



**Cyfoeth  
Naturiol  
Cymru  
Natural  
Resources  
Wales**



**Environment  
Agency**

# Challenges and Choices

Consultation on the summary of significant water management issues for Wales, Western Wales River Basin District and Dee River Basin District

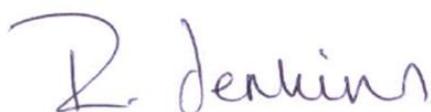
## FOREWORD

The Natural resources in Wales are extremely important from the rugged mountains and woodlands, to the beautiful landscapes, coastlines, and diverse wildlife. They are vital for our survival and provide us with the basic things we need to live: clean air, clean water, and food. They create jobs for thousands of people creating wealth and prosperity and are intrinsically linked with Welsh culture and language. They give us all a better quality of life and opportunities to enjoy the outdoors against a backdrop of Wales' natural beauty and heritage and people come from far and wide to experience them. We need to look after these natural resources and what they provide for us: a sufficient quantity of good quality water is essential for living organisms and to support Wales' diverse wildlife.

The Water Framework Directive established an overarching framework and cycle of river basin planning through which we prevent deterioration of waters, we aim to restore them and ensure that we sustainably manage water resources. We work with others across the public and private sector to do this, to ensure that the environment and natural water resources are more resilient to climate change and other pressures.

This now sits within a wider legislative context for the purpose and principles set out in the 'Environment (Wales) Act 2016' and the objectives of the 'Well-being of Future Generation (Wales) Act 2015'. SoNaRR describes some of the progress that has been made to improve water quality and connectivity of our rivers in the last 25 years, but concluded that we are not yet achieving sustainable management of water. There are still many challenges to overcome; population growth, climate change and challenging economic times mean that the natural environment remains under constant pressure. The development of Area Statements under the Environment Act will enable Natural Resources Wales to work with others to provide evidence on the demands for water and the opportunities at a local level, to inform decision-making by ourselves, stakeholders and partners. This will help us to focus on a more collaborative and integrated approach to natural resource management, looking at the root causes of problems and working with stakeholders to find long-term solutions, which also helps us to seek to maintain and enhance biodiversity and promote the resilience of ecosystems.

This consultation has been produced to share an overview of the significant water management issues identified across Wales and in river basin districts to inform those actions required to secure the necessary improvements and to share evidence around where action is required. We also seek your support in updating our assessment of freshwater sustainability in preparation for SoNaRR 2. By being involved you can take an active role to help to protect and deliver further improvements to ensure the sustainability, health and resilience of Wales' water environment.



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**Head of Natural Resource Management Policy**

## Contents

FOREWORD .....	2
1.0 Introduction .....	4
2.0 The approach in Wales .....	5
2.1 Taking a Place-Based Approach .....	5
2.2 Evidence to support sustainable water management .....	8
2.3 Freshwater dependant habitats and species .....	8
3.0 Challenges and Choices: Wales .....	9
3.1 The Significant Water Management issues: general .....	10
3.2 The Significant Water Management issues: Wales .....	10
3.3 Additional issues that impact on the water environment.....	14
3.4 Climate Change.....	16
4.0 Challenges and Choices: Western Wales RBD .....	18
4.1 Overview .....	18
4.2 The Significant Water Management Issues .....	19
5.0 Challenges and Choices: Dee RBD .....	20
5.1 Overview .....	20
5.2 The Significant Water Management issues .....	21
6.0 Further information.....	21
7.0 Consultation arrangements .....	22
Appendix A: Facts and Statistics for Wales, Western Wales RBD and Dee RBD.....	24
Appendix B: Programme of Measures currently used to address the significant water management issues.....	33
Appendix C: Working Together summary of responses.....	39

## 1.0 Introduction

Water is essential for life. Water allows the natural environment to flourish, and businesses, agriculture and the economy to grow and prosper. Rivers, lakes, estuaries, coastal areas, wetlands and ground water provide many different benefits to society – from supplying drinking water and supporting fisheries to providing an essential resource for business and agriculture, transport routes and a source of recreation that promotes wellbeing.

Healthy water environments also help protect the nation from floods and droughts and regulate the quality of the air and the climate. Everyone benefits from using water and enjoying the water environment, but it is essential that both are used and managed in a sustainable way. By doing this, the natural environment, business and economic growth will be protected and the long-term benefits to health and wellbeing improved.

The best way to protect and improve the water environment is by everyone understanding the difference they can make by becoming actively involved. This consultation not only complies with the requirements under the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, it also provides an important opportunity to engage with you on the work we are undertaking in response to the Environment Act (Wales) 2016 – namely Area Statements and the 2<sup>nd</sup> State of Natural Resources Report (SoNaRR). This consultation describes the significant water management issues and is an important step in managing the water environment, giving you the chance to influence the approach in your local area. Section 2 of the document outlines the legislative context in Wales, Section 3 describes the issues across Wales, section 4 the issues in the Western Wales River Basin District (RBD) and section 5 the issues in the Dee RBD. Out of the three RBDs in Wales two are cross border with England (Dee and Severn). Natural Resources Wales (NRW) publishes the consultations for Dee and Western Wales RBDs and the Environment Agency publishes the Severn RBD consultation.

Your responses will then feed into the next update to the River Basin Management Plan (RBMP), Area Statements and SoNaRR 2. As part of this consultation you will be required to identify which area(s) your response applies to. We are proposing not to publish a separate consultation response document, but will include a summary of responses in the draft RBMP in 2020.

In 2018 we consulted with you on the Working Together document which set out the statement of steps and timeline for the third cycle of the RBMPs. The consultation took place between June 2018 and December 2018 and you can find the summary responses to the consultation in Annex C.

## 2.0 The approach in Wales<sup>1</sup>

The Water Framework Directive (WFD) now sits within a wider legislative context in Wales, and this consultation is an opportunity to support the delivery of new statutory duties under the Environment (Wales) Act 2016 and Well-being of Future Generations Act 2015.

The Environment Act includes a requirement for NRW to embed the principles of Sustainable Management of Natural Resources (SMNR) throughout the way we work. By applying these principles we can maximise our contribution to the well-being goals in the Well-being of Future Generations Act and pursue SMNR. It also sets out an iterative framework to ensure that managing our natural resources sustainably will be a core consideration in decision-making in Wales. This framework includes the State of Natural Resources Report (SoNaRR), the national Natural Resources Policy (NRP) and Area Statements.

The first version of SoNaRR was published in 2016, highlighting the pressures on our natural resources and linking the resilience of Wales' natural resources to the well-being of the people of Wales. Drawing on this evidence, Welsh Government published the NRP in 2017, outlining the three national priorities for natural resource management in Wales:

- 1) Delivering nature-based solutions
- 2) Increasing renewable energy and resource efficiency
- 3) Taking a place-based approach

In response to these national priorities the NRP lists eight challenges and four opportunities. Listed below are a selection those of those with particular relevance to water management:

- Improve the quality and ensure the quantity of our water
- Reverse the decline in biodiversity – by developing resilient ecological networks
- Reducing the risk of flooding
- Supporting climate change mitigation and adaptation through ecosystem approaches
- Maintaining, enhancing and restoring floodplains and hydrogeological systems to reduce flood risk and improve water quality and quantity
- Restoration of uplands and managing them for biodiversity, carbon, water, flood risk, energy and recreational benefits

### 2.1 Taking a Place-Based Approach

The NRP sets the context for Area Statements, which must respond to the national priorities, challenges and opportunities at the local level. NRW is the lead organisation responsible for the preparation of seven Area Statements (six terrestrial and one marine), and we are engaging with stakeholders on the evidence base and application of SMNR at the local and national level. Co-production of Area Statements with partners and stakeholders is an important step to support implementation of the priorities and opportunities outlined within each.

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<sup>1</sup> This document reflects the legislation and measures that will be implemented in Welsh water bodies only, for information on relevant English legislation and measures please refer to the Environment Agency 'Challenges and Choices' consultation document due to be published in Autumn 2019.

Area Statements will also be used to shape NRW's business planning and partnership working including projects linked to WFD outcomes for our water bodies, and will be used to influence a range of public plans and policies to help integrate sustainable water management across other delivery mechanisms including land use planning, land management, flood risk and water company planning.

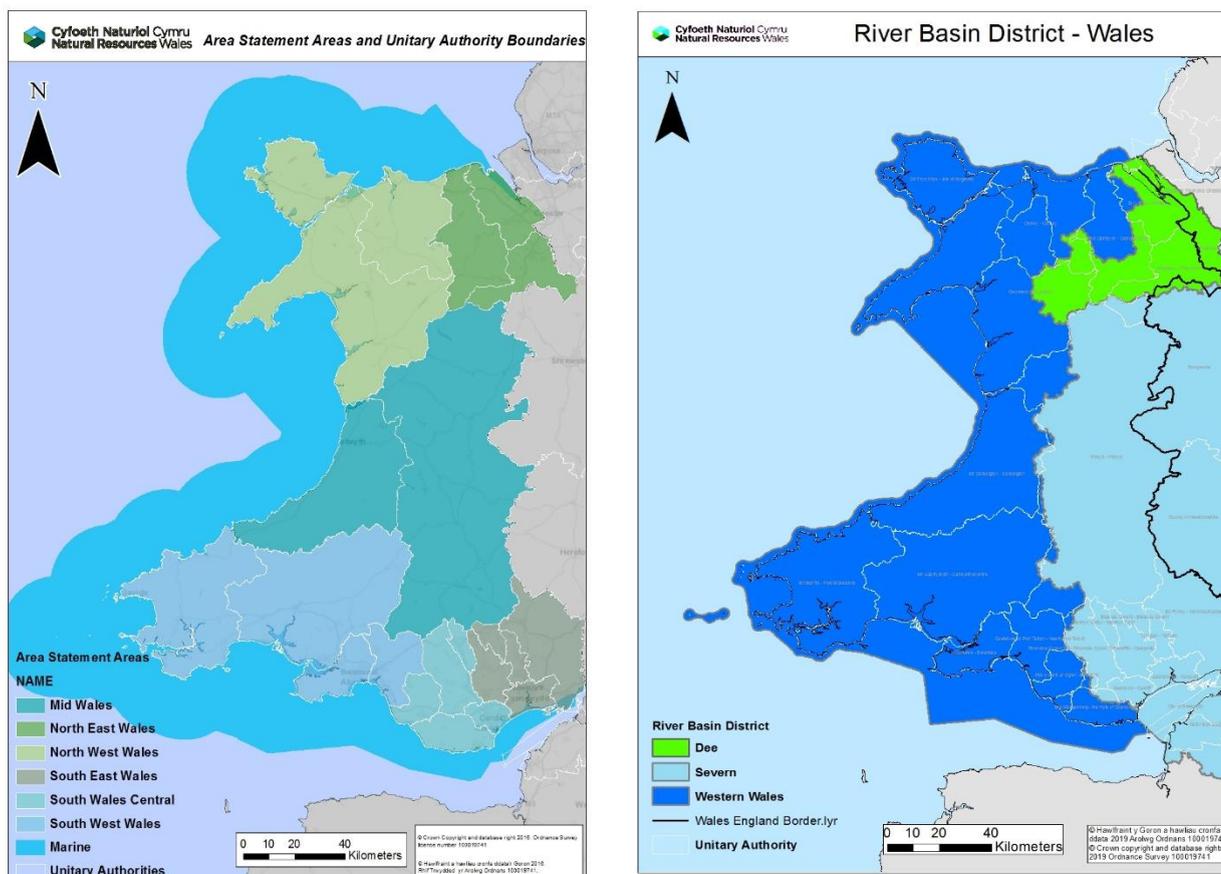
For this reason, in cycle 3 RBMPs we are not proposing to select targeted water bodies solely for the purpose of delivering outcomes under WFD, but propose to consult on a list of catchments that present a range of opportunities to address multiple benefits as well as improvements to overall status of water . The Area Statement engagement process will be central to the selection of these 'opportunity catchments' so we encourage consultees to answer question 1 in this consultation and refer to the Area Statement development process and evidence base. Details on how to access this information is contained at the end of this section. NRW aims to publish the first Area Statements by spring 2020, with engagement taking place throughout 2019. Please refer to figure 1 below for a map of the Area Statement areas and the RBDs in Wales for comparison.

The Act requires that Area Statements include information about the natural resources in that place, the benefits provided, and the priorities, risks and opportunities that need to be addressed to achieve sustainable management within that area. [Statutory Guidance on NRW's purpose](#) states:

*Area statements play a key role in delivering the spatial element of the Natural Resources Policy through identifying the areas in Wales where taking action at the right scale, both directly by NRW and through advocating action by others, can maximise benefits and identify synergies across policy areas. The aim is for action by NRW and others to be focussed in areas of most benefit and for these areas to be clearly identified, together with the rationale for why they have been prioritised.*

Area Statements are therefore both an evidence base and a prioritisation tool to help us clearly signpost opportunities to deliver SMNR at a local level right across Wales. The Environment Act and Well-Being of Future Generations Act also require us to bring together data, information and ways of engaging others to help us better understand the state and trends of natural resources in an area, pressures on them, the benefits we receive, plus preventative actions to halt deterioration and build resilience.

**Figure 1: Map of Area Statement Boundaries and River Basin Districts in Wales**



The legislative approach above means we need to consider water in a wider context in terms of identifying the issues, potential solutions and preventative actions. To make the transition to sustainable management possible, we need to focus on delivering multiple benefits that contribute to ecosystem resilience and improved well-being. Area Statements will help direct the wider sector to work collaboratively to develop the right solutions in the right place in an integrated way.

In line with the NRP, in working to build a resilient future for water in Wales we will increase the role of nature-based solutions in flood and water management. We will take a place-based approach which will allow us to respond to local needs and opportunities, whilst increasing our ability to manage natural resources more efficiently. Work within whole catchments from source to sea will improve rivers' capacity to respond to high and low flows; reduce flood risk; improve water quality and support recreation and economic activity.

Engagement on the design and implementation of Area Statements is taking place throughout the consultation period for Challenges and Choices, and we want both processes to work together in helping to identify opportunities to focus effort in delivering SMNR in Wales. The water environment is an essential element of Wales' natural environment, therefore information provided in response to this consultation will be used to inform the development of Area Statements and the right actions on the ground to restore water alongside other benefits.

To engage with the Area Statement development process please visit the [NRW Area Statement webpage](#) to access information, evidence and opportunities to be involved. This is also where you can access the 'Area Profiles', which provide a breakdown of natural resource management and socioeconomic data per area. These profiles are a platform to aid discussion, holding a consolidated summary of the state of natural resources in each area. This includes high-level data on water quality and quantity, protected areas e.g. Nitrate Vulnerable Zones (NVZs) and a summary of WFD data with hyperlinks to [Water Watch Wales](#) for more detailed information.

Please note that area profiles are not 'reports', but have been designed to aid discussion on the local opportunities to address natural resource management. The data each contain is taken from other published sources, and each profile will be subject to continuous and regular change. For this reason we encourage stakeholders to download the most recent version from the NRW area statement web-page.

## **2.2 Evidence to support sustainable water management**

NRW is currently assessing the SMNR evidence for inclusion in the 2<sup>nd</sup> edition of the State of Natural Resources Report (SoNaRR), due to be published in Dec 2020. SoNaRR is a comprehensive and centralised national evidence base on the sustainable management of natural resources in Wales, which is reviewed and updated to reflect current conditions.

SoNaRR aims to provide both a baseline for, and to subsequently measure, how Wales is progressing in achieving the objectives of SMNR. It provides evidence to inform the identification of national risks, priorities and opportunities for SMNR and suggests how SMNR could be achieved in the future. Since SoNaRR 1 we have developed the method for assessing SMNR. This includes four new SMNR objectives which will be core to the assessment set out within SoNaRR 2 and will provide the framework for the new indicators of SMNR which will be used to show progress.

We are currently undertaking an assessment of the freshwater and marine evidence and information available to update SoNaRR 2. This includes information on trends, qualitative evidence, and data essential to measuring ecosystem resilience in Wales and our application of SMNR. We welcome contributions from partners to the water evidence base and encourage respondents to answer question 1 of this consultation.

NRW has developed a draft list of water evidence needs, categorising gaps in our knowledge that are barriers to achieving the sustainable management of water. We are seeking opportunities to work collaboratively with others to deliver these evidence needs, and welcome any feedback. To review NRW's draft evidence priorities for water please visit our [website](#)

## **2.3 Freshwater dependant habitats and species**

Section 6 of the Environment Act introduced a stronger biodiversity and resilience of ecosystems duty for Public Authorities in Wales, which includes NRW. The duty requires public authorities to seek to maintain and enhance biodiversity and promote the resilience of ecosystems, as part of their business planning and day-to-day activities. For further information see [Vital Nature](#)

WFD looks at measures which include the whole river system, therefore delivery will bring benefits to biodiversity and support improved ecological resilience, including sites and species designated as especially important,

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)?

### 3.0 Challenges and Choices: Wales

SoNaRR I outlined the challenges to sustainable management of the water environment. The development of the NRP was shaped by recommendations from SoNaRR I to address the challenges and opportunities for natural resources management, and drive place-based decision making to harness opportunities to work collaboratively with others in managing our environment. Evidence on the state of our natural resources is key to place-based decision making, and the data collected to inform WFD is one of the richest sources of information on the status of our water environment.

There are other sources of information that compliment and add weight to the Significant Water Management Issues (SWMIs) identified below, one of these sources is the [Natura 2000 Thematic Plans](#), that show many of the same issues have been identified as preventing Natura 2000 sites from achieving 'Favourable Status' e.g. Diffuse pollution. The most recent reporting under the Habitats Directive (Article 17) included information on the main pressures and threats for designated features. For freshwater features, the pressures and threats categorised as high included physical alteration and modification of hydrological flow, pollution to surface and groundwaters, abstractions and invasive species. For estuarine features these included water pollution (from marine and coastal, and agricultural activities sources), modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures).

WFD classification for water bodies is one of the national indicators monitored by the Future Generations Commissioner, used to inform how the Welsh environment contributes to the well-being of the people of Wales. This data also provides an essential insight to our progress in achieving the sustainable management of natural resources in Wales. Whilst extensive, WFD does not cover all aspects of water dependant habitats and species, and precludes monitoring on certain attributes and substances. In the development of SoNaRR 2, and via engagement on area statement development, NRW is gathering new evidence from stakeholders on the state of our water environment. We are also working with Welsh Government on the needs of non-licensed water users, and through our water evidence gaps project we hope to tackle certain areas where our understanding of the water environment can be improved.

One example where we need better evidence and understanding on the in-combination and long term effects is in coastal and transitional water bodies, which present a challenge

in understanding of the dynamics between nutrients, accelerated algae growth, and undesirable balance in organisms. We are also working to improve our understanding of in-combination effects of chemicals and the potential impacts of emerging chemicals. Hydrological processes such as water movement due to tides and waves (which affect water levels, currents, mixing, and sediment transport), water temperature and salinity, have a significant influence on marine habitats. Locally or regionally, these may be affected by development or management measures, but largely these processes are outside management control. These have the potential to be significantly influenced by climate change, and this in turn, will affect extent, distribution, and condition of marine and coastal habitats.

The following sections detail the significant water management issues (SWMIs) in Wales, as reported under WFD. It is important for NRW to dedicate sections of this consultation to the SWMIs to ensure continuity with previous RBMPs, and aid reporting of pressures consistently under these headings. Section 3.3. details other issues that impact on the water environment not necessarily covered under the each of the main SWMIs. These, and other factors are vital to present the overall picture of the state of the water environment in Wales. SoNaRR 2 will rely upon the SWMIs and a range of other evidence to provide an indication of Wales' progress in achieving SMNR for the water environment. We will also rely upon SoNaRR 2 in combination with area statement progress reports to assess the degree to which Wales is meeting the priorities, challenges and opportunities outlined in the NRP

### 3.1 The Significant Water Management issues: general

In consultation with our partners we have developed a list of the important issues we believe threaten the current and potential future use of the water environment. For the purposes of this consultation these have been categorised according to the WFD convention and are based on number of water bodies failing for that pressure – note that a water body can fail for more than one issue and we have only used those SWMIs where the certainty is either 'confirmed' or 'probable' to ensure only robust data is used. This information has been reviewed since the last RBMP and updated from our most recent monitoring and classification data.

Note that there may still be some water bodies where the cause of the failure is not known; this may either be as a consequence of a new failure in the 2018 interim classification or where for example, we have diffuse inputs that are difficult to trace to an origin. We will continue to investigate these to ensure that measures can be put into place to address the issues.

It should also be noted that the figures below for Wales include Welsh water bodies in the Severn RBD and that the figures used for the Dee include some English water bodies.

### 3.2 The Significant Water Management issues: Wales

Across Wales the main five issues are **Physical Modifications**, **Pollution from sewage and waste water**, **Pollution from towns, cities and transport**, **Pollution from rural areas**, and **Pollution from mines**. We are taking actions to address these and prioritise work so we can deliver environmental improvements in the most efficient way. We still

have a lot more work to do, so success will rely on partnership working and collaboration. For information on the latest key statistics for Wales see Annex A.

A summary of the key measures available to address the issues are given in Annex B, this includes existing measures, revised measures and some new measures that will be considered further in the dRBMP. The RBMP 2015 included a Programme of Measures (PoMs) required to meet WFD objectives for 2021. As part of the review and update of the RBMP for the third cycle, these will need to be revised. Some PoMs may remain in place and continue through the 3<sup>rd</sup> cycle, some will be completed or no longer required and some may simply require updated wording to reflect the current status of that measure. Any changes will need to be recorded and reported to ensure a transparent audit trail. For the purpose of this consultation there is an opportunity to start to look at the PoMs which will be fed into the draft RBMP 2020 prior to becoming the updated PoMs for the 3<sup>rd</sup> cycle.

### **Physical modifications**

These are modifications that society has made and continues to make to rivers, lakes, estuaries and our coastline; the end result being that the size and shape of natural habitats become altered. Physical modifications can include artificially straightening channels to aid navigation or flood risk management, structures designed to reduce flood risk, flow regulation structures to create reservoirs, dams and weirs, or short-term management activities like dredging or vegetation removal. They can also cause changes to the natural flow, water levels and can result in the excessive build-up of sediment and the loss of habitat that wildlife needs to survive.

Many of our towns and cities have been built around the water environment and we need to find sustainable solutions to ensure these issues do not have a negative impact on the water environment, economy, health and wellbeing. Some historic modifications may have been present for many years, and may serve multiple purposes providing benefits to society. Where these physical modifications lead to a failure of environmental objectives, practical and reasonable mitigation measures are required. The aim of these mitigation measures are to enhance and restore the quality of the existing environment.

As our population grows and the effects of climate change increases, the pressure to physically modify water bodies in the future is likely to increase as we protect ourselves and our homes from increased risk of flooding and droughts. The approach to new modifications is to ensure that they do not adversely impact the water environment. These modifications need to be undertaken in an environmentally sensitive way within the constraints of technical feasibility and costs and help improve our resilience to other pressures including climate change, recreation and fishing.

Physical modifications are a widespread problem: 241 water bodies fail to reach good status because of them. Some of these are as a consequence of pressures like barriers to fish migration such as weirs (90 water bodies), but also flood protection (9) and impoundments (19).

### **Pollution from sewage and waste water**

Sewage and waste water can contain large amounts of nutrients (such as phosphorus and nitrates), ammonia, metals and other damaging substances including viruses and bacteria. These can have a detrimental effect on habitats and a significant impact on our use of

water, particularly the recreational use of bathing waters and waters supporting shellfish for consumption. All groundwater forms part of a Drinking Water Protected Area (DWPA). Unregulated discharges to ground and leaking subsurface sewers can cause point source and diffuse pollution of groundwater resources. Pollutants enter the water environment through discharges from sewage treatment works and sewage overflows (either treated or untreated)

During periods of wet weather, storm overflows also contribute to the impact. This can affect the water environment and in particular bathing and shellfish waters. Changes in weather patterns and population distribution, alongside the need for new housing and other premises all contribute to pressure on the infrastructure in place to deal with our sewage and waste water. With ageing networks and future development this can overload works, increase the number of spills from overflows and have an impact on our environment. Consequently one of the key Programme of Measures continues to be those actions taken to tackle these issues through the NEP.

Improving effluent treatment and regulating unlawful discharges from privately owned septic tanks will have a significant positive affect on the water environment. This will ensure our drinking water supply is protected from the harmful effects of pollution, also benefit habitats and a large number of Protected Areas including bathing waters, shellfish waters, Natura 2000 sites and sensitive areas under the Urban Waste Water Treatment Directive (UWWTD). The UWWTD Review is identifying water bodies across Wales that may be designated as sensitive areas (eutrophic). If designated, and found to be impacting on the water environment, large sewage treatment works will be required to have appropriate nutrient treatment in place.

It is also important to increase public awareness to prevent misuse of the sewerage system and avoid the disposal of harmful chemicals, fats, oils, grease and inappropriate materials like wetwipes. Pollution from sewage and wastewater cause failures in 74 water bodies

### **Pollution from towns, cities and transport**

A combination of misconnections of our dirty water (from sewage and washing) at our workplaces (in particular industrial estates) and homes and privately owned septic tanks and treatment plants together with rainwater collected from manmade surfaces such as building roofs, roads and pavements collectively contribute to a mixture of water pollution within our towns and cities. This can include dust/grit, oils, detergents, metals, road salt, bacteria from animal faeces and other particulates which becomes collected through surface water drainage systems or directly into local streams and lake from localised drains. This can have an impact on our rivers, lakes, groundwater, estuaries and coastal waters. In some instances pollutants from historically contaminated land and atmospheric pollution contributes to the problem in surface waters and groundwater.

Tackling this is complex due to the nature and number of small discharges that collectively have a locally significant impact, for example locating the source of pollution from a large industrial estate which may have many different types of businesses This has been recognised by the Welsh Governments Water Strategy to protect and improve our waters. We also have an opportunity to minimise impacts from historic and future developments through better urban design and planning. Across Wales it is now a requirement that owners register their septic tanks/sewage treatment system with NRW, since NRW was

formed there have been over 1500 new registrations across Wales. NRW has also produced guidance on maintaining septic tanks/private sewage systems and this can be [found here](#). Pollution from towns, cities and transport cause failures in 101 water bodies.

### **Pollution from rural areas**

Some land management practices as well as impacts from other rural uses (for example horses/stables and golf courses) can result in nutrients (such as phosphorus and nitrate), bacteria, pesticides, soils and sediments affecting the water environment. Nutrients can cause excessive algal growth and lead to eutrophication in our surface waters. Groundwater used for drinking water can also be impacted through the long term application of fertilizers and manures which can result in nitrate concentrations above the drinking water standard. Groundwater containing elevated levels of nutrients can lead to poor ecological status in wetlands that are groundwater fed.

Diffuse pollution from rural areas causes failures in approximately 129 water bodies. Of these 113 failures are from farming and 16 are from forestry. Preventing and reducing pollution from rural areas will benefit the water environment, both for people and wildlife. From an economic perspective, land managers can save money through good land management practices, preventing loss of soil and nutrients, the water industry can make significant savings if there is less need to prioritise investment in the treatment of drinking water for colour, pesticides and nitrate contamination. Approaches such as General Binding Rules could assist in tackling diffuse agricultural pollution issues. Locally, people would benefit through better water quality in our rivers, lakes, groundwater, estuaries and coastal waters especially in areas designated for bathing or shellfish harvesting. There would also be benefits to our habitats and a large number of Protected Areas including Bathing Water, Shellfish Waters, Drinking Water Protected Areas, Natura 2000 sites and nutrient sensitive areas designated as Nitrate Vulnerable Zones. In addition, measures that promote tree planting, new woodland creation and better woodland management in accordance with the UK Forestry Standard and associated publications, could also help reduce pollution from rural areas.

In January 2017 the Wales Land Management Forum (WLMF) Sub-Group on Agricultural Pollution was established in order to focus on tackling agricultural pollution. The membership comprises of Natural Resources Wales, National Farmers Union Cymru, Farmers Union Wales, Welsh Water, Tenant Farmers Association, Hybu Cig Cymru, AHDB Dairy, Carmarthenshire Fishermen's Federation, Welsh Government and Wales Environment Link. In April 2018 the Sub-Group collaboratively produced an interim report on agricultural pollution for the Minister Lesley Griffiths. The report detailed recommendations for further work areas needed to bring about change. These are a robust regulatory regime, developing a voluntary, farmer-led approach to nutrient management, better advice and guidance, improving the range of investment opportunities and identifying and promoting innovation. For further information visit our website [HERE](#)

### **Pollution from mines**

Contaminated groundwater can discharge from abandoned mines and is a major problem in Wales. These mine water discharges are often contaminated with dissolved metals such as iron, lead, copper, zinc and cadmium which discharge into adjacent rivers and

subsequently to estuarine and coastal waters. Rain water run-off from spoil heaps associated with the workings can also discharge into rivers. These metal rich discharges have a significant detrimental impact on many of our rivers and the fish and ecosystems they support.

Abandoned metal mines are responsible for the majority of this type of pollution although discharges from former coal mines also cause significant, but more localised river pollution. Many groundwater and surface water bodies fail to achieve good status as a result of the discharges from abandoned mines and some estuarine and coastal waters can also be impacted in catchments that have a significant legacy issue.

Dealing with pollution from mine waters will substantially improve water quality and help wildlife, including fish, insects and other aquatic life. It will also protect valuable drinking water supplies. There are wider benefits from mine water remediation for example using wetland reed beds significantly enhances biodiversity and provides a rich habitat for birds. These are often visually attractive and can be used as public amenities. Abandoned mine sites are part of Wales's industrial heritage with many being designated as Scheduled Monuments or Sites of Special Scientific Interest.

The Coal Authority currently operates 74 mine water schemes at abandoned coal mines using funding from the Department of Business Energy and Industrial Strategy (BEIS) across England, Wales and Scotland. 15 of these are in Wales. These schemes must continue to operate to prevent deterioration in rivers and groundwater. Since 1994, the Coal Authority has cleaned up and protected over 371 km of rivers, and protected 5 drinking water supplies from groundwater, and each year prevents over 3500 tonnes of iron solids and other contaminants causing pollution. The mine water schemes also provide 35 hectares (8 hectares in Wales) of reedbeds. The Coal Authority also operate 3 metal mine treatment schemes in England using funding provided by the Department of Environment, Food and Rural Affairs (DEFRA). In Wales there are 60 water bodies that are failing to achieve good status because of abandoned mines.

### **Changes to natural flow and levels of water**

This can affect rivers, estuaries and groundwater through either seasonal climatic variation or abstraction and determines the amount of water available for people and wildlife. A reduction in the flow and volume can affect the way we use water in our day to day lives, for drinking water and specific uses such as agriculture, business and industry. Changes in population growth creates greater pressure on water demand. Improving the way water resources are managed will make sure that there is enough good quality water for a healthier water environment and secure supplies of water for people, businesses and agriculture. It will also provide more leisure opportunities and increase the amenity value of natural environments, leading to health benefits for people. In Wales there are 35 water bodies that are failing to achieve good status because of changes to flow and levels of water.

### **3.3 Additional issues that impact on the water environment**

The presence of **invasive non-native plants and animals** in our watercourses can have significant economic impacts, once they are established control is often prohibitively expensive or technically infeasible and ultimately unsuccessful. Climate change may affect

the distribution of these species resulting in increasing their frequency and variety in the future.

The cost of controlling invasive species to make sure that flood defences, navigation and the natural environment are not compromised is rising. Some plants such as floating pennywort and creeping water primrose increase the risk of flooding. Others like signal crayfish can decrease river bank stability and most have negative impacts on ecology and leisure activities such as angling and water sports. There are also significant costs in controlling and safely disposing of invasive species such as Japanese knotweed on development sites and managing species such as zebra mussels, which can block pipes, intakes and other structures.

The most effective and least expensive measure is to reduce the number of new species introduced and slow the spread of those that are already present by applying good biosecurity (measures which reduce the risk of spreading diseases and invasive non-native plants and animals) and promoting the ['Check, Clean Dry'](#) and ['Be Plantwise'](#) campaigns.

Natura 2000 Protected Areas can be vulnerable to certain invasive non-native species. Intensive and often expensive control measures may be required to actively manage or eradicate them in specific circumstances. For example, at sites designated for their habitat interest, Himalayan balsam can dominate and reduce the habitat space available for native plant species. Controlling the Himalayan balsam by targeted and intensive hand pulling or cutting over a number of years can reduce the pressure from this species and prevent further deterioration of the habitat. Within marine Natura 2000 sites the slipper limpet has the potential to smother protected habitat features reducing their biodiversity and affecting their condition. Careful biosecurity will reduce the risk of this happening however control measures such as dredging and smothering can also be used to remove the species should it be found.

**Acidification** continues to impact rivers and lake ecosystems due to the atmospheric deposition of sulphur and nitrogen compounds on sensitive upland soils and affects 42 waterbodies across Wales. Afforestation with conifers in uplands and changes to drainage also increase the risk and impacts of acidification. The source of atmospheric pollution historically was coal-fired power stations. International controls and a shift to cleaner fuels has resulted in significant emissions reductions. Diffuse emissions from transport, domestic and agricultural sources still have a local impact. There is evidence of recovery from acidification at a small number of sites, in some cases aided by the liming of river beds and catchments. Wider ecological recovery is likely to be a long term process.

**Chemicals** can impact on the aquatic ecosystem in the following ways:

- Aquatic life (fish, plants and invertebrates) from exposure to chemicals in UK waters;
- Human health and higher wildlife predators from chemicals that may accumulate via the aquatic food chain; and
- Surface and groundwater sources where chemical contamination may compromise their on-going use to supply water for domestic or food production purposes.

NRW manage chemicals in the water environment within the framework of a strategic approach to tackle risks from harmful chemicals in UK waters. Chemicals in the environment are derived from a variety of sources. Some chemicals are ubiquitous and are best managed at a national scale whereas others are particular to an activity and their management should be focused at a local scale. Many chemicals are banned from production and/or use but are persistent in the environment for long periods and continue to be monitored to demonstrate that existing controls are adequate and concentrations are decreasing. Managing chemicals will ensure that we minimise the impact on aquatic life and human uses of water and the flora and fauna that live in it.

The WFD identifies a sub group of chemicals which are ubiquitous, persistent, bioaccumulative and toxic (uPBT) that require special consideration for monitoring and presentation of classification results. Some of these uPBTs will be reported for the first time in 2021 and we anticipate that additional information will be given in the RBMPs to provide further context on the existing uses, risks and impacts that these uPBTs may have on the aquatic environment.

**Plastics and litter** have been recognised as a widespread problem in recent years and they are having a detrimental effect on wildlife, wildlife habitats and humans. Plastics are slow to degrade in the environment and, as such, living organisms particularly marine animals can be harmed either by mechanical effects, such as entanglement in plastic objects or problems related to ingestion of plastic waste, or through exposure to chemicals within plastics that interfere with their physiology. Currently there is no standardised way to monitor or report this problem, however there is a growing concern and awareness regarding this issue and steps are being taken to fight the rising tide of plastic pollution. The UK along with other Commonwealth countries have pledged to eliminate avoidable single use plastics and other avoidable plastic waste under the '[Commonwealth Clean Oceans Alliance](#)', this agreement aims to call on all countries to pledge action on plastics and take steps to stop plastics entering the water environment in the first place.

There are many other issues that can affect the water environment, however these can be more localised. For more information on these please see our [SoNaRR report](#).

### 3.4 Climate Change

The water environment is particularly vulnerable to the effects of climate change. The weather we experienced in 2012 highlighted the challenges we face in delivering improvements to water ecosystems in a variable climate. We need to prepare for increasing variability as the climate continues to change. We must take account of climate change now to reduce the risk of poor investment decisions which may limit the extent to which Water Framework Directive objectives are met and the efficiency of achieving them. The climate change adaptation effort needs to be built into catchment planning to allow for greater climate variability and longer term increases in temperature.

There is evidence that climate change is increasing river water temperatures, and that rainfall intensity and peak river flows are increasing. As climate change continues there will be an increased pressure on our work to achieve good ecological status. These include

the impact on fisheries from increased temperature, an increasing risk of diffuse pollution under heavy downpours and challenges in maintaining flows under drought conditions.

In our considerations of the significant water management issues for the Western Wales and Dee River Basins we have considered evidence from the outputs of the [Climate Change Risk Assessment \(CCRA, 2017\)](#) and [Climate Change projections using medium emissions to the 2050's from the UKCP18](#)

Figure 2 below displays the central estimate of predicted change in summer temperature for Western Wales and the Dee River Basin Districts between 2040 and 2059.

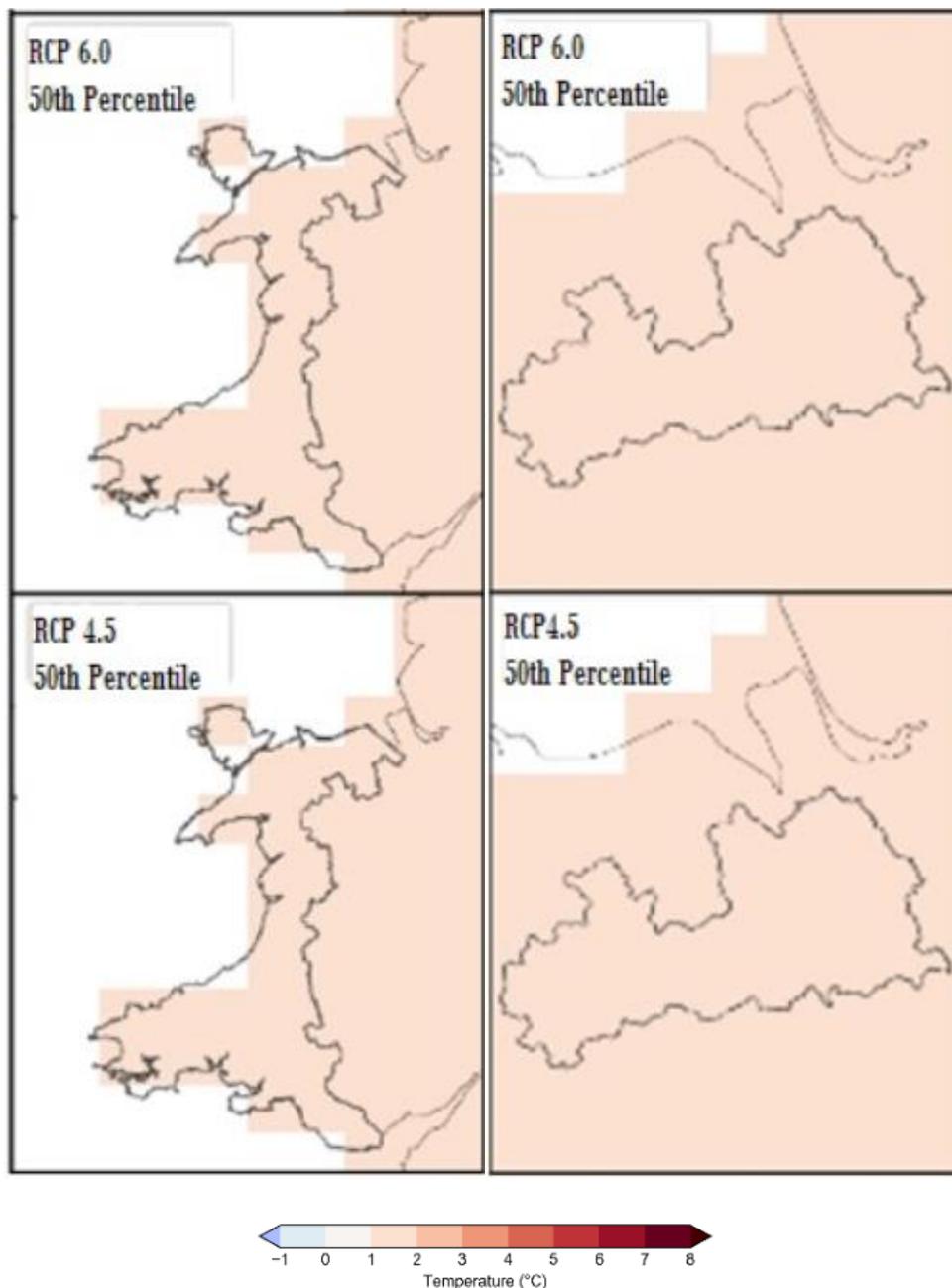


Table 1 Dee RBD

	10 <sup>th</sup> Percentile	50 <sup>th</sup> Percentile	90 <sup>th</sup> Percentile
Summer rainfall %	-30	-14	2
Winter rainfall %	-6	3	11
Summer temp °C	0.3	1.4	2.5
Winter temp °C	0.2	1.1	2.1

Based on emissions scenario RCP 6.0

Table 2 Western Wales RBD

	10 <sup>th</sup> Percentile	50 <sup>th</sup> Percentile	90 <sup>th</sup> Percentile
Summer rainfall %	-32	-14	2
Winter rainfall %	-7	6	19
Summer temp °C	0.3	1.4	2.5
Winter temp °C	0.1	1	2

Based on emissions scenario RCP 6.0

Mean temperature is predicted to increase by 1-1.4°C. Rainfall in winter could rise by between 3-6% and in summer decrease by 14%.

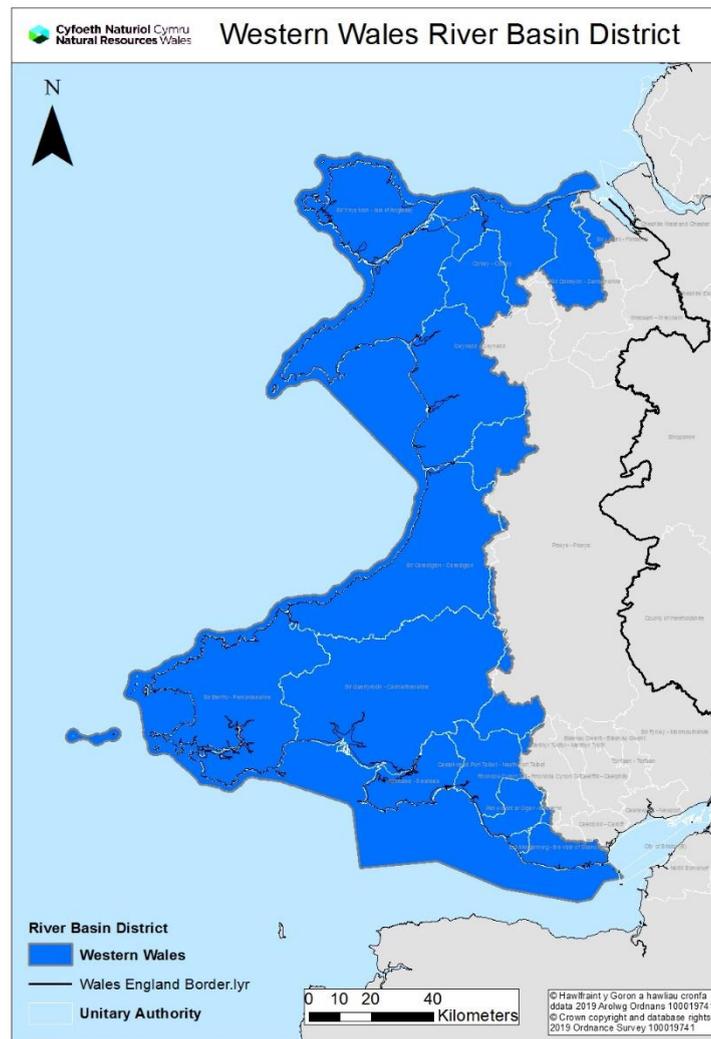
## 4.0 Challenges and Choices: Western Wales RBD

### 4.1 Overview

The Western Wales RBD (Figure 3) covers an area of 16,653 square kilometres. It extends across the entire western half of Wales, from the Vale of Glamorgan in the south to Denbighshire in the north. The main centres of population are restricted to the coastal strip and the westernmost part of the South Wales valleys. The main urban centres are Swansea, Bridgend and Neath in the south, Aberystwyth in the centre on the coast and Bangor in the north. The RBD is primarily rural, with land mainly used for agriculture and forestry. Swansea Bay and Milford Haven are centres of heavy industry with the Port Talbot steelworks and oil refineries and gas terminals that provide fuel for the nation. In terms of Area Statement boundaries in Wales the RBD spans part of the North West Wales, Mid Wales, South West Wales, South Central Wales and Marine Areas. Significant Water Management Issue data for your local area can be found in the Area Statement Profiles which can be found [here](#). Further detailed information about the river basin district catchments can be found in the previous 2013 consultation.

For information on the latest key statistics for the WW RBD, including the Protected Areas (PAs), see Annex A. Maps of all PAs can be found on [Water Watch Wales](#).

Figure 3. The Western Wales RBD



## 4.2 The Significant Water Management Issues

Figures A2 and A5 in Annex A shows the results for the significant water management issues for Western Wales RBD, including by sector. The following are the main categories of significant water management issues for the RBD. A summary of the measures available to address the issues are given in Annex B.

- **Physical Modifications** causes failures in 101 water bodies due to pressures like barriers to fish migration such as weirs (25 water bodies), but also flood protection (3) and impoundments (12).
- **Pollution from Sewage and wastewater** causes failures in 41 water bodies.
- **Pollution from towns, cities and transport** cause failures in 58 water bodies.
- **Pollution from rural areas** causes failures in approximately 71 water bodies. Of these 56 failures are from farming and 15 are from forestry.
- **Pollution from mines** causes failures in 42 water bodies

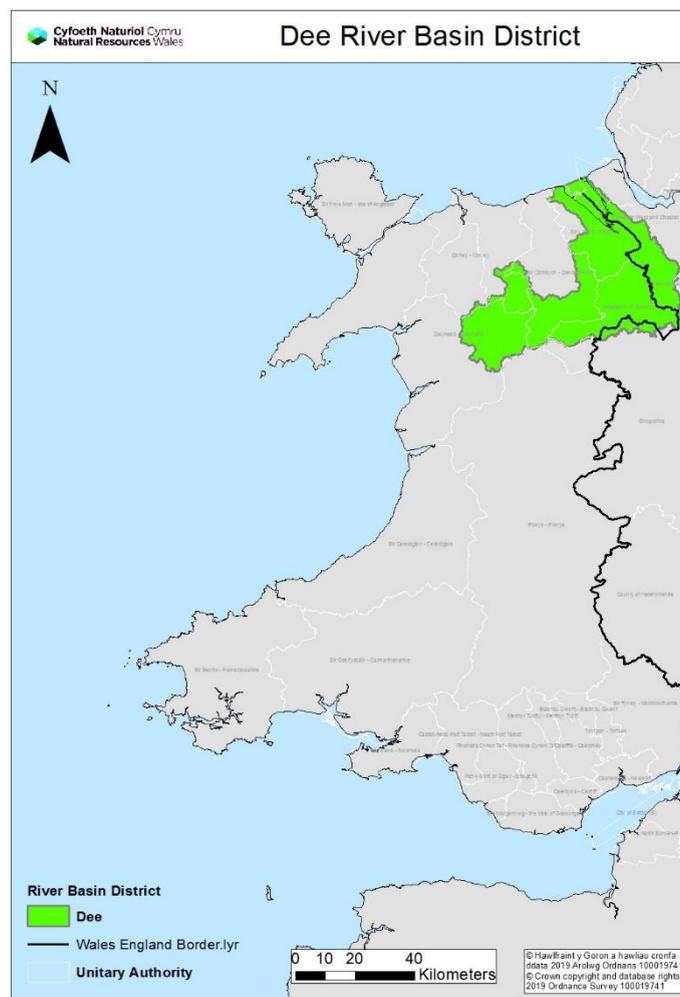
## 5.0 Challenges and Choices: Dee RBD

### 5.1 Overview

The Dee RBD (Figure 4) covers an area of 2,251 square kilometres, mainly in Wales but including a small area in England. Its source is in the mountains and lakes of the Snowdonia National Park and it runs to the internationally significant intertidal and wading bird habitat of the Dee Estuary. Chester and Wrexham are the major urban centres, but the land is mainly rural with rough grazing and forestry in the upper catchment and arable and dairy farming on the Cheshire Plain. In terms of Area Statement boundaries in Wales the Dee RBD spans part of the North East Wales, North West Wales and Marine Areas. Significant Water Management Issue data for your local area can be found in the Area Statement Profiles which can be found [here](#). Further detailed information about the catchment can be found in the previous 2013 consultation.

For information on the latest key statistics for the Dee RBD, including the Protected Areas (PAs), see Annex A. Maps of all PAs can be found on [Water Watch Wales](#).

Figure 4. The Dee RBD



## 5.2 The Significant Water Management issues

Figures A3 and A6 in Annex A shows the results for the significant water management issues for Western Wales RBD, including by sector. The following are the main categories of significant water management issues for the RBD. A summary of the measures available to address the issues are given in Annex B.

- **Physical Modifications** causes failures in 34 water bodies due to pressures like barriers to fish migration such as weirs (7 water bodies), but also flood protection (5) and impoundments (4).
- **Pollution from Sewage and wastewater** causes failures in 13 water bodies
- **Pollution from rural areas** causes failures in 20 water bodies due to farming.
- **Pollution from towns, cities and transport** cause failures in 17 water bodies.
- **Changes to natural flow and levels of water** cause failures in 9 water bodies

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

## 6.0 Further information

This consultation provides an overview of what we believe are the significant issues in Wales, Western Wales RBD and Dee RBD. To find out further information in support of this consultation please see [Water Watch Wales](#) and for England see [Catchment Data Explorer](#).

### Strategic Environmental Assessment

Statutory Strategic Environmental Assessment (SEA) has been undertaken on the first and second cycle River Basin Management Plans. NRW, as Responsible Authority, must make a screening determination under the SEA regulations for the third cycle RBMPs (Dee and Western Wales). Our current view is that RBMP3 *could* be considered a minor modification, however, there is some uncertainty at this early stage whether the plan or modifications are likely to have significant environmental effects. In making our determination we must consider the following:

- We will review the SEA undertaken for the 2<sup>nd</sup> cycle RBMP, in relation to what has been delivered, to determine whether any predicted or unforeseen significant effects have arisen. In particular looking at the significant effects that may or may not have arisen, for

example, we predicted significant adverse effects on cultural heritage as a result of measures to remediate metal mines and remove weirs. We must determine, based on our experience in the 1<sup>st</sup> and 2<sup>nd</sup> cycles whether project level environmental assessment sufficiently avoids, reduces or mitigates impacts on the historic environment.

- The Significant Water Management Issues remain the same as the 2<sup>nd</sup> cycle.
- Where new measures are introduced in the 3<sup>rd</sup> cycle, we will monitor development of the RBMP and screen them for significant environmental effects under Schedule 1 of the SEA Regulations.

We will be applying the SMNR principles in the development of the RBMPs, which are closely aligned with the SEA approach. We will be screening the plan and any modifications as they are developed, for significant environmental effects under Schedule 1 of the SEA Regulations. In the event that this screening predicts significant effects, we will revert to undertaking a statutory SEA. If we propose not to undertake statutory SEA, for the reason that the plans are a minor modification of the 2<sup>nd</sup> cycle plans and we conclude no significant effects, we will consult statutory consultees on our determination and publish it along with our justification.

A Habitats Regulations Assessment of the RBMPs will be undertaken.

### **Area Profiles**

Please visit the [NRW Area Statement webpage](#) to view the 'Area Profiles', which provide a breakdown of WFD data per area statement boundary. These profiles are being used as a high level consolidated summary of the state of natural resources and socio-economic data for each area statement. Each contains a high level summary of WFD data, with hyperlinks to access greater detail. Please note that area profiles are not 'reports', but have been designed to aid discussion on the local opportunities to address natural resource management. The data each contain is taken from other published sources, and each profile will be subject to continuous and regular change. For this reason we encourage stakeholders to download the most recent version from the NRW area statement web-page.

## **7.0 Consultation arrangements**

### **How to respond**

Responses are required by the 22<sup>nd</sup> December 2019, please use the questions proforma on our website. The form should be sent to;

[WFDWales@cyfoethnaturiolcymru.gov.uk](mailto:WFDWales@cyfoethnaturiolcymru.gov.uk) Or by post to:

Jill Brown  
Natural Resources Wales  
Ty Cambria  
29 Newport Road  
Cardiff  
CF24 0TP

If you would prefer a printed version of the document, please call 0300 065 3000.

### **How the responses will be used**

We will use the responses of this consultation to shape how we deal with the issues when we update the RBMPs and in developing the Area Statements. Any response you send us will be seen in full by NRW staff dealing with this consultation. It may also be seen by other NRW staff to help them plan future consultations and may be shared with staff from, Welsh Government, the Environment Agency and Defra.

### **How we will use your information**

NRW will make all comments (excluding personal information) available on request. This includes comments received, unless you have specifically requested that we keep your response confidential. We will not make available names of individuals who respond; we will include the name of the organisation for those responses made on behalf of organisations.

If you respond to the consultation with an email address, we will acknowledge your response. We will also notify you of any forthcoming consultations, unless you tell us you do not want to receive this information.

The Freedom of Information Act 2000 and the Environmental Information Regulations 2004 will allow the public to ask to see information held by many public bodies, including NRW. This includes information which has not been published. However, the law also allows us to withhold information in some circumstances. If anyone asks to see information we have withheld, we will have to decide whether to release it or not. If someone has asked for their name and address not to be published, that is an important fact we would take into account. However, there might sometimes be important reasons why we would have to reveal someone's name and address, even though they have asked for them not to be published. We would get in touch with the person and ask their views before we finally decided to reveal the information.

If you have any questions or complaints about the way this consultation has been carried out, please email [WFDWales@cyfoethnaturiolcymru.gov.uk](mailto:WFDWales@cyfoethnaturiolcymru.gov.uk)

## Appendix A: Facts and Statistics for Wales, Western Wales RBD and Dee RBD

Figure A1: SWMIs for Wales

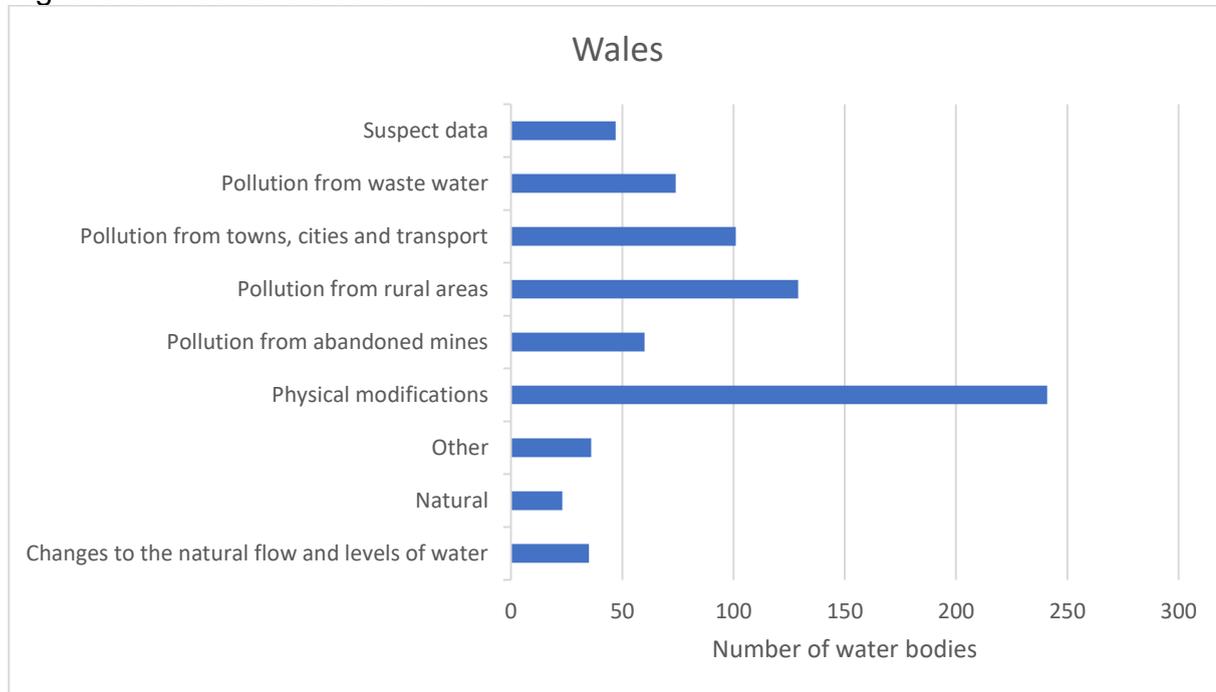


Figure A2: SWMIs for Western Wales RBD

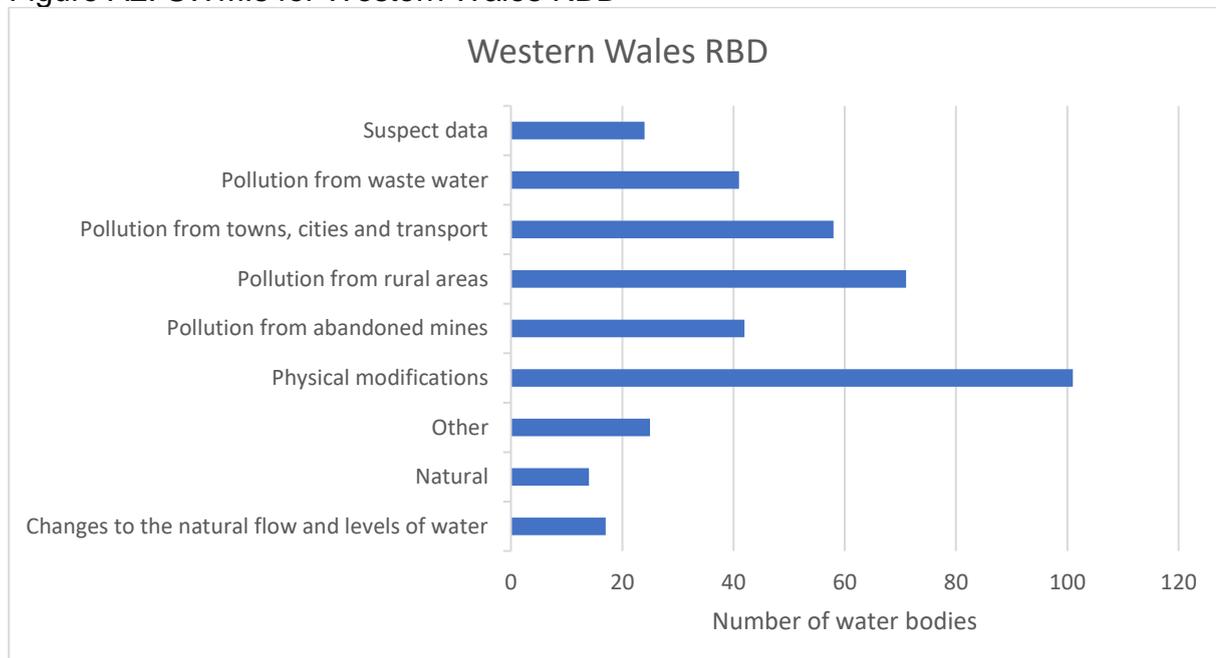
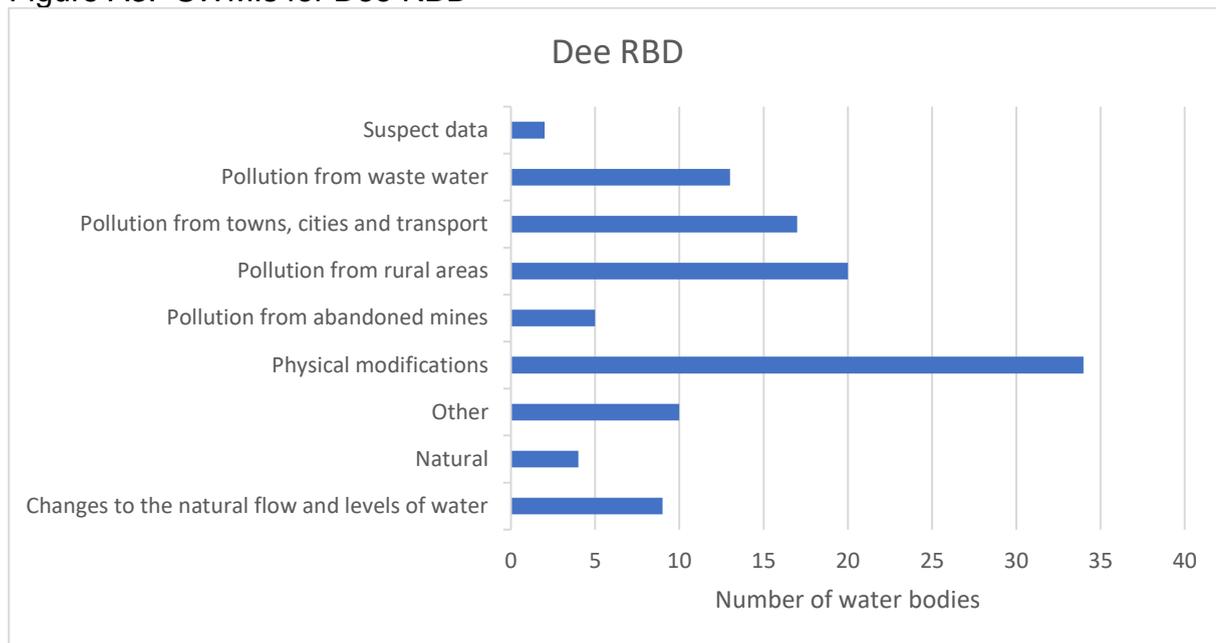


Figure A3: SWMIs for Dee RBD



NOTE: The data above includes failures due to 'natural circumstances/features' for example, a natural barrier to fish movement such as waterfalls (in some instances we may need to set an alternative objective for these water bodies as it is unlikely that they will achieve good status). Also there are failures due to 'suspect data' which we are working to resolve, and 'other' which can include things like time needed for the ecology to recover. There are also some 'unknowns' where we are unable to identify the reason for failure or the investigation was incomplete at the time of writing (these have not been included in the graphs)

Figure A4: Number of water bodies failing by sector (Wales)

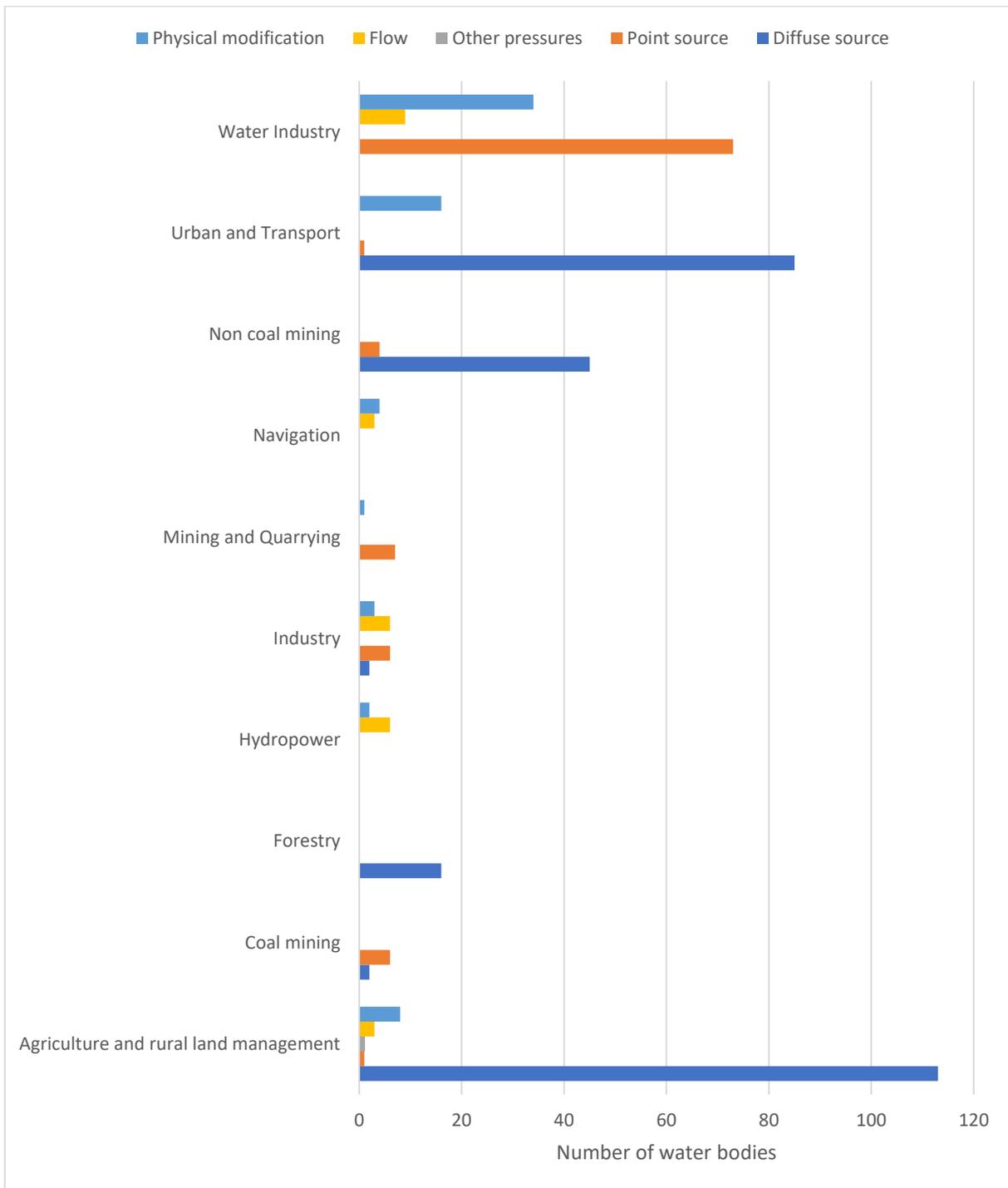


Figure A5: Number of water bodies failing by sector (Western Wales)

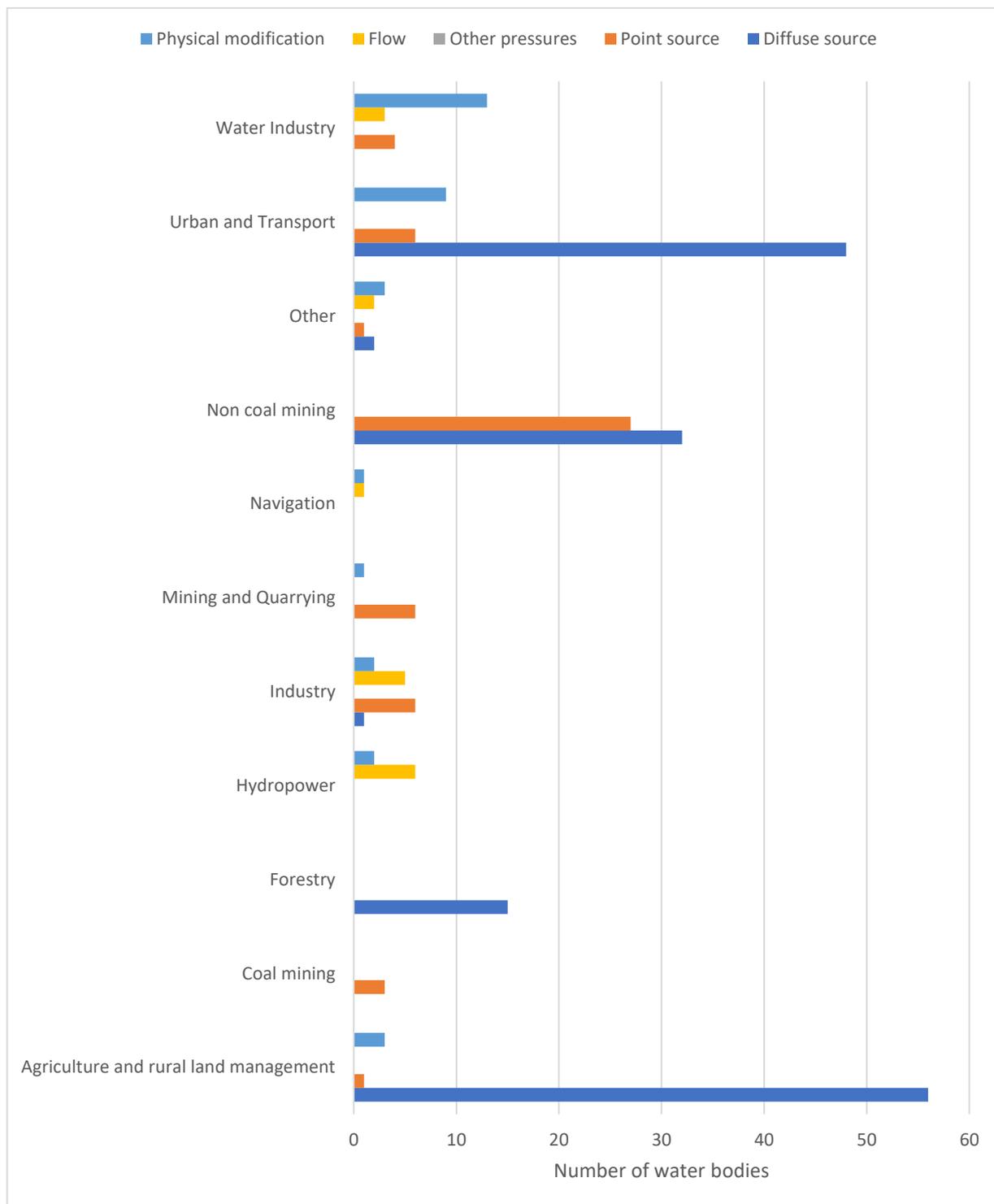
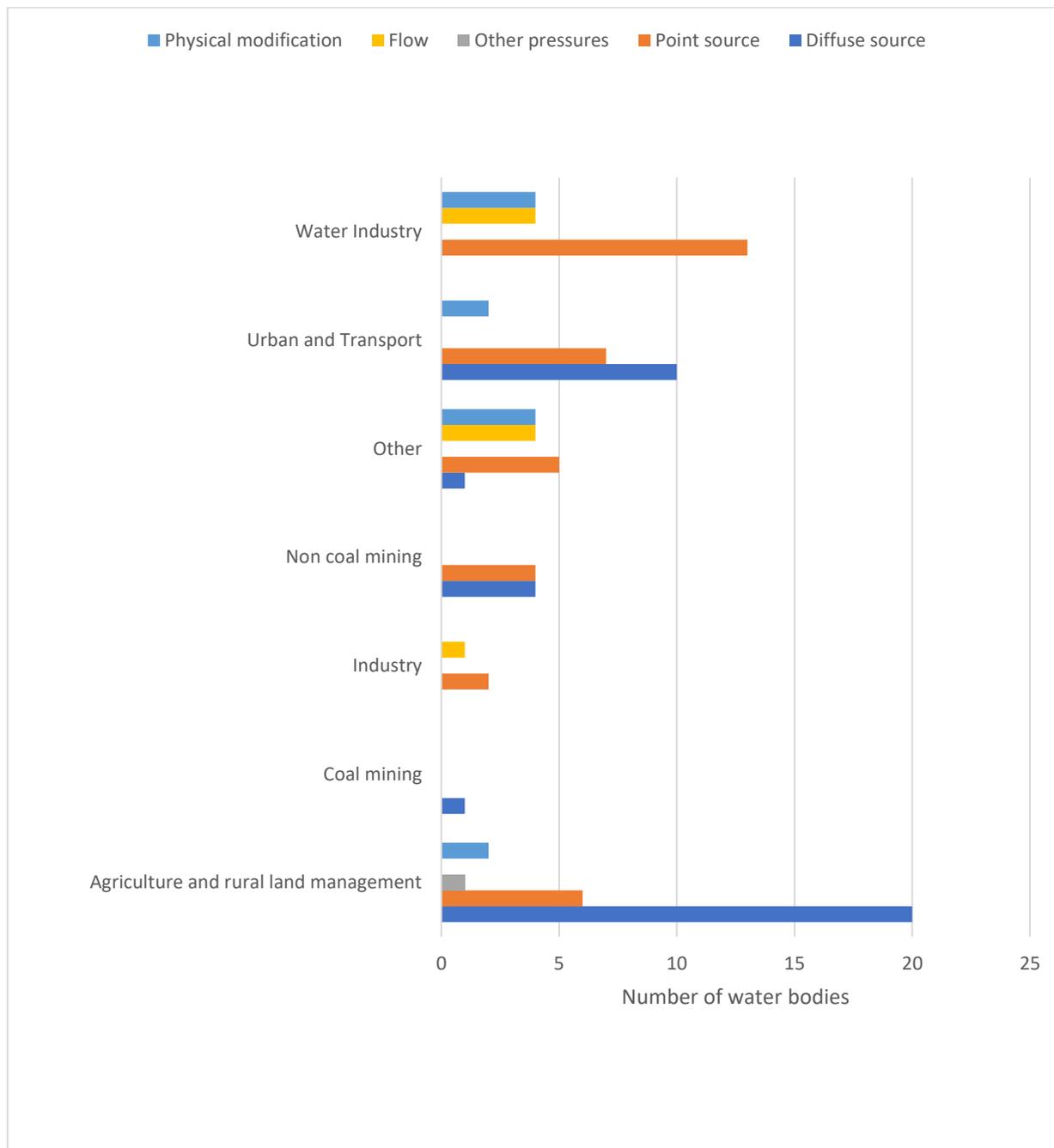


Figure A6: Number of water bodies failing by sector (Dee)



Note – Each water body can fail for more than one issue and all the above graphs include both ‘probable’ and ‘confirmed’ SWMIs, for a breakdown of this information please see the RNAG dataset on Water Watch Wales.

Table A1: A comparison of water bodies in Wales, Western Wales and the Dee RBD at good/high ecological status in 2015 and 2018

Category	Total number of water bodies	Number of water bodies at 'good or better' 2015	Percentage 2015	Number of water bodies at 'good or better' 2018	Percentage 2018
<b>Wales</b>					
Rivers	717	301	42	333	46
Lakes	124	18	15	25	20
Canals *	8	4	50	4	50
Transitional	32	10	31	7	22
Coastal	23	11	48	12	52
Groundwater	38	21	55	N/A	N/A
<b>Western Wales</b>					
Rivers	426	195	46	215	50
Lakes	64	13	20	15	23
Canals *	2	1	50	1	50
Transitional	28	9	32	7	25
Coastal	23	10	43	12	52
Groundwater	25	12	48	N/A	N/A
<b>Dee</b>					
Rivers	71	25	35	37	52
Lakes	21	1	5	8	38
Canals *	N/A	N/A	N/A	N/A	N/A
Transitional	1	0	0	0	0
Coastal	N/A	N/A	N/A	N/A	N/A
Groundwater	4	3	75	N/A	N/A

\* Includes surface water transfers

Note: Groundwater has not been assessed in the 2018 classification, this will be assessed in the 2021 classification.

In Wales there are 43% freshwater bodies and 35% marine water bodies at good or better ecological status.

For overall water body status see [Water Watch Wales](#)

Figure A7: Ecological status for surface water bodies (Wales) in 2015 & 2018 (for GW see 2015 River Basin Management Plan as no change).

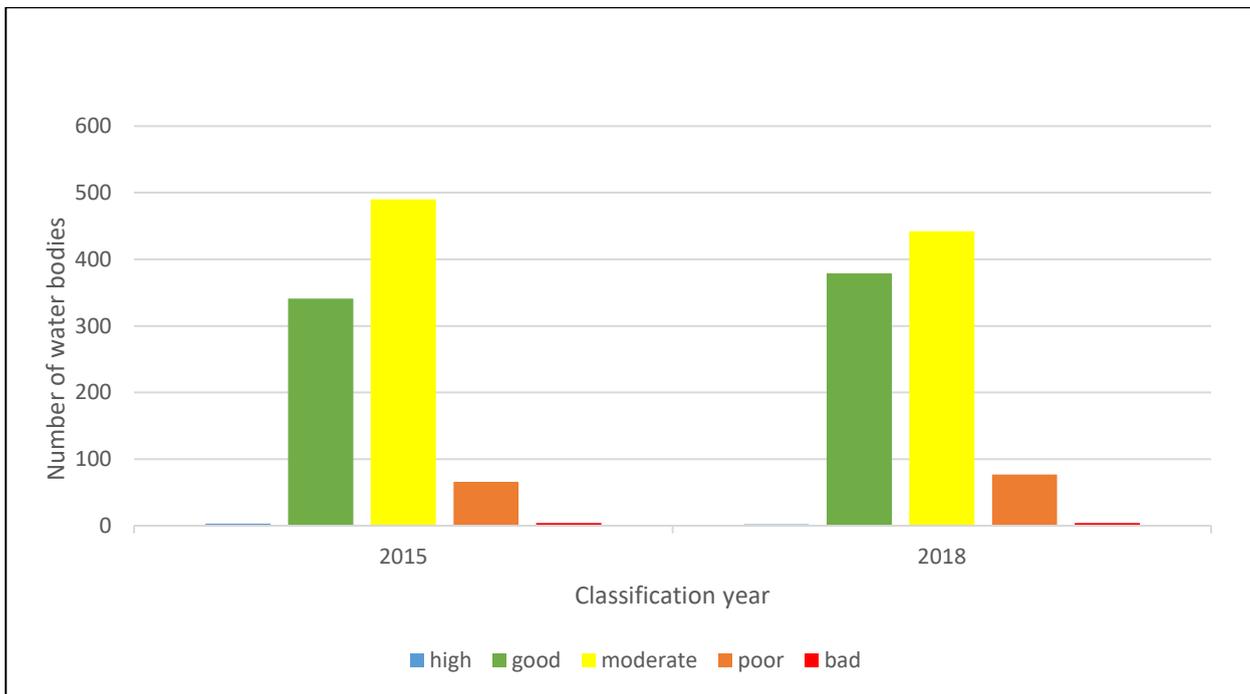


Figure A8: Ecological status for surface water bodies (Western Wales) in 2015 and 2018

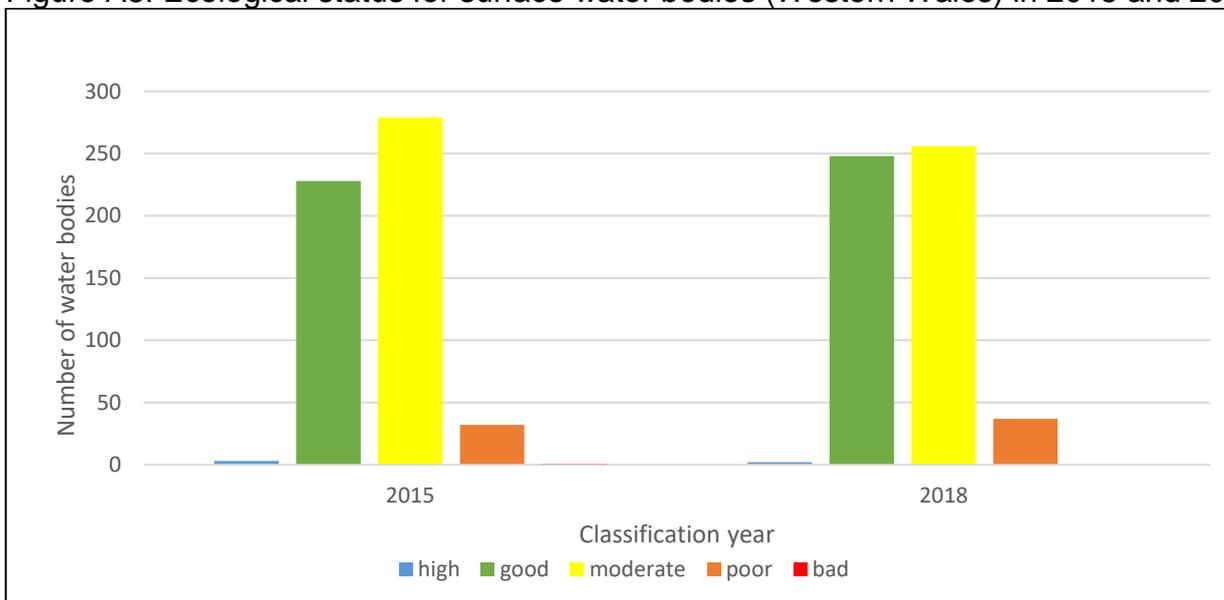


Figure A9: Ecological status for surface water bodies (Dee) in 2015 and 2018

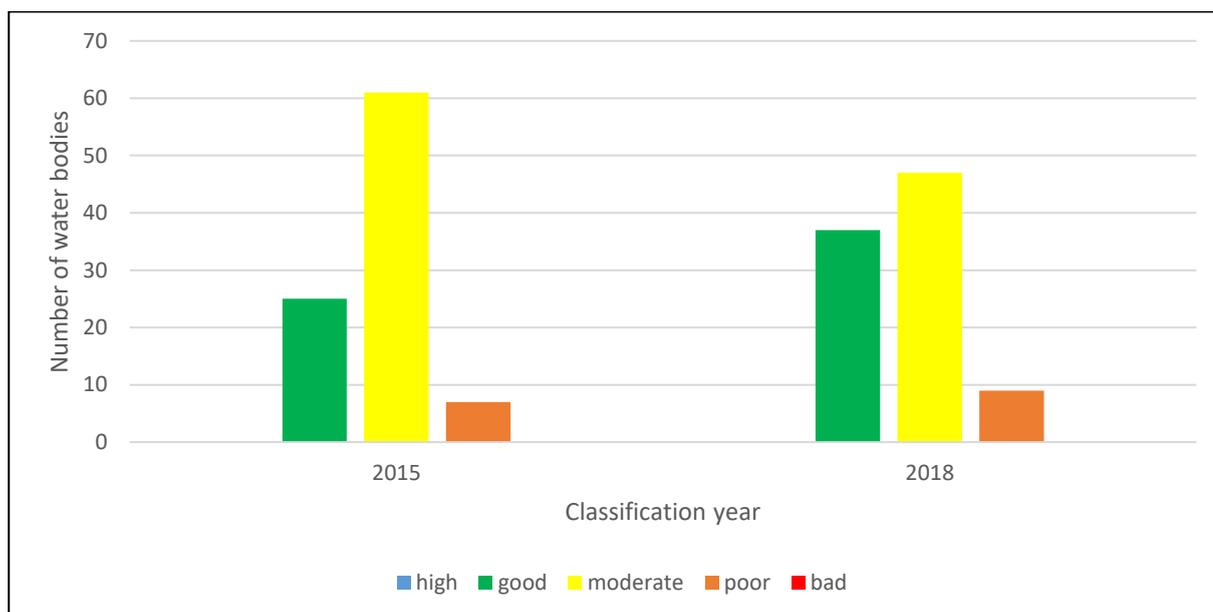


Table A2: Protected areas in Wales, Western Wales and the Dee RBD

Protected Area	Number
Wales	
Drinking Waters	169
Bathing Waters	105
Shellfish	23
UWWTD Sensitive Areas	5
Water dependent Special Areas of Conservation (SACs)*	88
Water dependent Special Protected Areas (SPAs)*	23
Nitrate Vulnerable Zones (NVZs)	23
Western Wales	
Drinking Waters	90
Bathing Waters	105
Shellfish	21
UWWTD Sensitive Areas	3
Water dependent Special Areas of Conservation (SACs)*	56
Water dependent Special Protected Areas (SPAs)*	16
Nitrate Vulnerable Zones (NVZs)	8
Dee	
Drinking Waters	23
Bathing Waters	1
Shellfish	2
UWWTD Sensitive Areas	1
Water dependent Special Areas of Conservation (SACs)*	9
Water dependent Special Protected Areas (SPAs)*	3
Nitrate Vulnerable Zones (NVZs)	12

\* this figure might differ slightly to the previous consultation as we have undergone a QA exercise to ensure each PA is accurately mapped to an RBD using a consistent set of rules.

## Appendix B: Programme of Measures currently used to address the significant water management issues.

Physical Modifications National
<ul style="list-style-type: none"><li>• Continue to implement the Hydropower guidelines including the production of a design and siting guide for developers of hydropower schemes</li><li>• Identify opportunities to improve the water environment through existing programmes of work and scheme designs for Flood Risk Management</li><li>• Revise Clearing the Waters guidance for dredging and disposal activities in coastal and estuarine waters</li><li>• Deliver our statutory duties to maintain, improve and develop salmon, trout, freshwater and eel fisheries</li><li>• Give strategic direction for fisheries work in Wales as set out in The Agenda For Change for Fisheries</li><li>• Deliver the sustainable fisheries programme in Wales to secure improvements to fish habitat and migration</li><li>• In waterbodies designated as heavily modified due to flood and coastal protection, mitigation for NRW owned assets and activities will be reviewed and delivered on a prioritised basis.</li><li>• NRW will seek opportunities and influence others to utilise natural flood risk management measures where appropriate.</li><li>• Across Wales review of the impacts of unregulated activities targeting sea fisheries resources is underway. This should consider the extent of activities, impacts of extractions and associated activities (e.g. access) on European Marine Site (EMS) features, and the recoverability of EMS features.</li><li>• Contribute to research and development to identify best practice for managing hydromorphological pressures in the water environment.</li><li>• Use our regulatory role to identify opportunities to improve the water environment</li><li>• Promote managed realignment and intertidal habitat creation through the National Habitat Creation Programme (NHCP).</li><li>• Contribute to the delivery of priority Water Level Management Plans.</li></ul>
Physical Modifications Local targeted water bodies
<ul style="list-style-type: none"><li>• Removal or easement of barriers to fish migration: Enable fish passage (e.g. fish pass)</li><li>• Improvement to condition of channel/bed and/or banks/shoreline</li><li>• Change to operations and maintenance</li><li>• Improvement to condition of riparian zone and/or wetland habitats: Habitat Management</li></ul>
Pollution from sewage and waste water National
<ul style="list-style-type: none"><li>• Reducing disposal of fat, oil and grease to sewers – awareness campaign to influence behaviour visit <a href="http://www.letsstoptheblock.com/">http://www.letsstoptheblock.com/</a></li><li>• Work strategically with UK administrations to share best practice on preventing and resolving misconnections</li><li>• Water companies develop and deliver catchment management options that improve water quality and deliver additional ecosystem services</li><li>• Develop and deliver a more focussed approach to sewerage and drainage management</li><li>• Promote the use of sustainable drainage systems (SuDS) and provide guidance for integrating development and water planning</li></ul>

### Pollution from sewage and waste water National

- Implement revised methodology for assessment of hazardous pollutants within surface water discharges
- NRW have worked with water companies to develop a programme of investigations and improvements to sewage discharges in order to support delivery of WFD and protected area objectives in AMP6 (2015-20)

### Pollution from sewage and waste water Local targeted water bodies

- Reduce point source pathways (i.e. control entry to water environment): Sewerage system re-design and rebuild

### Pollution from towns, cities and transport National

- Promote the Control of Pollution (oil storage)(Wales) Regulations 2016
- NRW working with Welsh Government and others to promote and embed the use of Water Sensitive Urban Design (WSUD) into planning policy and devolved building regulations
- SuDS Approval Bodies to provide consistent advice for planning activities and maintenance of schemes
- Promote the implementation of SuDS in new and existing developments, in both urban and rural areas to gain environmental, water quality, social and flood risk benefits by performing our statutory consultee role and by working with LPAs to embrace green infrastructure (GI)
- NRW uses a risk-based approach to help Suds Approval Bodies determine applications consistently.
- Deliver priority actions set out in NRW's Diffuse Water Pollution Plan
- Work in partnership to investigate misconnections including the targeting of hotspots. Include outreach work to increase public and community awareness and engagement
- Use UK Government's electronic Property Information Mapping Service (ePIMS) property asset system to identify publicly owned industrial estates and depots within failing WFD water-bodies and work with Welsh Government and Local Authorities to resolve issues such that these sites aim to achieve best practice
- Assess the environmental impacts and reduce contamination from historic industrial and waste sites
- Develop evidence base to support management of marine litter and marine litter strategy.
- Implement legislation to support sustainable drainage solutions.
- Implement Schedule 3 of the Flood and Water Management Act 2010, which requires new developments of more than a single dwelling to include SuDS features that comply with national standards.
- We will engage with local authorities who have a duty to ensure that owners of private sewerage systems maintain them to prevent a threat to public or environmental health
- Control the release of chemicals, to the water environment, at source i.e. production and use, through the implementation of European legislation, including the REACH regulation, Persistent Organic Pollutants regulation and Sustainable Use of Pesticides Directive
- Improve understanding of the origins and solutions to diffuse pollution by carrying out local investigations (e.g. Clear Streams)
- Use pollution incident data to target pollution prevention advice and activities.
- Raise awareness of the benefits and successes of managing surface water run-off through SuDs (sustainable drainage systems) in accordance with Welsh Government standards in order to mitigate flooding and pollution.
- Implementation of SuDS (sustainable drainage systems) Code of Practice. Comply with published advice for operators on sustainable drainage systems
- Advise small and medium sized businesses on pollution prevention

### Pollution from towns, cities and transport National

- NRW has published guidance on '[Running and maintaining a septic tank or small sewage plant](#)'
- Raise awareness of correct installation and operation of private sewage treatment systems

### Pollution from towns, cities and transport Local targeted water bodies

- Action on point source pathways on Worthenbury Brook following pollution incident
- Mitigate/Remediate point source impacts on receptor: Install telemetry
- Reduce point source pollution at source

### Pollution from rural areas National

- NRW work with farm assurance schemes and key buyers to promote sustainable agricultural practices and achieve WFD and protected area objectives
- NRW work in partnership with key stakeholders (e.g. Farming and Forestry Connect, farming unions) to develop and deliver targeted advice and guidance to land managers
- NRW delivers a prioritised programme of measures on the Welsh Government Woodland Estate to support delivery of WFD and protected area objectives
- NRW produces water management plans for all operations on the Welsh Government Woodland Estate to support delivery of WFD and protected area objectives
- Continue to improve awareness and implementation of the UK Forestry Standard Guidelines (including "Forests and Water" Guidelines), and Practice Guides (including "Managing forests in acid sensitive water catchments"), across the forest sector..
- Welsh Government target Glastir Woodland Management incentives to deliver improvements to the water environment
- Welsh Government to review legislative framework surrounding rural diffuse pollution
- Ensure the Rural Development Plan supports sustainable agricultural practices to achieve WFD and protected area objectives
- Deliver Water Awareness Events to all NRW staff who work on Welsh Government Woodland Estate to cover water management on operational sites.
- Use the Small Business Research Initiative (SBRI) innovation programme to develop new solutions to environmental issues.
- NRW to promote relevant measures for tree planting, new woodland creation and woodland management measures that are consistent with 'Woodland for Water: Woodland measures for meeting WFD objectives' 2011
- Review the implementation of Statutory Management Requirements (SMR) and Good Agricultural Environmental Condition (GAEC) to strengthen the drivers for best agricultural practice - ensure that there is parity in terms of the monitoring for and consequences of practices causing diffuse pollution (within the catchments of Natura 2000 sites) with SMR.
- Strengthen links between agri-environment options and Natura 2000 objectives on farms within catchments which are currently impacting on Natura 2000 sites
- Prioritise the delivery of measures where Natura 2000 sites downstream of forestry may benefit from improvements (i.e. riparian vegetation improvements, forest drain realignment and roadside drain disconnection from watercourses) to meet current UKFS standards, in order to minimise any risk of diffuse pollution and acidification.
- Align statutory duties under permitting and planning legislation to support a holistic approach to nitrogen deposition in Wales, integrating both air and water quality impacts and engage with external stakeholders to deliver a natural resources management approach
- Encourage catchment scale community action through area statements developed by NRW and other co-operative groups aiming to improve water quality in their area.
- Monitor, investigate and resolve the source of pollution in Drinking Water Protected Areas

### Pollution from rural areas National

- Review and strengthen the effectiveness and enforcement of relevant legislation and policy (gap analysis) to improve its ability to deal with diffuse water pollution
- Undertake a pilot investigation to identify sources of diffuse pollution within a Marine Natura 2000 site and recommend target actions to address the diffuse issues.
- We will encourage Natural Resources Wales and our own Agricultural Advisory Services to work with landowners to develop a common understanding of diffuse pollution and how they can help to prevent it through improved land management.
- The WLMF Sub-Group has established a Task & Finish Group which will continue to work with Welsh Government on the development of the new agricultural regulations on nutrient management.
- NFU Cymru in partnership with FUW, Welsh Water are developing a Voluntary Approach to establish a farmer-led approach to delivering water quality improvements and reducing nutrient enrichment. This is supported by NRW with a key component including the development of a Farm Assurance Scheme on Nutrient Management.
- A second tranche of a targeted programme of advisory work will be delivered by Farming Connect designed to raise awareness of the risks associated with agricultural pollution. This work will include large scale meetings, smaller on-farm events and clinics, group advice and 1-to-1 on-farm advice.
- The WLMF sub-group will continue to influence Welsh Government to ensure the mechanisms for on-farm investment are as well designed as possible, enabling farmers to invest in developing more sustainable businesses and incentivising them to make infrastructure improvements
- The WLMF sub-group will continue to explore opportunities for innovation within the farming sector.
- A report describing how the recommendations within the Interim Report on Agricultural Pollution are being take forward will be published in 2019.
- NRW have employed 8 additional staff as part of a Dairy Advice Project which aims to visit 350 dairy farms. Advice is being provided on best practise and regulatory compliance so as to reduce agricultural pollution incidents and improve the WFD status within failing waterbodies

### Pollution from rural areas Local targeted water bodies

- Agricultural diffuse pollution measures - Aldford Brook, Worthenbury and Wych Brook
- Mitigate/Remediate diffuse pollution impacts on receptor
- Reduce diffuse pollution at source: farm infrastructure, field and crop (nutrients), manure and fertiliser management
- Reduce diffuse pollution pathways (i.e. control entry to water environment) Surface run-off & drainage management

### Pollution from mines National

- A programme to deliver appropriate treatment at a small number of high priority, high benefit metal mines identified under the Metal Mine Strategy for Wales
- Research programme to look at the remediation of spoil heaps (coal) using woodland and habitat creation
- Assess the environmental impacts and reduce contamination from historic industrial and waste sites
- Coal Authority minewater preventative and remediation programme
- Investigate discharges from abandoned metal, and other non-coal mines in accordance with the Metal Mine Strategy for Wales. Prioritise for inclusion in national agreement with relevant mines partner organisations

<p><b>Pollution from mines National</b></p> <ul style="list-style-type: none"> <li>• Continue to investigate minewater impact and develop remediation plans in accordance with the Metal Mines Strategy for Wales and failing waterbodies</li> <li>• Implementation of best practice controls and remediation at abandoned coal mines. DECC funded prioritised (phased) programme</li> <li>• Implementation of best practice controls and remediation at abandoned metal mines</li> <li>• Use of revenue funds and funding opportunities to invest in Research Development and Innovation and Wellbeing and Future Generations in developing remedial and water treatment solutions at mine sites whilst delivering enhancements for the impacted communities</li> <li>• NRW is undergoing a programme of work to investigate discharges from abandoned metal mines into failing waterbodies, aligning with the Metal Mine Strategy for Wales.</li> </ul>
<p><b>Changes to natural flow and levels of water National</b></p> <ul style="list-style-type: none"> <li>• Welsh Government to introduce legislation that will enable water abstraction and impoundment licensing to be moved into the Environmental Permitting Regulations. Bring currently exempt water abstractions within licence (New Authorisations)</li> <li>• Investigations to assess the environmental impacts of impoundments and possible mitigation measures</li> <li>• Prioritise solutions to tackle water body failures due to abstraction</li> <li>• In line with the Welsh Government's Water Strategy for Wales, seek ways to reduce waste and improve water efficiency</li> <li>• Revise Glastir to better support and prioritise Natura 2000 wetlands/peatlands conservation management and water level management.</li> <li>• Complete actions to address abstraction licences identified in the Review of Consents process as having an adverse impact on site integrity.</li> <li>• Dwr Cymru Welsh Water has partnered with Aqualogic to provide customers with free water saving gadgets</li> <li>• Support the delivery of the Welsh Government National Peatland Restoration Programme.</li> <li>• Target land management measures through Glastir agri-environment scheme and Section 15 agreements to mitigate diffuse pollution from agriculture and reduce impact of drainage to enhance biodiversity and achieve favourable conservation status.</li> <li>• Dwr Cymru Welsh Water has partnered with Aqualogic to provide customers with free water saving gadgets visit <a href="https://aqualogicwc.co.uk/store/dcww/">https://aqualogicwc.co.uk/store/dcww/</a></li> </ul>

<p><b>Changes to natural flow and levels of water Local targeted water bodies</b></p> <ul style="list-style-type: none"> <li>• To improve regulated flows: Appropriate management of releases, appropriate management of impoundment</li> <li>• To control or manage abstraction: Control pattern/timing of abstraction</li> </ul>
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Other issues that impact on the water environment

<p><b>Invasive non-native species National</b></p> <ul style="list-style-type: none"> <li>• Continue to improve knowledge of species distributions and improve public awareness of new and established INNS, including using mechanisms such as online and smart phone recording systems</li> <li>• Support implementation of the EU regulation on Invasive Alien Species and Marine Strategy Framework Directive to improve the coordination of measures and create stronger controls on pathways of entry for the most damaging species, especially those arriving in estuarine and coastal water bodies</li> <li>• Implement the updated GB strategy on invasive species</li> </ul>
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### Invasive non-native species National

- Work with partners and support the development of new and innovative solutions such as the work of CABI on bio-controls for widely spread invasive non native species and the development of a collaborative strategic framework to improve coordination of INNS action within Wales (Wales Resilient Ecological Network (WaREN))
- In line with the regulation implemented by DEFRA for England under the Wildlife and Countryside Act, ban the sale of 2 invasive non-native aquatic plants in Wales: New Zealand pigmyweed (*crassula helmsii*) and water fern (*Azolla filiculoides*)
- Develop and promote adoption of codes of conduct and biosecurity initiatives, and raise awareness of impacts of INNS across marine, terrestrial and freshwater Natural 2000 habitats and species.
- Ensure that risks to Natura 2000 habitats and species posed by INNS are managed by integrating biosecurity best practice into appropriate regulatory regimes.
- Support research into effective control and eradication methods for INNS (marine, terrestrial and freshwater) with significant impacts on Nature 2000.
- Undertake risk assessments to identify priority invasive non-native species for mitigation and control action at GB and national levels

### Chemicals National

- NRW set emission limit values for certain chemicals discharged from qualifying industries regulated under the Environmental Permitting Regulations
- Investigation into emerging issues and pathways of chemicals to the water environment such as the UK Chemicals Investigation Programme and passive monitoring project
- NRW are one of the enforcing authorities in Wales for Registration, Evaluation, Authorisation and restriction of Chemicals (REACH) Regulation
- Guidance on application of pesticides in protected areas and on our forestry estate
- NRW are the competent and enforcement authority EU Persistent Organic Pollutant (POPs) Regulation
- Welsh Government participate in discussions on UK, EU and worldwide measures such as the Minamata Convention on Mercury. NRW are the competent authority in Wales for the EU regulations that implement the Minamata Convention in the UK.
- Water companies in Wales have a number of measures such as pestsmart and the pesticide disposal scheme which are aimed at reducing the amount of pesticides getting into the water environment

## Appendix C: Working Together summary of responses

The Working Together Consultation was the first consultation leading up to the publication of the updated RBMPs and ran for 6 months between 22 June 2018 and 22 December 2018 on our website as part of the requirements under the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017. The purpose of the consultation was to:

- set out the 'Statement of Steps' to review and update the plans by 2021.
- ask stakeholders how they would like to be involved.
- build on our existing network of contacts for the updated plans and support the development of the Area Statements.

Over 700 stakeholders were contacted that included national organisations and those stakeholders that were involved in the review of earlier RBMPs. No separate engagement events were held, we raised awareness of the consultation through existing networks and ongoing engagement (including through the Area Statement work). Views were also sought from the newly formed Wales Water Management Forum (WWMF). We used social media to promote the consultation. Notices of the consultation were published in the Western Mail, The Leader and the London Gazette as required by the WFD Regulations 2017. We also worked with the Environment Agency to support cross border advertising and working.

A total of 26 responses were received mainly from the Third Sector from recreation, conservation and fisheries groups. Responses were also received from the following sectors: Business & Industry, Local Government, Land Management, Navigation and Mining/Quarrying. The following organisations responded:

Pembrokeshire Coast National Park, South Wales Outdoor Activities Group, Canoe Wales, River Severn Custodians, Innogy Renewables Ltd, Ridgeway Angling Club, Rhyl & St Asaph Angling Association, Clwyd, Conwy & Gwynedd Rivers Trust, Cheshire Wildlife Trust, RSPB, Youth Hostel Association, Swansea Council, WLGA, PLANED/Pembrokeshire Coastal Forum, Dŵr Cymru Welsh Water, Seafish, Energy UK, Consumer Council for Water, Canal and River Trust, Afonydd Cymru, Farmers' Union of Wales, Blaenau Gwent County Borough Council, Natural England, Associated British Ports, Coal Authority and NFU Cymru.

We received 9 responses for the Western Wales River Basin District, 4 responses for the Dee River Basin District and 13 responses were received for 'all Wales'. One respondent did not comment on the scale of their response.

Natural Resources Wales would like to thank all respondents for taking the time to contribute. We are grateful for the comments received. The responses will help us shape how we engage and work with others on the development of the Area Statements and updated RBMPs. The points made have been noted and we will address the comments in the RBMPs. The following pages set out a summary of the comments provided together with our response.

### **Consultation Question 1:**

#### **Does the programme set out include all the significant steps necessary to review and update the RBMPs?**

Generally, respondents agreed that the programme covers the necessary steps to review and update the RBMPs. A suggestion was made to include an outline of how and when the different agencies will be involved in the preparation of the plan.

It was suggested that reference be made to screening under the Environmental Assessment of Plans and Programmes (Wales) Regulations and the Habitats Regulations. For the consultation on the significant water management issues, some respondents would like to see an update on progress with current RBMP actions to help identify potential areas of focus/prioritisation for the updated plans and an assessment of the work and effectiveness of previous plans undertaken. One organisation expressed disappointment at the progress that has been made in previous cycles. They would like to see a different approach for the next cycle with more emphasis on a cross-sectoral approach.

Several respondents were unsure how Welsh legislation will be accounted for in the English-led plans. They encouraged NRW to continue working closely with the EA to ensure that the Welsh context is considered for cross-border plans.

In terms of classification, one respondent was concerned about the differences in the timetable between NRW, EA and DCWW's current planning cycle. This means that the third round of RBMPs will be published before the benefits of improvements made have been recorded. NRW were urged to consider producing an interim classification update early in 2020.

One respondent commented that previous plans showed very little effort to address Transitional and Coastal (TraC) waters. This group would like to be consulted on relevant catchment issues that relate to TraC water issues as well as freshwaters for those ports that have freshwater feeders/abstractions. Several organisations raised concerns about the implications of BREXIT on the RBMP process.

A respondent referred to the remit of the Wales Water Management Forum. They expressed concern if the Forum operates at a strategic 'all Wales' level, there is potential for views and opportunities from the River Basin Districts to be overlooked. They felt that the Liaison Panels provided an over-arching strategic forum for all partners to be engaged in. The respondent observed that the geographical spread of the Liaison Panels was an issue during the previous cycle.

One respondent commented that there should be a focus on practical issues that affect land and catchment management. These issues could be addressed by establishing catchment-level task and finish groups for each river basin district at the start of the Challenges & Choices Consultation. This would allow for partners to contribute at a river basin district level.

### **NRW Response:**

Our approach to screening the RBMP3 under the Environmental Assessment of Plans and Programmes Regulations 2004 (known as the Strategic Environmental Assessment

Regulations) is set out in the Challenges and Choices consultation. In making our determination we will be undertaking a review of the SEA of RBMP2 to determine actual positive and negative effects over the course of the planning cycle. This will inform our SEA screening of RBMP3 and if an SEA is undertaken, it will be presented in relevant publications. If we do not undertake SEA, because we consider RBMP3 to be minor modifications of RBMP2, we will publish our justification for this determination.

A Habitats Regulations Assessment of the final updated RBMP will be carried out to consider whether the plan is likely to have a significant effect on any Natura 2000 sites.

In response to the comments made on an update on progress we plan to provide an update in the draft RBMPs. In terms of classification, a decision to publish the classification on a 3-year frequency has been made with the final classification to be published in 2021.

At the time of writing, the UK is due to leave the European Union by the 31 October 2019. The obligation to review and update the RBMPs is set out in our domestic law, the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, and these obligations will continue to apply. We will therefore complete the review and update to the plans in 2021 under the current set of WFD regulations. NRW is recruiting additional fixed-term roles to better resource some of the key policy, regulations and incident management work anticipated and manage the most likely immediate impacts of any exit and any medium to longer-term transitional risks. This includes 2 posts focused on water.

We note the comments on the previous work of the Liaison Panels, the development of the new Wales Water Management Forum and the suggestion to set up task and finish groups for each River Basin District which will be discussed by the Forum.

**Consultation Question 2:**

**How do you want to work with us in updating the RBMPs? We asked if you could include the level of involvement (inform, consult or working together to solve problems) you want and specify the methods you prefer?**

All respondents welcomed the opportunity to be involved and work together. Some specified that they would like to be consulted on specific issues to find solutions to address the issues. Most respondents wanted to be kept informed and consulted.

Several organisations commented on wanting more local engagement to address water body, river or catchment scale issues. Reference was made to the workshops held for the first RBMP and some respondents would like to see a similar approach for the updated plan. A Third Sector group offered to share their data.

A respondent commented that the work of the Wales Land Management Forum Sub Group on agricultural pollution should be informed by both the Wales Land Management Forum and the Wales Water Management Forum. They would be concerned if there was any duplication of effort in the work of the Forums.

**NRW Response:**

We will work closely with the WWMF to help shape future engagement work as we develop the next RBMP. For the third cycle RBMPs we don't propose to hold catchment workshops in the same format as those organised for the first RBMPs, as local engagement will be undertaken through the development of the Area Statements via workshops and meetings with stakeholders. The new legislation requires Area Statements

to help facilitate the delivery of Welsh Government's Natural Resources Policy at a local level.

The 7 Area Statements will bring together data, information and ways of working with others in each area, the pressures on natural resources and the opportunities to be achieved for people and the environment in each area. Engagement with stakeholders on Area Statement development will include management issues that impact on the status of water bodies, but will also focus on public attitudes and behaviours towards the sustainable management of water in each Area Statement boundary. Public Service Boards will strengthen joint working across Wales' public bodies, and the well-being goals set by each PSB have influenced the development of Area Statements.

We note the comments made on the links between the Forums and the secretariats of the Forums meet to discuss cross cutting issues.

### **Consultation Question 3:**

**Do you have any suggestions on how we can improve our communication with you for updating the RBMPs? Have we identified the right organisations shown as examples in Appendix 5 of the consultation document?**

Most respondents felt that the right organisations were involved in the review process. The following organisations were suggested as being added to the list: Afonydd Cymru, Drinking Water Inspectorate, Rivers Trusts, Hydro Generation Industry, South Wales Outdoor Activity Providers Group, Pembrokeshire Outdoor Charter Group and Snowdonia Active, Canoe Wales, Energy UK, British Hydropower Association, Network Rail, Canal Trust, Country Land Business Association Ltd and Nature Friendly Farming Network. It was noted that although Pembroke Power Station was identified, it was suggested to include other power stations/plants in Wales. An organisation felt that the Consumer Council for Water's role was misrepresented in Appendix 5.

A respondent commented that engagement was encouraged with local groups and the Public Service Boards as they felt that these provide good links with NRW local staff. A comment was made that public bodies have a legal duty to have regard to the approved RBMPs. They felt that organisations should be encouraged to refer to the plans in any plans produced by other organisations, explaining how that legal duty has been met.

One respondent commented that negative messages were communicated about the agricultural sector. It was suggested that a more balanced communications process was needed. To ensure that messages get out to the farming industry, this could be cascaded through Farming Connect or through organisations working with farmers. The respondent also questioned the validity of decisions made and conclusions drawn from the sampling and monitoring programme.

It was suggested that the membership of the Wales Water Management Forum should include representation from the Environment Agency, given the cross border connections for the Dee and the Severn River Basin Districts.

### **NRW Response:**

It should be noted that the organisations listed in Appendix 5 were given as examples of organisations for each of the sectors. We apologise that the Consumer Council for Water

was placed in the Water Industry sector column. We will continue to work with our existing external partners and make contact with the new organisations if they are not already on the RBMP stakeholder list. We will also build on the partnership working which has been established for previous cycles.

In response to comments about communications with Farming Groups, we will check whether Farming Connect is on the WFD stakeholder list. The WLMF set up a sub-group in January 2017, where it was agreed to identify water bodies where impacts from agriculture need to be resolved. Farming Connect have delivered help and advice in some priority catchments where agricultural issues are the reason for not achieving good status. Work has taken place on drafting a list of second tranche catchments within which Farming Connect will target advisory work.

We note the comments made on the membership of the Wales Water Management Forum. The Environment Agency are members of the Forum.

**Consultation Question 4(a):**

**Have we identified all the plans and strategies that affect, or are affected by the RBMPs? (Appendix 3 of the consultation document).**

You told us that we need to be aware of the 22 plans that were not listed. Some examples are: Nature Restoration Plans, Welsh Marine Plan and Drainage and Wastewater Management Plans

The following amendments were recommended:

- Biodiversity & Ecosystem Resilience Forward Plans be amended to “plans and reports required by the biodiversity and ecosystems resilience duty in section 6 of the Environment (Wales) Act 2016.
- Issue heading amended from “water supply” to “water industry”.
- Plan/strategy title amended from “Bathing Water Priorities” to Bathing Water Profiles.

One respondent commented that further consideration may be beneficial over how management of groundwater in coalfield areas interacts with other plans and strategies.

A respondent referred to the work of the Wales Land Management Forum Sub Group on agricultural pollution that has established a blue print for addressing land management issues.

**NRW Response:**

We acknowledge the additional plans identified and that alignment where possible is essential as we develop the RBMPs. We will also correct the errors that have been identified.

**Consultation Question 4b:**

**Can you identify any opportunities to integrate the RBMPs with other plans and strategies?**

One respondent commented that the Water Industry planning cycle does not synchronise with the WFD 6-year cycle. They would like to see consistency of timetables for all plans and strategies.

Some respondents commented that when preparing the RBMPs, NRW should ensure that they provide a strong evidence base to enable Welsh Government to target its support for land managers through the proposed Land Management Programme. Reference was made to Natural Capital Plans and the sustainable management of natural resources. It was suggested that the development of appropriate and realistic natural capital plans to support this would be valuable.

**NRW Response:**

We welcome the suggested opportunities. The timeline for the RBMPs is set out in the Regulations and we are therefore constrained by the legislative timetable. We will also work closely with the Wales Water Management Forum and the Wales Land Management Forum to make sure that we are working effectively with others.

**Consultation Question 4c:**

**How do you think the consultation on the updated RBMPs and FRMPs can best be co-ordinated?**

Respondents supported the integration of both plans. Suggestions were made that the plans be co-ordinated on a river by river basis. Several respondents suggested consulting on both plans at the same time on a web site and notifying stakeholders via email, using an online portal.

One respondent commented that given that many water bodies are not reaching good status because of physical modifications, there needs to be more linkage between both plans. It was noticeable that the English section of the 2016 Dee FRMP included measures to deliver specific WFD objectives that were much more transparent. The respondent would like to see the approach taken by EA mirrored in the Welsh plans.

**NRW Response:**

We will consider the suggestions made. The plans will be published on our website and emailed to stakeholders. We will look at the EA approach and discuss how we can improve the linkages between the RBMPs and FRMPs on WFD failures associated with physical modifications.

**Consultation Question 5:**

**What opportunities can you identify in developing Area Statements that would join up with the RBMPs**

Several groups said that they would like to be involved in the development of AS and RBMPs. Some respondents felt that it was difficult to answer this question without knowing what the finalised Area Statements were likely to contain. Comments were raised about the uncertainty on the timing of the preparation and publication of the Area Statements. It was felt that more clarification and guidance was needed on the purpose and aim of Area Statements.

Several respondents felt that the Area Statements run slightly contrary to the accepted whole catchment management approach, with some rivers split across different areas. A respondent also felt there remains significant ambiguity around the Area Statement process by which they will be developed and scope thereafter. Concerns were also raised

on the remit of the Area Statements that impact on the Severn RBD. As the Severn RBMP is led by the EA, it was felt that this could affect the 'join up' with the Area Statements. It was suggested that Welsh Ministers consider establishing a Wales shaped RBD following the Scottish model.

Comments were made that the WFD Regulations are far more detailed in terms of contents and timing of the Plans than the equivalent provisions relating to Area Statements. Partly for that reason, the Plans should be the overarching management plans for the aquatic environment, dictating the water related aspects of the Area Statements to avoid duplication.

It was commented that an ecosystem approach was required for the management of all activities. It was felt that the Area Statements do not consider management of an individual resource or activity in isolation. It was suggested that the Area Statements should be integrated with the Marine Plan, to help avoid unnecessary duplication and overlap. Several comments were made that it was important for Area Statements, RBMPs, Drainage and Wastewater plans and water company business plans to take account of each other.

**NRW Response:**

See comment regarding Area Statements in the response summary for Question 2.

Your comments on support and concerns on the join up of the Area Statements and RBMPs are noted and have been shared with our Area Statement Practitioners Group. Details of those who wished to be involved in the engagement of the Area Statements have also been shared.

We will continue to work with partners and EA to ensure that arrangements are in place for planning and managing cross border catchments. We will work with the EA on the Severn RBMP.

**Consultation Question 6:**

**How can we get the best out of our new WWMF, as it continues to deliver the role of the Liaison Panels, but takes on a greater role mirroring the work of the Wales Land Management Forum?**

There was support for the creation of the WWMF that has replaced the Liaison Panels. Respondents felt that the new Forum allows communication across the three RBDs within the Welsh border. Some organisations were uncertain on how local issues will be addressed. It was also felt that the membership should reflect geographic representation across Wales and cover all sectors.

Reference was made to a 'health check' of the WFD at an EU level. They highlighted the definition of a failing water body and the 'one out, all out rule', that they felt give a false impression of water body status.

Similar comment as in questions 1-3 on the previous work of the Liaison Panels and development of the Wales Water Management Forum was made.

**NRW Response:**

Two meetings of the WWMF have been held. We will be reviewing the terms of reference and membership for the Forum to provide greater clarity. Information on the Forum will be available on our web site.

We note the comments made on the WFD EU 'health check'.

**Consultation Question 7:**

**We propose to explain how we have considered your response to this consultation on the significant water management issues in 2019. Previously, NRW have published a response document for each consultation. Are you satisfied that this is a reasonable approach?**

All respondents were supportive of the approach to include an explanation of how we have considered the responses to the consultation in this Challenges and Choices consultation

**General Comments:**

A respondent felt that we use too many acronyms and unclear terminology on Water Watch Wales. One respondent welcomed the news that NRW intend to ease fish passage at two points on the Eastern Cleddau. The group also raised concerns raised about intensive dairy farming on the Eastern Cleddau, declining fish population and flow variations.

**NRW Response:**

Responses on local issues have been shared with our Operations Teams. Regarding comments on the use of terminology; we will ensure that the terminology is explained so that it can be easily understood by our stakeholders.