

River Basin Management Plans 2021 – 2027

Summary of responses to the Challenges and Choices Consultation 2019

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1. About River Basin Management Planning

Natural Resources Wales (NRW) is the Competent Authority for implementation of the Water Framework Directive (WFD) in Wales. We have responsibility for drawing up the River Basin Management Plans which includes working in partnership with a wide range of public, private and voluntary organisations. Wales has three River Basin Districts; Western Wales is entirely within Wales, the Severn and Dee are cross-border. A map showing the three River Basin Districts can be found in Appendix 5.

In 2015, we published the second River Basin Management Plans. These plans outlined what would be done to protect and improve the water environment up to 2021.

The Directive and UK Legislation requires that the River Basin Management Plans are periodically reviewed and updated every six years. Subsequently the updated plans will be published in December 2021. The Environment Minister in Wales and the Secretary of State in England are responsible for approving the River Basin Management Plans. NRW will lead on the development of the Dee and Western Wales plans, whilst the Environment Agency will lead on the Severn plan. NRW and the Environment Agency continue to work together on the two cross border plans (Dee and Severn) to ensure a joined-up approach to cross border issues and solutions.

1.1. About the consultation

There are three statutory steps which include formal consultations to take us to December 2021. The first public consultation, 'Working Together', closed in December 2018. This asked for views on how we can all work better together to protect and improve the water environment.

The 'Challenges and Choices' consultation was the second public consultation which began on 22nd June 2019 and closed on 22nd December 2019. The consultation document covered the Dee and Western Wales River Basin Districts and fulfilled the requirements under the WFD but also encompassed the wider aspects under the Environment Act 2016 and the Wellbeing of Future Generations Act 2015.

In the Challenges and Choices consultation we asked for views on:

- Any additional evidence that should be included in our Area Statements and State of Natural Resources 2 (SoNaRR 2)
- Whether the options for resolving the issues are reasonable and achievable
- The best way to tackle these issues and if they could be addressed through the areas statement process.

1.2. Overview of this document

This document includes;

- The approach used for engagement during the consultation.
- Summary information about:
 - the number of responses received.
 - the types of organisation that responded.

- A summary of the responses to the consultation questions.
- Next steps and the review of River Basin Management Planning.

The information provided during the consultation will inform the review of the River Basin Management Plans. The consultation on these updated plans will be available in Autumn/winter 2020. This will be the third public consultation during this third cycle of river basin planning.

2. Overview of Responses

The Challenges and Choices consultation documents for the Dee and Western Wales were published on our website and the Severn on the Environment Agency's website; hard copies were also available on request.

The consultation was promoted at external meetings, including the Middle Dee Catchment Partnership, Independent Environmental Advisory Panel, National Access Forum, Wales Water Management Forum, Wales Land Management Forum and Wales Fisheries Forum. It was also promoted in the Living Waters for Wales Newsletter. Through social media, we issued tweets, it is estimated that 2152 twitter followers have read the tweets. Awareness of the consultation was raised internally within NRW to encourage staff to promote to their external network of contacts.

Almost 700 stakeholders were contacted. No separate events were held, we raised awareness of the consultation through existing networks and ongoing engagement including through the Area Statement work. For example, the South-Central Wales and South East Wales Operational Teams held a series of themed involvement events in November 2019. The events were designed to enable stakeholders to reach a consensus on action for the Area Statements, recognising the River Basin Management Plan as a mechanism under each of the four strategic Area Statement themes.

Notices of the consultation were published in the Western Mail, The Leader and the London Gazette as required by the WFD Regulations 2017. A presentation was given to the Cardiff University Water Research Group. The consultation was also promoted at the NRW webinar on evidence needs to external stakeholders. The consultation was shared at a total of 12 sector meetings in locations across Wales.

NRW were supported by the Wales Water Management Forum that replaced the Liaison Panels to promote the consultation to their networks. We also worked with the Environment Agency.

A total of 23 responses were received these included the voluntary sector (Recreational, Fisheries and Conservation Groups), Land Management sector, Water Industry, Energy and Health sectors (see figure 1).

A full list of respondents is provided in Appendix 5.

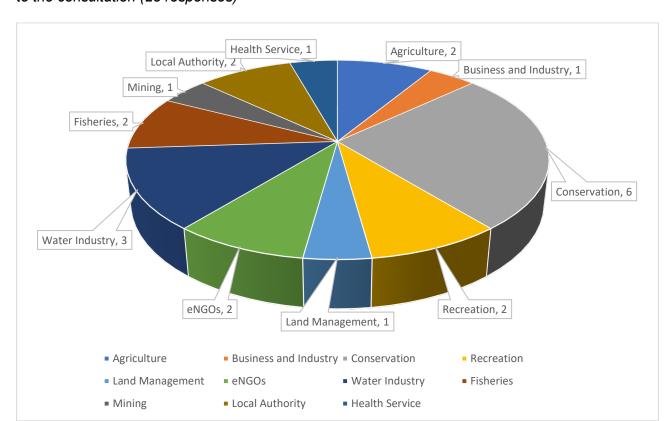


Figure 1 – Graph showing the breakdown and number of groups and organisations who responded to the consultation (23 responses)

3. The significant water issues in Wales, the Dee and Western Wales

This section summarises the responses received. NRW will use this information to ensure the updated River Basin Management Plans include the relevant significant issues.

The following significant issues were set out in our Challenges and Choices consultation documents:

Wales - Physical Modifications; Pollution from sewage and waste water; Pollution from towns, cities and transport; Pollution from rural areas; and Pollution from mines

Dee – Physical modifications; pollution from sewage and waste water; pollution from rural areas; Pollution from towns, cities and transport; Changes to natural flow and levels of water

Western Wales - Physical Modifications, Pollution from Sewage and wastewater, Pollution from towns, cities and transport, Pollution from rural areas, Pollution from mines

We asked you to comment on the following questions;

Question 1.

Is there additional evidence you believe should be included in the preparation of Area Statements and our next Wales level assessment of the sustainable management of natural resources (SoNaRR 2)?

Question 2.

Are the options for resolving the significant water management issues (see Annex B) reasonable and achievable? Please state which issue and RBD you are responding to.

Question 3

Do you have other suggestions for how to address the significant issues identified in the RBDs?

Question 4.

What opportunities exist to address the Significant Water Management Issues in each RBD through the Area Statement process? If possible, please specify catchments you believe present specific opportunities.

Question 5.

We don't plan to produce a consultation response document for this consultation but will summarise responses in the draft RBMP, is this agreeable?

3.1. Summary of Responses to the consultation questions

Question 1.

Is there additional evidence you believe shoul be included in the preparation of Area Statements and our next Wales level assessment of the sustainable management of natural resources (SoNaRR 2)?

Three respondents felt that the Area Statement engagement process had been poorly communicated and there had been little engagement with the agricultural sector. Many of the natural resources in the area, particularly as far as they relate to water, will be in the direct control of farmers and landowners. This means that farmers and landowners will be largely responsible for delivering any environmental objectives and rural views need to be heard. It was also felt that Area Statements and SoNaRR place additional hurdles in the drive to improve our water quality/ prevent deterioration as they exhaust third party resources.

Respondents wanted clarity on how Area Statements will help National Parks and Local Authorities deliver on priorities in Local Development Plans. It was also suggested that consideration should be given to inclusion of invasive non-native species (INNS) in the draft evidence priorities for water as this not only affects biodiversity but also because it is a potential modifier of freshwater and other systems Also the need to identify priority areas for habitat and species pollution creation, recovery, expansion etc. and highlight/prioritise where landscape scale action for reversing biodiversity declines is needed.

It was felt Area Statements should help deliver and prioritise a plan for habitat restoration, creation and connectivity and Green Infrastructure Assessments through a spatially mapped Nature Recovery Network (NRN) based on NRW Connectivity mapping. The mapping of opportunities must also take account of benefits to the coastal environment.

Some felt that evidence collated by the water companies and considered as part of the National Environment Programme should be included. Some proposals for investment and monitoring (e.g. remote monitoring of sewer overflows), are specific to geographical areas and area statements should consider and acknowledge these proposals and what they aim to achieve. In addition, any evidence arising from the water resource management plans or the drainage and wastewater management plans should also be included. SoNaRR2 should cover the issue of micro-plastics, including evidence on sources, quantities and effects.

One respondent commented that an assessment of both diffuse and point source metal inputs would help understanding on a catchment wide scale. Further evidence of metal concentrations within silts and sediments on the river bed may help to understand the mobilisation of sediments and the movements of metals downstream. It was felt that further evidence and work should be done around the interaction of Sustainable Drainage Systems (SuDS) with underground workings and to gather evidence that there are no adverse impacts from the temporary storage of flood water in mines. They expressed an interest in working with NRW to extend the mapping work done on mines in England to Wales.

Another respondent commented that the Area Statements and SoNaRR 2 should consider maintaining the quality of boating waters to ensure a safe recreational boating environment, allow users to access all inland waters irrespective of water quality, maintain access points through proposed flood defence and coastal protection, maintain water levels to ensure access is viable. where recreational boating is identified as a potential pollution source, encourage best practice, and develop appropriate prevention and response plan(s) for invasive species/ waterborne pathogens. They commented that they have developed a GIS based Coastal Atlas that identifies clubs, boating areas and recreational boating hotspots at area level and that they would be happy to assist the Area Statement process with this information as NRWs information is out of date.

One respondent felt that more needs to be done to assess of climate change, biodiversity decline and land use on water quality, particularly the impact on water quality and potential increase in salinity. The draft 'water evidence needs' document which sets out research priorities should not only feed into the updated SoNaRR 2, but it should also feed into the RBMP process. Public Service Boards have used a Wellbeing of Future Generation evidence base to create their well-being plans; it would be interesting to see the relevant research findings from this work overlaid with the RBMP / Area Statements evidence base. A review of the Wellbeing of Future Generations evidence in the context of the SWMIs will help identify potential policy conflicts between environmental and social objectives. It was suggested that there is a wider roll out in the use of tools such as Story Map, which can be used to show where engagement with farmers and landowners has taken place and highlight which catchments have investigations or interventions taking place which will contribute to improvements in WFD status.

Some respondents commented that the River Basin Management Plans should identify trends, actions undertaken, and a review of lessons learnt to ensure effective adaptive management. It was considered that the impact of failing water quality, and the benefits of good water quality should be placed in the context of economy, designated sites and landscapes where deterioration has occurred it should be highlighted, and action plans

developed. Evidence of the efficacy, cost or likely outcome of any action, or suite of actions should be included as without it there is no evidence of where water quality improvements will be of most benefit and it is not possible to judge whether the plan is credible.

Concerns were raised by one respondent that it's not the lack of suitable habitat which is the root cause of the ongoing decline in stocks of fish as there is plenty of unused spawning gravel available. The issue is the lack of fish to populate these areas, there's been little real resource allocated by Natural Resources Wales (NRW) to identify the root cause/s of the stock decline and as a result the organisation will undoubtably fail against the WFD targets. Also of concern is the proliferation of large-scale chicken units and the effect of chicken manure they produce and it's disposal.

The definition of some of the terminology used in this and many similar consultations was flagged as a concern. The use of the term 'address' carried the implication of action to resolve an issue over time it has become a surrogate for all sorts of alternatives to action but not necessarily direct action.

Concern was raised by one respondent regarding the continued use of phosphate to treat lead in drinking water, and the adverse effect it can have on river quality. We need to look more holistically at drivers to avoid creating new problems while seeking to solve others.

Question 2.

Are the options for resolving the significant water management issues (see Annex B) reasonable and achievable? Please state which issue and RBD you are responding to.

On the whole most respondents felt that the measures were reasonable and achievable with one respondent commenting on each of the measures individually, however some made the comment that these measures were at a high level and that they may not be reasonable at a local level. It was recognised that measures need to be specific, measurable, achievable, realistic and timely (SMART) rather than just a list of options and that they should be effective and cost beneficial. Direct linkages between the agricultural policies in the Area Statements and the Programme of Measures contained in the River Basin Management Plans would reinforce the potential environmental benefits for Wales of tackling rural pollution.

There was some confusion over the following statement that 'there is need to deliver a more focussed approach to sewerage and drainage management' on page 33 and clarity is needed over whether this is a specific initiative (if so which one) or just a general statement. It was felt that measures should be catchment based and include sustainable drainage solutions particularly from agriculture. NRW are asked by one respondent to review whether more can be done to improve this issue. Other respondents commented that for many land owners this has involved a difficult and expensive upgrade to sewage treatment plants and that regulation for this can be onerous and expensive. Whilst it was recognised that there is a need to reduce the impacts of agriculture upon water quality, a Wales-wide compulsory approach would not meet the water quality targets of Welsh Government while maintaining the economic future of the Welsh rural economy. The majority of Welsh farms are small businesses which face an uncertain future therefore it is important that this is reflected in any government advice and future agriculture policy and that there should be a robust regulatory regime, voluntary farmer-led approach to nutrient management, better advice and guidance, is important that any regulatory standards set

that may impact farmers or landowners has a strong evidence base. It was felt that third sectors can play a major role if resources were provided to help with this work. One respondent mentioned that we currently do not have workable agricultural regulations nor the will to enforce them.

One respondent noted that there has been a reduction in fertiliser application rates, significantly reducing the risk of nitrate pollution at a catchment level for the majority of Wales. Issues should be targeted where they exist to ensure best practice is adopted across the industry. It was felt that managed realignment of tidal areas if this reduces the land areas available for agricultural production was not appropriate would support investment in tidal barrages and earth banks to control tidal areas. It was also felt that the NRW dairy visits should have been completed first before the drafting of new regulation and legislation, so that informed decision making would follow.

One respondent pointed out that there is work ongoing to deliver Eel Regulation improvements on abstraction intakes in the Dee and a request to inform if there are any additional fish passage requirements being brought in before work commences as it is easier to delay plans rather than retrofit later. It was felt that more collaborative work could be done between Water Companies and NRW to produce a national campaign to educate the public in how to avoid blocked drains.

One respondent commented that in order for Wales to begin to remediate its metal mine issues, a long term focussed, funded national programme is essential. This is in contrast to what has been observed over the past decade, where funding has been mostly ad-hoc. Whilst this has allowed some notable engineering solutions to be delivered, it hasn't allowed for any ongoing water treatment schemes to be delivered. Another felt that a revised methodology for the assessment of hazardous pollutants in surface water discharges should be implemented and that we need to ensure that the Rural Development Plan supports sustainable agricultural practices to achieve WFD and Protected Area objectives.

It was pointed out that there was no reference to the Dee Protection Zone in the Programme of Measures and that there were concerns about how well the planning process is taking account of water quality issues in relation to poultry farm applications / private septic tank & treatment plants. At present, they appear to be assessed on an individual basis, but it will be the combination impact of all those in a catchment which will have a long-term impact on nutrient levels so we would suggest there needs to be an update in planning guidance to take account of this.

There was also concern raised by one respondent regarding the issue over the differences in cross-border funding and training opportunities, which can limit the scope of projects.

One respondent suggested that NRW review its approach to works that will improve the environment e.g. removal of redundant weirs and the amount of bureaucracy involved. It was felt that there is a need for more openness and transparency in what is and isn't monitored and what criteria are deployed and how often and appropriate to that site?

Question 3.

Do you have other suggestions for how to address the significant issues identified in the RBDs?

The following suggestions were made on ways in which some of the issues could be tackled;

- Through existing land management schemes e.g. Mynydd Du, Usk Reservoir, Central Beacons, Usk Valley, Black Mountains and Llangorse Lake.
- The need to be able to deploy measures at the appropriate scale is a key determinant of success.
- Good communication to ensure uptake by land managers is essential and resources will be required where enforcement is necessary.
- Create buffer strips along both sides of every water course, at a scale appropriate to the size of the water course. For example, 50m buffer strips on the largest rivers, and a minimum of 5m along the smallest streams.
- Better NRW planning and management processes, there is no agreement/control/procedural practice to ensure that the chicken production units dispose of waste in a sustainable way.
- Better support by NRW for 3rd Sector organisations through grants and partnership working
- A review of Environment Protection Permits discharging to the water environment.
 Where there are failing stretches it would be prudent to review the discharges entering it, particularly given the accepted increase in rainfall anticipated from climate change predictions.
- Innovative approaches taken to reduce other environmental footprints through a payment for ecosystem service scheme.
- Co-production of a pilot within an opportunity catchment would ensure that the benefits to the river basin plan are maximised.
- The completion of the current BRICs project could ideally be run alongside the development of a catchment project particularly if done in collaboration with Dwr Cymru Welsh Water alternative investment in catchment interventions.
- Research done suggests that consumers are willing to play their part in saving water but are generally unaware of the pressures on the water environment and therefore why this issue is so important. Clear and engaging communications and messaging are key to changing behaviours.
- Raising awareness amongst developers, and approval boards of the constraints and limitations of SuDS on mined land is key to ensure properly informed risk assessments are conducted by the designers.
- Where recreational boating is identified as a potential pollution source, statutory
 agencies should work in partnership with boat users, clubs, facility operators and water
 companies to provide appropriate pollution control and management facilities (e.g.
 sewage treatment, appropriate boat maintenance areas, etc.).
- There are a large number of forums and groups across Wales looking to tackle a wide range of emerging issues in the water, land and air environment and it is simply not possible to contribute to everything. We feel that both NRW and Welsh Government have a role in better co-ordinating these pieces of work to minimise conflict between priorities and make the best use of resources.
- Measures to address climate change must not add to biodiversity's decline, Therefore, ensuring our wildlife sites are in excellent condition is vital to combating climate change and addressing some of the identified SWMIs.
- Changes to land management practices will also make a major contribution, given the impacts of agricultural land management on the freshwater environment. This will require greater uptake of Catchment Sensitive Farming approaches, with current and

- new regulatory requirements better monitored and enforced, and further voluntary approaches supported by advice, guidance and appropriate funding.
- We must restore wetlands and rivers, including managing water flow patterns in ways that promote ecosystem processes, this creates multiple benefits.
- Spatial planning must prevent development on floodplains, and land management (e.g. crop rotations) and land use change (e.g. arable reversion, set aside, riparian habitat creation, riparian buffer zones, creation of wet woodland and wet grassland, water meadows) will need to be considered as we adapt to climate change, helping to restore the functionality of some floodplains. High proportions of rivers are disconnected from their floodplain by embankments and flow control structures, limiting the scope of those floodplains to hold water during high flows and contributing to downstream flooding issues. This loss of connectivity must be reversed.
- General Binding Rules could assist in tackling diffuse agricultural pollution issues". They
 have been very effective in Scotland in bringing 80% of farmers inspected into
 compliance.
- All forestry plantations should be reviewed for their appropriateness and impacts. Any
 forestry on priority habitats such as peatland should be removed, and the habitat
 restored this includes peatland. New woodland planting should adhere to the 'right tree
 in the right place' maxim.
- Evidence suggests that misconnections are a significant problem, particularly in urban areas. Often caused by inexpert plumbing, better awareness amongst householders and trades is required to prevent their creation. Impacts on water quality from a new development should be considered in the early stages of the design process and a greater emphasis on high quality design, both of buildings and places, is needed.
- Funding to manage invasive non-native species should be increased. This funding should ensure that rapid response systems are in place to eradicate new INNS, support local action groups, and support the implementation of Pathway Action Plans. Increased funding should be made available to support research on INNS, including on biocontrol and management measures.
- Microplastics should be added to the list of pollutants regularly monitored in inland waters, requiring agreement of an accurate, repeatable, reportable method for microplastic quantification. The full consequences microplastics are having on organisms, ecosystems and human health, are not yet known, but we should not wait until any harmful effects are determined before seeking to understand the extent of microplastic pollution.

Question 4.

What opportunities exist to address the SWMIs in each RBD through the Area Statement process? If possible, please specify catchments you believe present specific opportunities.

A number of respondents felt that Area Statements couldn't add any more to the what was already outlined in the consultation document and that they are not designed for use by stakeholders and are not supported by any plan of active engagement. As passive documents their use will be limited. Two respondents felt that the process of their production has been exclusive rather than inclusive and has not demonstrated SMNR principles. There has been some engagement, but it has not been targeted with any view to ongoing relationship building or capacity building for issue engagement. The expediency with which the river basin plans must be implemented does not lend itself to using the Area Statements as a vehicle for delivery. It was also felt by one respondent that the River

Basin Plans have not been successful, and the Area Statements are untried. The Area Statement process has been developed around capturing issues with ad hoc consultation and has not been done to build relationships for resolving the issues raised.

Some mentioned that once the emerging priorities have been identified for each Area Statement, these need to be compared with the SWMIs for RBDs sitting within those areas to ensure there are no conflicts and that any actions identified within the Area Statements will continue to address the SWMIs. It was felt that through the Area Statement consultation process, there is a great opportunity to reach a much wider stakeholder base than was engaged with through the previous RBMP process and identify where there is common ground for tackling impacts to water, land and air environments. NRW need to look at the basics as well as taking a broad-brush overview. What is the point of all these plans and targets if they are considered in isolation between Local Authority planners, enforcers and monitoring officers, when enforcement by NRW is all but non-existent?

It was noted that the Coal Authority is working with the Environment Agency to develop and deliver a programme of metal mine works across England. A similar programme in Wales of monitoring, prioritising and remediating of metal mines would, over time, help to ensure the issues of metal mines can also be improved and remediated. Risks of deterioration to water bodies could also be managed.

One respondent commented that the Clwyd catchment and many of the catchments on Anglesey are heavily impacted by poor agricultural practice and these should be targeted for remedial action. Others noted that source apportionment is a necessary step in targeting mitigation options for nitrogen from agricultural sources and that INNS should be tackled in small coastal water bodies efficiently.

Question 5.

We don't plan to produce a consultation response document for this consultation but will summarise responses in the draft RBMP, is this agreeable?

When NRW went out to consultation in 2018, the intention was to produce a summary of responses to attach to an appendix in the draft RBMP. Since then a decision has been made to delay the consultation on the draft plan and therefore this separate summary document has now been produced.

The majority of respondents that answered this question agreed that it was acceptable to produce a summary of the responses. A small number of respondents felt that action and dialogue was more important than paperwork, whilst one respondent felt it was unacceptable and that they wanted to see the rationale for future action.

General Comments

Some respondents did not answer the questions in the consultation but made general comments on the following topics/issues.

Two respondents mentioned that water is a vital resource for Welsh farmers and landowners who abstract for agricultural and business applications, therefore, it is imperative that NRW takes steps to ensure the views of farmers and landowners are

included in any consultations and decisions on water issues. It was felt that there has been a lack of progress to date through the WFD which has been disappointing, particularly in failing to achieve some of the ambitions set in the 2015 River Basin Management Plans; NRW must continue to provide both financial and advisory support for farmers to tackle diffuse pollution from agriculture and to adapt to any proposed rules for water.

Three respondents felt that the overall progress in river basin management planning was disappointing, the targets set out in the 2015 plans have not been met and it was felt they wouldn't be met during the current cycle of plans. The next round of River Basin Management Plans will be the final cycle required by the Directive. That makes it all the more important that the Welsh Government grasps this opportunity to align land use and water policy better, and from there enable NRW to regulate and enforce controls on diffuse pollution in particular. Without such policy alignment and enforcement, we cannot see how the requirements of the WFD will be met, or indeed the requirements of the Well-being of Future Generations and Environment (Wales) Acts.

One respondent commented that they have already done a great deal to support the delivery of the Directive by reducing impacts, as well as supporting projects by the third sector to reduce some of the impacts made by others. However, a lack of meaningful action by others to tackle the pressures they continue to create means that the majority of Wales' water bodies are still failing WFD requirements.

While delivering the desired reductions in nutrients, with the benefits that brings to the aquatic environment, tertiary treatment requires additional energy use, more equipment to maintain and renew, as well as chemical intensive treatment technology. The chemical resources are finite and the carbon emissions from the energy used will contribute to climate change. As such, these approaches whilst effective, may simply not be sustainable, nor affordable for customers. In contrast, investment could be made in catchment interventions through a form of paid for ecosystem services to address fair share of pollution, such as by encouraging agriculture and other land managers to reduce their impact beyond the levels they should achieve anyway. We should be willing to tailor the approach that we take on a catchment-by-catchment basis, weighing the pros and cons of conventional versus alternative approaches, so that we can jointly achieve the most sustainable outcome for Wales' natural resources.

One respondent felt that the marine environment needed to be given a higher priority this time as it has previously been overshadowed by the freshwater environment. The River Basin Management Plans are a key lever for NRW to help deliver the Marine Plan, including actions to bring Wales' Marine Protected Areas into favourable condition.

It was acknowledged that the consultation makes various references to the Environment (Wales) Act 2016. However, it gives the impression that it is mainly through the Area Statements and its SoNaRR report that NRW will deliver its new statutory general purpose, the sustainable management of natural resources (SMNR). Whilst these linkages were welcomed, NRW needs to go much further. The next cycle of River Basin Management Plans (2021–2027) will be the first opportunity for NRW to view its Plans through the lens of its SMNR overarching purpose. NRW should use its WFD planning processes to explore the full potential of the SMNR approach.

One respondent felt that in the third, final cycle of Plans, NRW must lead by example, be bolder in its ambition and enforcement, and bring SMNR into the heart of the River Basin Planning process. For example, designing the 'Programme of Measures' (essentially a list of the mechanisms that will be used to bring waterbodies up to Good status) represents a unique opportunity for NRW to show how the SMNR approach can be put into practice. Central to the selection of measures is the economic analysis that must be undertaken by NRW. This is important in two areas; the selection of the most 'cost-effective' measures and consideration of disproportionate costs. a shift from traditional, end of pipe solutions toward a more catchment-based approach, a set of minimum standards for land managers to meet - and so enable them to be eligible for both funding from the state and through market-based ecosystem services from private companies, for the public goods they would deliver.

There will be some situations where there is no viable catchment or nature-based intervention available. In such cases, NRW will have to weigh the pros and cons of adding tertiary treatment at water treatment works or uprating the performance of a storm overflow. There will be cases where the installation of additional treatment or storage is justified. However, there may be other examples where, in SMNR terms, the appropriate conclusion would be that making an intervention would cause more overall damage to natural resources, outweighing the local benefits that would be realised by the 'improvement', e.g. when both embedded and operational carbon, and chemical costs exceed water quality benefits.

Such circumstances are recognised by the WFD which allows Member States to set 'Alternative Objectives' where, after a full consideration of all the costs and benefits, remaining at moderate or lower status might be the best thing to do overall. It was thought that this is particularly important in the context of the declared climate change emergency and at a time of economic uncertainty

Another respondent commented that the Welsh Government has also declared a climate emergency and has agreed with the recommendations from the Committee on Climate Change which recommends Wales achieve a 95% reduction in greenhouse gases by 2050. The Intergovernmental Panel for Climate Change's report highlights that food security has already been affected, agriculture is contributing to climate change.

There is a need for urgent action in the face of mass species extinction. One million species may be pushed to extinction in the next few years, with serious consequences for human beings as well as the rest of life on earth. The major culprits are, changes in land and sea use; direct exploitation of organisms; climate change; pollution and invasive alien species. Management of agricultural land, including its effects on the water environment, has been identified as the most significant factor driving species' populations declines. None of our ecosystems show signs of resilience and there has been a 56% decline in wildlife. It is not too late to make a difference, but only if we start now at every level from local to global but need action now.

Many of the respondents said that they would be prepared to engage with measures across a range of sites and scales to address SWMIs.

It was also felt that the equivalent of good status should be defined for a range of small waters including ponds, small lakes and headwater streams, and targets should be used to

inform a catchment-scale Programme of Measures that could be delivered in parallel to that for WFD targets.

Concerns were raised by the conservation sector regarding frequency of monitoring, and that the figures given for pollution in rural areas are only the reported cases (with likely many unreported incidents) hence this is likely to be an underestimate. If water monitoring is reduced, then the likelihood of picking up agricultural pollution will be significantly reduced.

In Wales, we have placed rather too much faith in voluntary measures which is in effect what the current system amounts to. The livestock farms polluting the UK raised significant concerns about the current system. It was found that pig, poultry and dairy farms were releasing harmful pollution once a week on average in England and Wales. If farmers, in good faith or otherwise, don't see themselves or farming as the problem, then they believe regulatory measures on them would have little or no effect in terms of reducing the water quality.

One respondent from the conservation sector welcomed the new agricultural regulations but a major obstacle to effective compliance with existing regulation is the lack of funding for enforcement, and Government should recognise the significant cost savings associated with investing in enforcement. An increase in resourcing for monitoring and compliance will need to accompany any new regulations.

It was also noted that there was support for a move over time more toward the 'polluter pays to principle' to prevent pollution. In some situations, this can be problematic but financial assistance for meeting the current baseline should be offered as loans. However, polluters should not be paid to meet the regulatory baseline, and a future Sustainable Land Management Scheme should ensure that all land managers meet basic standards of practice and are then rewarded for efforts beyond this level.

4. Natural Resource Wales' Next Steps

4.1. Challenges and Choices and the updated River Basin Management Plans

The feedback received largely supports our current evidence base (Reasons for Not Achieving Good information), which was used to identify the significant issues documented in the consultation. This evidence base, together with the issues and solutions put forward by this consultation, will be key to updating the River Basin Management Plans.

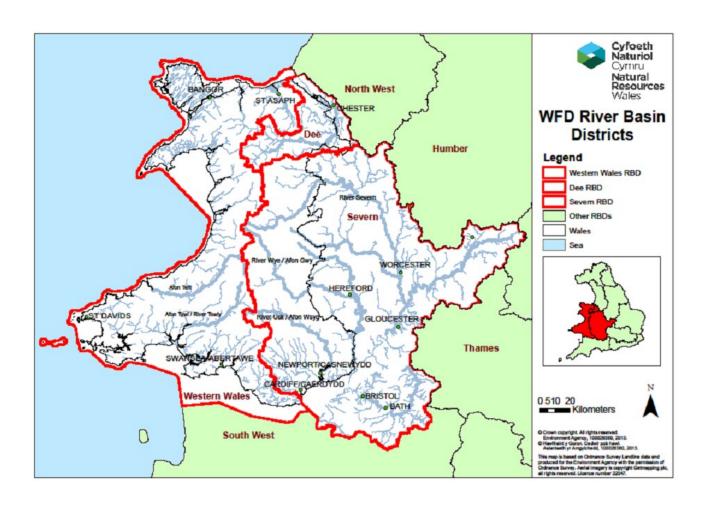
Our next step is to review this in detail with our colleagues and this will feed into the updated River Basin Management Plan. This will include setting out clearly in the Plans what we believe are the required solutions. Where specific local issues have been raised these have been passed on to local NRW officers and Area Statement officers for consideration and action where appropriate.

The next formal consultation will be the draft updated River Basin Management Plan consultations (Autumn/winter 2020). This will seek your views on the draft Plans and consider how we will work together to improve the water environment to 2027 and beyond.

To find out how you can get involved, or get more information on the consultations, visit the Natural Resources website. We will update our webpage as each consultation begins and when it is complete. A further response document will be published in 2021 following the consultation to steer the updated River Basin Management Plans.

5. Appendices

5.1. Map of the River Basin Districts in Wales



5.2. List of respondents

| NAME | SECTOR |
|--|---------------------|
| Farmers Union of Wales | Agriculture |
| Energy UK | Business & Industry |
| Wildlife Trust Wales | Conservation |
| RSPB | Conservation |
| Royal yachting Association | Recreation |
| Country Land and Business Assoc Wales | Land Management |
| PLANED | eNGOs |
| Dŵr Cymru Welsh Water | Water Industry |
| Hafren Dyfrdwy | Water Industry |
| NFU Cymru | Agriculture |
| North Wales Rivers Trust | Conservation |
| Canoe Wales | Recreation |
| Pontardawe & Swansea Angling Society | Fisheries |
| Coal Authority | Mining |
| Pembs. Coast National Park | Local Authority |
| Brecon Beacons National Park | Local Authority |
| Friends of Pembrokeshire Coast NP | eNGOs |
| Consumer Council for Water | Water Industry |
| Afonydd Cymru | Conservation |
| Campaign for Protection of Welsh Fisheries | Fisheries |
| Public Health Wales | Health Service |
| Wales Wild Land Foundation | Conservation |
| Various | Conservation |



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