, and long-term financing.
- Governance is about both social process and technical planning; relationship building, facilitation, and transparency are as important as policy frameworks.

Conclusions and Next Steps

The West Wales Nutrient Management Board event in Carmarthen reflected the appetite for change: a clear majority supported evolving the existing Nutrient Management Boards into broader Catchment Partnerships, with a remit that extends beyond nutrients to the wider health of rivers and communities.

Stakeholders shared detailed ideas on how to communicate better, deliver visible change over the next five years, and identified more key stakeholders to include in the process. There was a strong call for governance to be transparent, independent, and rooted in trust.

The catchment deep-dives gave participants a chance to get around the table and map out what's happening on the Tywi, Cleddau and Teifi. The richness of current projects was clear, but so too were the persistent challenges: slurry pollution, lack of enforcement, nutrient issues, governance gaps and regulatory complexity.

Participants also pointed to opportunities such as new agri-environment schemes, nutrient trading pilots, floodplain restoration, citizen science, and stronger supply-chain collaboration.

In the afternoon, the presentations from farmers, businesses, NGOs and river trusts brought these issues to life. Speakers gave updates on National Botanic Garden farm development and plans, detailed regenerative dairy systems, outlined the LENs model linking supply chains to landscape restoration, WWF's Wholescape vision, creative community-led action on the Teifi, and the Rivers Trust's call for peer-to-peer learning.

Discussions emphasised the importance of soil health, Wfoot printing, farmer trust, finance for nature, and the need to move from plans into delivery at pace.

A final reflection from many participants was that governance is about people as much as policy – relationship building, open dialogue, and trust will be just as important as technical frameworks and legislation if Catchment Partnerships are to succeed.

Suggested Next Steps

1. **Develop clear governance frameworks** for each river catchment, with a dedicated partnership for each area, based on learning from existing catchment partnerships.
2. **Resource communication and coordination**, including catchment officers and a professional communications plan.
3. **Support farmer engagement and peer learning**, scaling up regenerative practice pilots, share best practice and involve young farmers.
4. **Strengthen data and evidence systems**, including open dashboards and exploring a regional soil laboratory.
5. **Explore innovative finance mechanisms**, such as nutrient trading pilots and blended public–private funding.
6. **Maintain strong community and stakeholder involvement**, through citizen science, cultural projects and grassroots-led initiatives.
7. **Align with international best practice**, embedding subsidiarity ("local-first decision-making"), adaptive management and long-term funding.
8. **Focus on delivery**, turning governance and strategy into visible, measurable action on the ground

Appendix 1 – Xleap raw data:

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Appendix 2 – Catchment Maps with stakeholder input

1. Cleddau
2. Teifi
3. Tywi

1 Session 1: Wider Catchment Partnership

Question or instruction for the Deep-dive:
Session 1: Wider Catchment Partnership

1) How should we communicate so that everyone knows what is going on in the catchment partnership? (Both from the Catchment Partnership Boards and team of employees, and between stakeholders).

Sut ddylem ni gyfathrebu fel bod pawb yn gwybod beth sy'n digwydd yn y bartneriaeth dalgylch? (O'r Byrddau Partneriaeth Dalgylch a thîm gweithwyr, a rhwng rhanddeiliaid).

- (1)News page on the NMB website (#3)
- get the nutrient management plans on the website. (#7)
- quarterly newsletter (#8)
- By email (#9)
- Video updates, forget writing websites newsletter email, but a video is an easy way to understand what is going on (recieve by video) (#10)
- podcast or radio interview/tv interview/upload discussion between stakeholders/projects (#11)
- Keeping a monthly communication (#12)
- create a communication plan, get some resource to put someone in post to deliver this (#13)
- make the mapping super easy to use front and centre on the website, needs to be easy to use and understand ArcGIS mapping thing (#17)
- Have a comms plan which recognises the variety of different audiences from statutory organizations to individual farms etc. (#18)
- Suggestion that stipends for farmers to attend as with other catchments would help engage farmers in Catchment partnership endeavours (#20)
  - Have unified branding, messaging and ways of working. Have the appropriate people talking to the appropriate audiences. (#23)
- County Council Newsletters (#22)
- non-technical summary of the NMPs for farmers/agricultural land users (#24)
- Facebook may work with some areas - essential to have catchment-based approach for communication with key players. (#26)
- Keith Henson- Councilor Ceredigion- interest in Carbon- has discussions with farmers, there are farmers keen to engage and discussion groups out there, engaging an easy way is in discussion groups and with farmers unions- at agricultural shows for example. (#27)
- Define the task, define the community to be communicated to build a comms plan with a defined budget to achieve the comms outcomes. (#28)
- four rivers for life have press officer for communications. Consider resourcing communication officer!!!! ~~£££££££££££~~ (#29)
- Farming connect FUW needs to not be exclusive - remove holding number requirement (#31)
- Expand into local community groups - on Facebook, X, In My Area etc. (#32)
- There are plenty of effective channels, probably too many. (#33)
- animations on website to hep digest documents, NMP too much, needs to be broken down on website (#34)

- Remember many people do not want to use Facebook (#36)
- You need a catchment group to work with farmers, independent, not play the blame game. (#37)
- Consider using citizens to peer review projects/documents etc (#39)
- NRW: feedback from farmers, not in having enough resources to meet all the regulations. (#42)
- Communication via in person events - community shows - utilise the council faculties at the Royal Welsh next year - invite representatives to a day of presentations showing casing the new catchment (assuming it is approved of course) (#45)
- Rethink required on COaP rules- rethink on managing slurry. (#46)
- Peer to peer discussions (#50)
- Videos, vlogs multimedia (#51)
- Information videos' perhaps farmer led- will help engage and/or signposting to other useful learning/examples. (#52)
- bring together all parts of the partnership regularly, all parties understand what is happening. (#55)
- Should there be a dashboard showing all that is going on? (#58)
- Every catchment has a person or a direct point of contact. (#59)
- Reporting and updates on goals 6 monthly (#61)
- a larger focus of having eyes and hears of river and marine users i.e. fisherman, canoeist, birders (#63)
- sharing vision, what is going on with user that have lost 'heart' (#65)
- profile good practice. good news stories (#67)
- Farmers- creating an item linked to Ffermio on S4C- showcasing exemplary work - early entrant farming to long standing farming businesses. (#69)
- Evening sessions in bars, village halls to hold engagement sessions- e.g. slurry project - Gelli Aur (#73)
- engaging councils with biodiversity plans section 6, communicated with the catchment partners (#74)
- 🟢(1) As well as thinking in 5 years - also need longer term holistic plans (#131)
  - We need to adapt our language, our 'grammar of animacy', so that our relatedness to the river and wider landscape is regained. This would mean looking at river rights and the wider rights of nature, ensuring that our place within nature is re-examined and placed at the centre of all decision-making processes. (#186)
- 🟢(1) Work with existing discussion groups, grassland societies, YFCs, agricultural shows, farmer coops eg CCF, Pembs Machinery Ring (#162)
- 🟢(1) The catchment partnership should codesign a communications strategy and plan for the stakeholders, communities etc it wants to communicate with. There will be different methods and messages for each of these. For example, people interested in river health often join a FB page set up by the river campaign group and use this to access information. Farmers or farming community will have different communication channels. Mainly, community groups or interest groups get information from trusted spaces so using these trusted intermediators is important. Communicating is a skill and specialism and time consuming so hiring a professional to do these for the catchment partnership is required. (#168)
- Having a vision for the river which has been co-created will help with the engagement and communication as it will be owned and feel real by many people (#169)

- Agree - there is a great need to get away from the us and them scenario. Many people have no idea that the NMB exists, let alone what it does. What I liked about the Usk catchment website was that it talked of what WE can do to help/be involved. The catchment project MUST be co-created by the community so that all feel involved. Otherwise, there will be no change. (#187)

· Communicating will depend upon the set up and Governance of the Catchment Partnership. An early and key stage is to work out the future governance structure. It should not be assumed that the current set up will continue as is going forward as if the remit of the catchment partnerships changes then the structure to deliver also needs to change and will be fundamental to the success and effectiveness of the partnership. Communication methods and levels of information conveyed will differ depending upon which groups and stakeholders' communications will be between. (#171)

2) How would you like to have your say in the work of the Catchment Partnership? How can we make this inclusive and work together to improve the state of our rivers and seas? / Sut hoffech chi gael dweud eich dweud yng ngwaith y Bartneriaeth Dalgylch? Sut allwn ni wneud hyn yn gynhwysol a gweithio gyda'n gilydd i wella cyflwr ein hafonydd a'n moroedd?

· 🟢(1) More frequent stakeholder meetings (#5)
· Catchment based stakeholder meetings (#41)
· 🟢(1) sitting round a table organise events communication/events officer essential (#44)
· Invite engagement of local Citizen Science groups (#47)
  - definitely. The citizen science volunteers need to know they are appreciated, encouraged to respond to their work, and know that the data they obtain is achieving real results (#196)
· 🟢(1) Projects working with the local community e.g. The Peoples Plan - created by West Wales Rivers Trust. Use established networks where possible. (#48)
· I represent Welsh rivers union. Open transparent feedback to allow input. (#49)
· the catchments are hugely varied marine vs fresh, failing vs passing, sewage vs agriculture. This diverse array of impacts, influences and ambient conditions means approach, work, projects will be diverse. This diversity is a challenge. (#53)
· Varied groups of people - space for collaborative planning. Groups need governance. (#54)
  - agreed the groups need governance but to get maximum engagement from the public they need to be non-council/govt led. Grassroots led - with support if necessary. (#195)
· A clearly defined contact (#56)
· Transparency - good governance and good chairing of these groups is essential. (#57)
· board, TAG groups and stakeholder groups. We need to restructure groups. do we need marine group, freshwater group, do we need a sewage group or agri group, do we need a catchment group?? People don't have the capacity to sit on multiple groups. Will be a deep dive exercise working out how to efficiently set this up. We want people to be able to contribute and collaborate, we need to make sure they can attend. Don't swamp. (#60)
· NRW need to be transparent (#62)
· Structured advertising campaign which is ongoing with community councils and fishers, farmers and key stakeholders - regular emails & newsletters. Inclusive and ongoing... Someone to lead on the public relations (#66)
· 🟢(1) Governance should not be led by Country Council - independent governance. (#68)

- 🟢(1) By creating open community meetings, sharing updates online, encouraging local vices and volunteers so everyone can contribute to protecting our rivers and seas. (#70)
- partners working together to work on key actions - shifting to delivery. Trust is important but needs to be delivery based. (#71)
- keep nutrients as a key issue. There are coastal/marine management plans and groups in place. there needs to be interaction between the two but not replicate (#72)
- Nature and Future generations included as key stakeholders. (#75)
- Contact with local town councils to enable local citizen science groups to have greater legitimacy. (#76)
- 🟢(1) want meetings that have a specific topic and focus, not just general river water meetings. issue, meet then come up with solution. Less generic. more targeted (#77)
- start with trust and values, and resourcing people to participate (#78)
- a need to be able to access resources to develop projects and solutions and have a role in developing the role of projects. (#81)
- 🟢(1) Strengthen resilience in the landscapes- focus on this will tackle biodiversity/nutrient/flood and carbon storage issues (#82)
- Universities work with the NMB to solve problems to apply for grants. Planed local action group they did the secretary work and pull organisations together to apply for funding, represent a diverse array of stakeholders to deliver real change. We need something like this - the whole point (#84)
- Focus on the outcomes and work back. (#86)
- need both regional and catchment level ways of working to develop action that is both specific common across west Wales. but need for anonymity of each catchment. (#88)
- Farmers want to be part of the conversation concerning resilience in the landscape, via building natural processes. (#89)
- regional board, but catchment level development and delivery (#92)
- need collaboration but careful not to find fault with agriculture solely. (#93)
- SFS, protests -farmers feel under fire, young farmers need to be engaged. (#95)
- 🟢(1) Set up sessions for young farmers use them as a platform. (#97)
- better clarity of share data and information to inform and track progress. (#98)
- A live website to continually inform the partnership (#100)
- Competitions YFC- skills day- college open days- should be attended. (#102)
- Tackling the food system- food policy, representatives- shortening food chains- should look into getting representatives/stakeholders from these sectors to get traction on this issue. (#108)
- Better, clarity in layman's terms of the state of the environment and our progress on agreed goals. (#112)
- Reboot discussions with Food logistics, policy makers and local council procurement. (#119)
- Future Generation should be being utilised.in procurement, schools for example in Ceredigion - utilise Castell Howell to source local food and veg. (#128)
- Suggest using LAG (Local Action Group) partnership model used by PLANED (Pembs LAG) and other counties/ LAs in Wales to distribute EU LEADER funds. Partnership had membership consisting of 1/3 Public, 1/3 private and 1/3 third sector stakeholders deciding on how funds and spent via application process (#163)
- The catchment approach is wide-ranging and diverse in scope. To ensure that specialist interests are not overlooked, it may be beneficial to establish sub-workshops under strong leadership. Such leadership should ensure that specialist contributions are clearly

articulated and appropriately represented within the wider discussion, so that individual concerns inform the overall approach. (#165)

- 🟢(1) There needs to be a consideration of required change of existing governance of the NMB to enable catchment partnerships to succeed. We can't just rename the existing way of working and expect beneficial change. It would be beneficial to explore decision making, accountability, expectations on delivery (& by who), alongside behavior within and outside the catchment partnership. (#167)
- How to have a say will largely depend upon the set-up of the Catchment Partnership and its governance. Channels and how people communicate and can have their say will be dependent upon the revised structure of the NMB to deliver the changed brief going forward. (#172)
- 🟢(1) There needs to be an avoidance of too many different groups and sub-groups....perhaps utilising Task and Finish Groups to deliver specific projects. NRW, for example, would not have the capacity to participate in all different groups. Farmers and other stakeholders participating in a voluntary capacity will not be able to donate large amounts of time to sitting on groups. This means the set-up of the partnership, its structure and groups is extremely important for effective efficient delivery. (#173)
  - There is already a danger of confusion among the wider public with so many seemingly diverse groups dealing with similar issues. (#188)
- A critical element of a catchment approach - the governance of catchment partnership. A summary of what this should contain: (#200)

3) What would the ideal outcomes be after 5 years? And what would the priorities be if resources are limited and we can't do everything? / Beth fyddai'r canlyniadau delfrydol ar ôl 5 mlynedd? A beth fyddai'r blaenoriaethau os yw adnoddau'n gyfyngedig ac na allwn ni wneud popeth?

- 🟢(2) Policy changes in Welsh Government to safeguard the rivers. (#6)
  - Plaid and Cons have to acknowledge agri pollution (#198)
- 🟢(2) Engaging with farmers and seeing change happening on farm (#14)
  - Peer to peer learning and action. Maybe learn from the work being done in N Ireland re land mapping for nutrients. No soil, no farmers, no food. (#199)
- 🟢(3) having really good information and data on the state of the river (#15)
  - This is essential to get a change of policy. (#197)
- 🟢(1) harmony amongst all river users (#16)
- 🟢(2) Looking at a wider issue with how all users (ie homes) affect the river and sea. (#19)
- 🟢(2) Strong relationships with planning, a better consideration of environmental issues within planning. (#21)
- 🟢(2) much better community engagement, understanding and appreciation (#25)
- 🟢(3) Good enforced relegations in the agriculture sector. (#30)
- Multiple benefits of actions, flooding, nutrients wellbeing community economy. (#35)
- considering all barriers physical and wider. (#38)
- ensuring all community resources are maximised. (#40)
- 🟢(1)a division of skills and making the most of the people and organisations. (#43)
- I dont accept funding is limited, huge funding going into ineffective unaccountable organisation to do actions not deliver outcomes. (#64)
- Research funding sources possible connection through university to increase research/project scope (#79)

- 🟢(1) Rivers and waterways are given rights as living bodies, with a guardian appointed to represent them. (#83)
  - As has already happened on the Wye. Other councils have accepted river rights - Ouse, Test - it may not give the rivers any more immediate rights, but it starts to change the thinking of governing bodies. And it means that one person on the committee or at the meeting has solely the interests of nature in mind. Nature should have the right to purely exist, rather than be a resource for humans. See Barrister for the Earth by Maria Ferria-Tinto. (#191)
- Connection to marine area - the importance of the connection of rivers to the Marine SAC. I wish to see holistic management. (#80)
- Setting smart goals - specific - measurable achievable realistic and timebound against which river quality is measured. (#85)
- Complete community awareness and involvement. (#87)
- really clear objectives and governance so things can be achieved in 5 years. we want to be able to deliver essential affordable housing and provide betterment to our protected rivers. Reduce impact on economy and jobs, create real life impact to benefit communities. (#90)
- 🟢(1) Rivers should be given rights. Recommendation - Is a river alive book - Roberth McFarlane (#91)
  - This is essential for society to change the way we view our world. An increased respect for our environment. I admit that changing the mindset of the whole of society may be beyond our remit! (#189)
- 🟢(1) More stringent fines / consequences / policing of pollution of rivers - especially SSSI. (#94)
  - Unless NRW can deliver on the fines for pollution the existing legislation is worthless and makes a mockery of the laws. (#190)
- 🟢(1) shared map of interventions so everyone knows what they are doing in each specific area (#96)
  - An overview like this would be so incredibly useful. There are many great and positive projects going on across the catchments but siloed and only accessible on disparate websites. There needs to be more cross-group sharing of news - how many members of the public know about the groundbreaking UK satellites being used by Cered CC with their river data? Or the project that the Cleddau group are involved in with First Milk and farms re soil nutrients/compaction? Really great work, but under the radar for most people. We should be shouting about this! (#192)
- being able to quantify the wider benefits of mitigation, flood prevention, monitoring, ecology etc. (#99)
- The Water Framework directive is inaccurate and failing. Need to go back to land management. Rivers this summer became super dry. Algae growing, diatoms where they shouldn't be. (#101)
- find buy in from farmers, natural capital assessment, stipend roles for farmers. (#104)
- Novel - better methods of slurry management. (#105)
- follow the people that are interested, don't start knowing everything, let it develop. Beacons water group are a good example (#107)
- after 5 years we absolutely should have nutrient credit trading system up and running in Wales (#110)
- transparent information on the effectiveness of mitigation that has been put in place. (#132)

- Better communication on what is happening when a pollution incident is reported. (#139)
- Reintroduction of beavers (#140)
  - Yes!! I've run out of dots! (#193)
- DC/WW- need to move faster to reduce their pollutant load- 90% will be achieved within 5 years. (#143)
- Farmers need to reduce their nutrient loads at the same pace. (#148)
- FGen- recommendation on food affects all issues being discussed today- advocate for this. (#157)
- we need a catchment specific officer role for each of the catchments to coordinate projects within that cathcment (#158)
- Look at in the future to steer this- farmer led businesses- leverage TAN6 (#160)
- Install the first ICW in Wales and help to create first nutrient credit trading scheme linked to this mitigation measure (#161)
- An established, effective, resource efficient Catchment Partnership delivering practical actions on the ground, which are improving water quality but also delivering wider benefits including ecological resilience, and better hydrological connectivity. (#174)
- Catchment Officers in post to coordinate activity within agreed priority catchments/sub-catchments and building social capital, trust and collaboration. (#175)
- An improving natural environment (#176)
- Development being able to proceed without further detriment to nutrient loading within the catchment (#177)
- A pilot nutrient trading scheme up and running (#178)
- Private finance working together with public finance to deliver nature-based solutions that address key environmental challenges and help change land management practices in a way that also enables viable productive agriculture (#179)
- Priority focus is water quality and reducing the nutrient loading into both freshwater and marine waterbodies. Offsetting is not sufficient and there needs to be betterment to deliver the necessary improvement in terms of WFD status as well as Habs Regs conservation status. (#180)
- Catchment Officers working alongside and with catchments projects as well as with NRW who would deliver an effective regulatory role but also increase proactive pollution prevention activity (#182)
- Over the last decades, we have reluctantly come to understand that nothing is ever really "thrown away"; we now reduce, reuse, recycle. Over the coming years, we need to accept that nothing is ever "washed away" either and adapt our behavior accordingly. We need a new slogan / catch phrase to cover this change. (#184)
  - Janet, Save the Teifi (#185)
  - Yes! This links in directly with a need for increased relatedness. Across all life. We cannot continue to be blind and bury heads in sand. So many consumers don't understand the basics of the water cycle/ wastewater system. And don't get me started on a wet wipes ban. There's so much we can do just by spreading a better awareness among consumers (#194)

4) Is there anyone else who should be involved in the Catchment Partnerships? / A oes unrhyw un arall a ddylai fod yn rhan o'r Partneriaethau Dalgylch?

- Carmarthenshire County Council
  Pembrokeshire County Council
  Ceredigion County Council

Afonydd Cymru
Pembrokeshire Coast National Park
WWF
WWRT
DCWW
NRW
Coleg Sir Gar
PCF
The National Trust
Farming Connect
UWTS
Save the Teifi
Achub y Twyi
The Cleddau Project
Cwmarian
NFU
CLA
FUW (#4)

- 🟢(1)An independent NRW board member appointed by citizens assembly (#103)
- 🟢(1)Nature Friendly Farming (#106)
- Port Authority's e.g. MHPA (#109)
- Welsh Rivers Union (#111)
- Food farming and countryside commission - Wales (#113)
- younger generation - young farmers, schools, youth clubs, young kayak/canoe people (#114)
- Retailer representatives. e.g. first milk (#115)
  - Castle Howell (#116)
- Farming Connect (#117)
- Young Farmers (#118)
- SAC Officers (#120)
- Community Councils (#121)
- Local Citizen Science Groups (#122)
- Well-being and future gen scrutiny role (#123)
- local nature partnership (#124)
- lead flood authority (#125)
- Community Councils (#126)
- need a structure of what the project is so then we know who to involve. cant ask for everyone to turn up because it might not be relevant to the specific priorities of the plan or project. (#127)
- Universities as potential consultant. (#129)
- universities to collab on grant applications with (aber uni) (#130)
- Financial institutions who do care like Nationwide, CooP (#134)
- DEFRA (#136)
- we need to log what is in progress right now and what has been done so we can document work, create an open consultation on the website for people to explain their projects so they can be logged/expanded on (#137)
- Universities especially those within the catchment e.g. Aberystwyth University (#138)

- catchment sensitive farming officer to bring together projects focused on a specific area in farming/land use (#141)
- Fisherman's associations (#142)
- Wild Bathing Groups (#144)
- Ramblers, Birding Groups (#145)
- Young people's voices, school councils, university groups? (#146)
- Health board (#147)
- cycling groups (#149)
- create a dynamic stakeholder map that you move around depending on the current project. Everyone gets a basic level of communication but then people/organisations will be focused to lead groups that deliver certain projects (#150)
- Farming unions (#151)
- young farmers groups (#152)
- Supermarkets - food systems (#153)
- Coracles groups (#154)
- NGO's - woodland trust, National Trust, Future Scapes project, Biodiversity Partnerships, Sea Trust. Dolphin watch. (#155)
- Fishers (#156)
- netmens associations (#159)
- Discussion groups, grassland societies, CCF, Pembs Machinery Ring (#164)
- Vincent Wildlife Trust, RSPB, Wales Wildlife Link, National Trust, Initiative for Nature Conservation Cymru, Marine Conservation Society, Campaign for National Parks, Wildlife Trusts Wales esp Wales Beaver Project, Natur Am Byth, Plantlife, Buglife (#166)
- Having discussed this with colleagues after the meeting, there is some concern that if the partnership is too broad, it might lose focus and direction. Catchment based approaches are supported, if possible, building on what is already in place for the NMBs, to avoid the need to spend a lot of time re-visiting administrative and governance structures, potentially at the expense of taking forward catchment-wide solutions in a timely manner. (#170)
- The stakeholders to involve will depend upon which catchment or sub-catchment project work is to be focused in. Once the priority catchments are selected and the bespoke challenges, issues, wider benefits and deliverable outcomes agreed only then can all the stakeholders who need to be involved be identified. There is a next stage to get from the current management plan high level actions to identify practical on the ground delivery at a catchment/sub-catchment project level and then at this level appropriate relevant stakeholders can be identified (#181)
- The seagrass project, aquaculture and fishery businesses and representatives, coracle men on towy and Teifi, Tywi marshes salt marsh grazed lamb producers' anglers, cockle pickers. (#183)

2 Session 2: Catchment Area specific feedback - Current work (Green) / Challenges (Pink) / Opportunities (Orange)

Question or instruction for the Deep-dive:
Session 2: Catchment Area specific feedback - Current work (Green) / Challenges (Pink) / Opportunities (Orange)

Towy River / Afon Tywi

- SA335BA - wildlife rich - challenges from pollution. Not an SSSI but these important smaller rivers need to be looked after. (#1)
- Coomb Farm dairy Cwrt Valley - more than 3000 cows - issues with pollution. Slurry runs off and the contents of the slurry (chemicals) (#2)
- Needs a group to police this - lack of action from NRW (#3)
- Mark slurry pits on the map (#4)
- new slurry pit at Felindre. Large indoor dairy farm (circa 1000) - welcome the new slurry pit as previously slurry would go on fields (#5)
- Mekatek pollution into river - marked on the map. Causing a pollution incident. Johnston area - huge pipe by grey railway bridge (#6)
- Hope for the Sustainable Agriculture scheme (#7)
- Botanical water gardens - water testing could be introduced here. (#8)
- Cycle path - connects people to the river and will hopefully help recruit river trust volunteers, and more monitoring / care for the river. (#9)
- SSSI near the showground has been compromised (#10)
- The new Sustainable Agric Grant Scheme starts April '26. Opportunity to improve agricultural practice (#15)
- Engage with local artists to amplify the message. (#16)
- Government attitude to env is a threat especially Reform / Nigel Farage (#17)
- Opportunity - shared prosperity fund for equipment (#19)
- lack of focus on water quality in government and the media (#21)
- LLandeilo swing bridge bathing zone is an opportunity (#22)
- Llyn Brianne Reservoir - impact on fish reaching traditional breeding grounds. (#25)
- Opportunity - share learning from other citizen scientist groups and river campaigns (#26)
- support for businesses for equipment (testing for citizen science groups). (#29)
- public awareness on how to keep the river clean (#33)
- Organic film sharing on organic farming on Towy - share link Annie Delahunty (#36)

Cleddau River / Afon Cleddau

- Pembrokeshire Nature Partnerships undertaking work. (#13)
- Main opportunity is to get core funding for this work. (#14)
- challenge - Permit review at WWTW provides a use way forward but need a way land-based mitigation for nitrogen. (#18)
- Challenge - WQ i.e. Nutrients and Sediments, Hydro morphology - need ecological resilience, building social capital with landowners, integrated and complementary delivery of numerous projects (#24)
- Challenge - Food Systems, Varieties of Farms, Catchment Partnerships with a governance structure that is effective - not too complicated. (#28)
- Extended focus from Fresh water SAC to Marine SAC. (#30)

- Need to extend catchment to include marine area, particularly Milford Haven Inner. (#32)
- Current Work - First Milk Nutrient Trading Experience (#34)
- agree the artificial separation between fresh water and marine needs to be challenged (#35)
- challenge - Whitty Hedge polluting Robuston Wathen (#37)
- Opportunity - SUDS through planting (#38)
- PCC - Farms Nutrient Ecosystem service assessment (#39)
- Nutrient Thresholds for ecosystems in Estuary (#40)
- Partner WRAP explore and support supply chain (#41)
- Catchment Modelling for water quality targets link to supply chain (#42)
- Biofertilizer trials on farms (#43)
- Ffermio Bro (PCNPA) on farm interventions (#44)
- Communications actions and engagement, include community voice tourism, recreation use and local businesses (#45)
- Funding your catchment / sub catchment affairs, (like CFS) to build on ground capacity and coordinate activity with particular catchment or sub catchments (#46)
  - Officers not affairs! Like Catchment Sensitive Farming (CSF) Officers. A need to identify specific priority catchments to focus initial project work within. (#80)
- Ground truth case for farming providence in cleddau codesign with partners (#47)
- undertake Literature Wales and WWF voices of Cleddau (#48)
- Citizen science Water Quality River FLy Monitoring (#49)
- Good Ancestor proceed with Farmers (#50)
- 4 River for Life, Quality Bog project, WQ investigation on Rubuxton, Carlett brook, COAPR visits, pollution incidents investigations, LENs Pilot with Puffin, Wholescapes (#51)
- Current work with Pembs biodiversity project in catchment, PCC activity looking at mitigation opportunities in catchment, early days (#52)
- Looking at nitrogen footprint of emerging COP 2 and how it could be mitigated, investigating possibility of where key development project are affected by nutrient issues (#53)
- Call river catchment feeds into Milford Haven Inner Catchment where there is a nutrient neutrality, a big area! (#54)
- Control of Agriculture Pollution Regs compliance is about 47%, m that is a key problem. (#55)
- First Milk is linked to farms to doing the nutrient balance on farms, how do we get best practice elsewhere? (#56)
- Planning applications are stalled due to Nutrient Neutrality requirement. (#57)
- Challenging to take forward to LDP review (#58)
- Look at what might happen on what might happen on PCC owned Farms related to mitigation (#59)
- Link to a nutrient credit trading scheme (#60)
- Wide range of mitigation options to consider (#61)
- Networking between organisations WWRT engagement officer (#62)
- INNS (WERN Catchment) upper most sites, need top-down approach (#63)
- Private / public blended finance funding mitigation activity (#64)
- Better SFS integration, and regulatory requirements (#65)
- Learn from Pembs Coastal Forum projects Ecobank, BRICs (2018-22), Building Natural Solutions (2022-23), Developing Investment Ready Opportunities (2024-25) (#76)
- Link to Pembs Coastal Forums project ‘Land and Sea for Nature' (#77)

- Challenge and Opportunity = setting up an effective partnership with good governance working at the whole catchment scale to address the challenge of nutrients detrimentally impacting water quality in both freshwater and marine/estuarial environment (#81)
- Opportunity - set up and pilot a nutrient trading scheme (#82)
- Opportunity - Take a risk-based approach to enable private financing of nature-based solutions to understand how and demonstrate best practice to deliver environmental benefit while at the same time enabling productive agriculture. This may also present an opportunity to trial how blending private and public finance can work as well as how private finance can add environmental benefit to the SFS (#83)
- Challenge - plethora of different projects and initiatives makes engaging farmers and land managers challenging as too many different approaches. Opportunity - for an effectively structured and set up Catchment Partnership to deliver a more coherent offer of collaborative work. Working with Framing Unions and Suppliers is key and helpful in getting farmers on board and in starting to build trust for effective collaboration going forward (#84)
- Potentially set up farm cluster groups in particular sub-catchments (#85)
- Challenge: Increasing size of dairy farms and stock numbers (#86)
- Challenge - contractor availability around closed periods (#87)

Afon Teifi / Teifi River

- First milk- have a layer identifying farmers, offered to supply anonymous data to map onto catchment map to see where most support is required to help encourage existing regenerative farming efforts. (#11)
- Lots of Data coming in from Citizen Scientists- highlighting pollution clusters in the tributary areas but more action required to progress mitigation measures in these areas (#12)
- identifying funding to support regenerative farming efforts in general in the Teifi Catchment re and to support capital works - especially for small farmers struggling with current legislation and translating this into actions. (#20)
- Welsh Soil Policy- as a catchment should be tapping into this. (#23)
  - This is so important. We must look after our soil (#88)
- NRW Teifi Fyw- could we have a pot of money form this funding- suggestion- to deliver targeted measures for mitigation roll now and, in the future, (#27)
- Current work monitoring utilising handheld and continuous monitoring devices but it would be good to employ greater biotic monitoring and eDNA methodologies- CS instrumental in helping to deliver more ambitious programmes pre/post measures. (#31)
- PTP/Septic tanks numbers in critical areas- need to be looked at more closely- identify funding to help with upgrades catchment wise? (#66)
- highway monitoring biotic and abiotic not currently regularly happening monitoring systems and funding to implement in addition to identifying funds to implement NBS solutions identified by the LA in addition to other ngo's (#67)
- Legacy P/sediment showing up in the lower reaches from current monitoring is showing need perhaps to be restoring floodplains/wet meadows /ICW/rural wetlands at greater pace, to keep up with Climate change exacerbation. (#68)
- Fferm Bros- on farm benefits for mature benefits. (#69)
- WG Small grants- help farmers to access these pots to assist more with riverbank restoration. (#70)

- Work and more studies need to be carried out to assess vet preparation/PFAS/Microplastic ingress into the Teifi catchment and its impact on biodiversity and water quality (#71)
- Support and introduce nutrient footprint scheme for landowners/farmers in the catchment. (#72)
- Slurry spreading challenges in the South of the catchment need addressing (#73)
- Resilient Crops Programme IBERS- open dialogue and investigate trial staking place within the catchment. (#74)
- Challenge presently install ICW's regarding 3rd party waste aspect- currently working with NRW /WG to see how this can be overcome- opportunity to install more and potentially help to deliver on stacked nutrient credit trading models in Wales. (#75)
- Consider how investment from Dwr Cymru will have an impact on nutrient value in the catchment area. (#78)
- Identify land use opportunities for developing where landowners may wish to release for housebuilding as opposed to increase stock levels (#79)

3 Session 3: Notes

1. Add key notes from Session 3 here...

2. A need to improve soil structure and quality(condition) i.e enabling improved uptake of nutrients

3. A need for more riparian habitats for buffers and shading

4. Presentation about National Botanic Garden farm - 50 head of Welsh Black. Introducing sheep. Trying to make the farm profitable - but also managing the area for conservation for fungi etc. Team to measure water quality - volunteers. Soil quality and soil health are the focus.

5. Fungus experts doing a walk on Saturday.

6. Comment on NBG Famer having own team and lab + funding. How can this be replicated by other farms?

7. A desire and need for National Botanic Gardens to share their resource of their farm operations, i.e.. science side of their organisation with similar farms 🟢(1)

8. Question about the reason for non-profitability - Answer - increase direct sales - working with improving resilience of the food system.

9. Re fertilizer, Farm is organic. Using some hay and silage and letting hedge rows grow out.

10. 2nd Speaker - Lee Truelove First Milk - head of regenerative farming.

11. First Milk has taken a journey with their members to be regenerative, made progress but still a long way to go. 🟢(1)

12. First Milk with a focus on grazing, minimum grazing days and a push for rotational grazing. Big push on data and understanding the farming system (inputs and outputs) and soil management. done work with Princess gate around flood attenuation, river meandering on the river Eden, also working with College Si Gar on appropriate e slurry spreading times. Alongside looking at the nutrient balance on their farms. There is a need for other farms to complete like enable comparability. Long term commercial partnerships with food supply chain can deliver more and longer time periods than government delivery.

13. 200 dung beetles per cow pat, don't need scientific tests, worm counts etc. upload to an app 🟢(1)

14. Worked to do some river restoration (rewiggling) with Eden trust

15. reduce compaction and increase infiltration is critical 🟢(2)

16. 9 percent of farms contribute to the majority of excess nutrients

17. 9% of farms are responsible for 30% of nutrient excess - so need to target those farms. Every farm needs a nutrient footprint to be done. 🟢(1)

18. cheap food culture, lack of long-term food strategies perpetuates intensive operations 🟢(1)

19. Use of regenerative farm bonus payment structure to resource the regenerative change.

20. Everyone must complete a regen plan to get bonus payments

21. Third Speaker - Puffin Produce and the LENs project Landscape Enterprise Networks

22. 3rd Presenter - Emma - Puffin Produce and Pembrokeshire Creameries - West Wales LENs

23. Landscape enterprise project - supply chain resilience, 80% of fresh produce comes within a 50-mile radius.

24. A focus on local production of supply chain within Puffin

25. LENs is about landscape partnership to a variety of benefits, organization coming together to support funding that can be used on farms

26. Three Keele env consultancy (LENs project is an offshoot). The West Wales LENs identified opportunities and challenges for doing business, want to derisk farmer financial investment.

27. LENs operates across the UK and has reduced pesticides, nutrients, carbon seq etc. in its projects

28. Range of measures in place to test the LENS system in two Pembrokeshire Pilot farms.

29. A need for collaboration across supply chains, farmers, and beneficiaries

30. Funding collaboratively leads to a greater range of outcomes

31. puffin produce and local creamery funds LENs and a bit of DCWW

32. Not a need for direct finance return but benefit within Puffin for a more resilient business

33. Welsh produce, landscape and community are the main motivations for lens rather than £

34. Fourth Speaker Jess McQuade - WWF Wholescapes

35. 4th Speaker Jess McQuade - Triple challenge - wholescape approach in three areas including Pembrokeshire

36. WWF's focus in on the 'triple challenge' - food production, climate action, and biodiversity. A look at both land and sea. Moving into a delivery phase with a keen focus on bringing in the finance to enable change 🟢(1)

37. Land river coast and sea - multiscape approach. 🟢(1)

38. Development phase - Jan 23 - 25. Now moving into delivery phase.

39. heavy focus on supply chains in the dairy sector. worked with NatWest to create advice and support for the regenerative dairy sector. 🟢(1)

40. Listed key priorities (see slides for details)

41. Focus finance system, supply chain for the dairy sector, evidence base for spatial planning, community action, and innovative projects

42. A need to de-risk the action needed for farmers to engage 🟢(1)

43. WWF supported PCF, Cleddau Project citizen science and have developed a detailed theory of change for farmers to be supported by supply chain.

44. Ideas around literature Wales and Cleddau Voices. Could this project be joint funded?

45. Peoples plan for the Teifi - a space to create, and find out the views of the community

46. 5th Presenter - Peoples Plan for the Teifi - ensure community voices being heard.

47. People's plan for the Teifi-multi collaborative project to find out views of the community and give them a voice, utilising creative inputs- became multi-generational, after initially holding workshops with primary sector schools.

48. Worked with primary school to engage them on the river. Outreach included parents, teachers and grandparents. (1)

49. Rivers and be a part of the heritage and the community itself

50. Teifi - Food Trade People and Nature - 300 people engaged.

51. Teifi is art of the cultural heritage of this catchment- critical part of the thinking of those living within the catchment, perceived by a range of communities, who in turn need to come together to help restore this 'Queen of Rivers' (1)

52. Ideas to work with farmers and landowners to solve problems collectively, with CS providing data to utilise to improve situation- local networks- working for the community. (1)

53. Citizen science provides data to understand more about what is happening locally. Working with farmers and not laying blame but collaborating to support people.

54. The Teifi "the queen of Welsh rivers", it is a place for nature and community/people to coexist. Esmee Fairbourne funded project that considers access, culture and heritage, water quality, farming/agriculture. support small scale farms in particular. Communities asked that the regulator does their job. (1)

55. Working with local farmers, and a need for local supply chains, and not forgetting small scale food producers, with a variety of mitigation suggestions, while also ensuring regulation is enforced

56. Community voices unite to ensure pollution incidents are reported and resolved.

57. Community has a variety of views- e.g. view that regulators should do their job

58. Kate Winters West Wales River Trust

59. River restoration in community and partnership

60. WWRT has a focus on connecting people to the rivers of Wales in a variety of ways through engagement and activity.

61. Small charity- mission to restore rivers, wetlands & lakes in partnership. Provide variety of activities to help people engage with the rivers and water bodies to help inspire care and action to consider these 'mindfully'

62. Landowners can support WWRT work to do river restoration by providing access

63. Work both technical delivered by WWRT and accessible available for the general public

64. A need to reframe the pitch to be more pertinent to needs of a farmer,

65. how to improve input-'reframing our pitch'- farm business is at the centre of what we are proposing-optimal water management is part of this picture.

66. Knowledge of the front line, better in the benefits and confident to engaging with farmers, not farm advisors but better to speak with farms

67. Trees beneficial for livestock and river - need confident conversations (and well informed) with farmers. Call to WWF to support staff training.

68. respond to the diversity of farmers, different size and scale

69. A need for knowledge exchange

70. first milk - 50% of pembrokeshire farm numbers, less on milk, 20/25% coverage of west Wales.

71. first milk define diverse pasture by presence of 6 species or more

72. under sowing maize with herbal lays or grass

73. maize based over pasture-based milk production best mix?LT reckons maize is decreasing year on year- - under sowing with other species taking place.

74. First Milk explain the size / type of farms and some of their actions to create benefits

75. Wanting to be working more permeant pasture, and no need for tillage, this is a tough journey

76. pesticide used in grazing? Position- Lt what we really want is permaculture- traditional pastures- tension comes from productivity levels being lower-Cheap food culture- encouraging short term thinking. 🟢(1)

77. LENs are nutrient foot printing all dairy farms/nutrient balancing. They haven't done it for the rest of the supply chain - they want to do it on potatoes but this is challenging

78. Puffin is doing nutrient footprint / balancing on dairy and wanting to bring this into potatoes. Just completed a project and want to take this learning wider.

79. Puffin- nutrient balancing for all farms? - Emma- Dairy yes in process of rolling this out to potato farmers- tricky and current software outdated with respect to assessing this.

80. Puffin doing a lot reduce through what they grow, but some varieties much more impactful

81. Maris piper most nutrient hungry potato, demand is riven by consumers, if people vote with their feet they could choose not to buy Maris pipers

82. Every farm should have a nutrient management plan. 🟢(1)

83. Nutrient foot printing should be coming for dairy, and it does make sense for a variety of farms. It will be time to see if it is carrot or stick would enable this.

84. A need to understand and manage for the limitations of the land

85. Nervousness regarding nature markets- seems high risk with regard to return from farmland can fears be allayed? PR- variety of reason to invest i.e. to make supply chain more resilient rather than direct return; growing market for investing to provide for a healthier situation. Still growing but risks decreasing as bigger investors/organisations are coming forward.

86. Capacity gap about this in Wales- JQ- WWF- important next step and a role for the NMB's to help bring forward.

87. The Welsh government haven't driven the nature finance model but recently have grown interest. They are planning on learning from Scotland, England etc. They want to look at what is appropriate for Wales. We shouldn't take every opportunity but the right ones for Wales.

88. Welsh Government are now more supportive of wholscape approach.

89. caution though during the discussion to check 'rightness' of vehicles to invest in.

90. Risk based evaluations being developed by NRW currently for NBS

91. NRW - degrees and elements of risk that might be more acceptable if to do with complying vs developing nature-based solutions.

92. A need to learn from the Puffin LENs and First Milk initiatives and there needs to be shared learning.

93. nutrient foot printing seen as a way forward that should be promoted more widely- STC

94. It is not the 'cow' it is the 'how'

95. Simple solutions that may have unintended consequences - more ruminants in Wales 50 years ago than there are now. It's not the cow, it's the how. Make sure cows are farmed in sybiosis with farm and land. 🟢(1)

96. LT-not the cow but the how- comments on destocking- potentially would exacerbate intensity rather than mitigate the situation. Mob grazing/bale grazing etc.- forage grass based ruminant system etc.

97. This view rebutted by another speaker- that river data /soil loss and biodiversity issues would show that we still need to look at destocking.

98. Support from First Milk, however, no support for intensive cattle farms and many thousands of cows. Need forage grass based ruminant system or there is a worry that arable with tilling and spreading of chicken manure would be worse,

99. A need to look at the system.

100. Emma - NRW- ruminants in the landscape help with upland farming restoration and bring other benefits- prevention of wildfires etc.

101. Farmers should be involved in farming land use discussion

102. Need to leave blame at the door to make progress.

103. stocking density doesn't reflect necessarily nutrient density.

104. Stock density doesn't drive nutrient concentration; it depends on the farming system itself which drives nutrient concentrations in an area.

105. No about number of cows but disposal of slurry. Slurry onto the land leads to phosphate on the river.

106. A question on density verse stocking rates, is crude number and does not consider the nutrient density. The challenge of intensive is not the number of cows but the amount of slurry. There are solutions, and some changes have unintended consequences.

107. Importance of looking at soil condition and the rooting of crops to ensure good production and minimal environmental impact. Is there a need for a soil science lab in the region to help farmers.

108. Dedicated soil laboratory in Wales- other suggestion to investigate the best mix for pastures 🟢(1)

109. Puffin is small with two farms in western cleddau, but the scheme will follow where the investments come. In January there is an opportunity for a further roll out to wider areas. Still actively looking for funding, either way will continue.