Statement of Particulars Natural Resources Wales Flood Risk Management Plan, 2nd Cycle

Version 2: To accompany adopted FRMP2

Date: November 2023

1. Introduction

The Environmental Assessment of Plans and Programmes Regulations (Strategic Environmental Assessment (SEA) Regulations) requires that a Statement of Particulars is made available as soon as reasonably practicable after the adoption of the plan. This statement must demonstrate:

- 1. How environmental considerations have been integrated into the 2nd cycle Flood Risk Management Plan (**Section 2** of this document);
- 2. How the Environmental Report has been taken into account (Section 3);
- 3. How opinions expressed in response to the consultation on the Environmental Report have been taken into account (**Section 4**);
- 4. The reasons for choosing the 2nd cycle Flood Risk Management Plan, as adopted, in light of the other reasonable alternatives dealt with (**Section 5**); and
- 5. The measures that are to be taken to monitor the significant environmental effects of the implementation of the 2nd cycle Flood Risk Management Plan (**Section 6**).

Natural Resources Wales Flood Risk Management Plan, 2nd cycle

The <u>Flood Risk Regulations (2009)</u> set out a framework for the effective management of flood risk in England and Wales. Natural Resources Wales (NRW) has a duty to identify areas at risk of flooding via a <u>Preliminary Flood Risk Assessment (PFRA)</u> and then to produce <u>Flood Hazard and Flood Risk Maps</u>. We then have a duty to produce a Flood Risk Management Plan (FRMP) outlining our intended objectives and measures for managing flood risk identified within these earlier phases.

Our previous (first cycle) FRMPs were produced in 2016 at River Basin District (RBD) scale and covered the Western Wales, the Severn and the Dee. The Severn and the Dee FRMPs were produced jointly with the Environment Agency. For the second cycle we have taken a different approach by taking a Wales-wide view for our FRMP.

Our FRMP provides an overview of where is at risk of flooding in Wales and directs you to where you can find out further information from our interactive maps. It sets out our national Wales-wide Objective, Priorities and Measures for managing the risk of flooding and provides further information on the level of risk, including what we have planned for the communities with the greatest flood risks.

We consulted on our draft FRMP from 1 March to 24 May 2023. The draft plan set out proposals for managing the risk of flooding from main rivers, reservoirs and the sea across Wales for the next six years and beyond. The plan was accompanied by the environmental report, documenting the Strategic Environmental Assessment (SEA) and a draft Habitats Regulations Assessment (HRA).

2. How environmental considerations have been integrated into

the 2nd cycle Flood Risk Management Plan?

2.1 Overview

The FRMP itself consists of 1 objective and 14 priorities that have been developed taking into account the framework set by NRW's Corporate Plan and the Welsh Government National Flood and Coastal Erosion Risk Management Strategy and the duties placed on NRW by the Environment Act (Wales) 2016 and the Well-being of Future Generations Act (2015).

The SEA aims to present the environmental effects of the plan and ensure that Sustainable Development (SD) and Sustainable Management of Natural Resource (SMNR) principles are embedded, maximising delivery against NRW's Well-Being Objectives and the objective of SMNR. The SMNR objective is to use natural resources in a way and at a rate that... maintains and enhances the resilience of ecosystems and the benefits they provide. In doing so, this will meet the needs of present generations of people without compromising the ability of future generations to meet their needs and contribute to the achievement of the well-being goals.

A number of FRMP priorities promote environmental considerations in the delivery of measures, for example, Priority 4: Seek and take opportunities for the protection and enhancement of the physical and mental health and well-being of communities, biodiversity and the environment, and the wider benefits they provide, to support NRW's response to the Nature Emergency. These priorities will inform the delivery of measures.

The plan has been developed to reduce risk to people, homes and businesses from flooding and coastal erosion through the sustainable management of our environment. This in itself is beneficial, and the plan promotes the management of flood risk through non-physical measures first and foremost. For example, understanding risk through investigation and modelling, warning, informing and only consider physical intervention when the risk is understood and needed to help protect people and property.

However, there remain communities at flood risk across Wales and interventions to address this will be increasingly necessary in light of our changing climate. There is potential for wider environmental effects in the delivery of interventions to reduce this risk. As a legislative requirement, NRW will undertake SEA and Environmental Impact Assessment (EIA) of relevant plans, strategies and projects. This ensures we avoid or minimise adverse environmental impact and maximise delivery of environmental benefits. The FRMP SEA and HRA will provide important strategic context for project level EIA and HRA, as the FRMP is implemented.

2.2 Strategic Environmental Assessment

The SEA has been undertaken iteratively with the plan, to ensure it could influence and inform its development.

Scoping was undertaken in Spring 2022 to focus the assessment on the likely significant effects of the FRMP. This concluded that significant effects on air quality were unlikely and therefore this topic was scoped out. The scoping also considered which FRMP measures are likely to lead to significant effects. No measures were scoped out of the assessment, all national and local measures have been considered at a national scale to reflect the level of detail of the FRMP measures. The spatial element of the local measures have allowed consideration of opportunities and constraints in the Place appendices (E-J).

During scoping, relevant policies, plans, programmes and legislation were reviewed to determine potential synergies and conflicts with the FRMP. A summary of baseline information relevant to the FRMP was documented and developed to determine key issues and trends. This informed the development of assessment criteria that have been applied in the assessment of measures.

The Scoping Report was subject to statutory consultation with Natural Resources Wales, Cadw, Environment Agency, Natural England and Heritage England in March 2022 for a period of 5 weeks.

This consultation informed the assessment stage of the SEA which was documented in the Environmental Report and specifically:

- Identified, described and evaluated the significant environmental effects of implementing the Plan and any alternatives
- Identified actions to prevent, reduce or as fully as possible offset any adverse effects
- Provided an early and effective opportunity to engage through consultation in preparation of the plan
- Proposed measures to monitor the environmental effects of plan implementation.

The draft plan and Environmental Report were published between 1 March 2023 and 24th May 2023. The Environmental Report has been revised, taking into account responses received to the consultation and will be published alongside the adopted Plan and this Statement of Particulars.

2.2 Habitats Regulations Assessment

A Habitats Regulations Assessment (HRA) was developed iteratively with the FRMP and the SEA and will be published in a separate report alongside the FRMP. The conclusions of the HRA have informed the FRMP and been considered within the SEA.

3. How the Environmental Report has been taken into account.

It is important that any plan takes into account the environmental, technical and economic circumstances in which it is to be implemented. The Environmental Report and the HRA ensure that unintended adverse effects are avoided and potential for delivery of multiple benefits is identified.

The SEA has been undertaken at a high level, appropriate to the national scale of the FRMP. However, the assessment, grouped under Flood Risk Management (FRM)

activities, is presented in a manner that can be applied to, and influence, lower level plans and project level EIA. The Place Appendices focus on those local measures which have the potential to result in physical "on the ground" changes and direct environmental effects and they aim to identify opportunities and constraints relevant to delivery of measures. This should inform and encourage integrated work planning to deliver multiple benefits.

The SEA identified significant positive effects in relation to several receptors: Population and Human Health, Climatic Factors and Material Assets. It found that all national measures will deliver significant determinants of health (economic, environmental, social and cultural factors) benefits in terms of either preventing or protecting people and properties from flood risk. The measures will promote climate change adaptation and resilience which will benefit communities and material assets. Activities such as modelling and telemetry provide evidence for flood forecasting and warning which in turn, improves awareness and encourages adaptation both in land and at the coast. Advice provided through permitting and planning also prevent inappropriate development, promoting adaptation to climate change. Reducing flood risk to existing important material assets and infrastructure has the potential to significantly benefit local communities and national interests.

Whilst these beneficial effects were recognised by the Environmental Report, a number of receptors had potential adverse or beneficial effects as a result of physical interventions such as maintenance and improvement of FRM assets and development of new assets. Biodiversity, flora and fauna, land use, soil, geology, contaminated land, water resources and quality, cultural heritage and landscape and seascape were all assessed as having mixed effects, the uncertainty being due to the unknown nature of the interventions that will be used to manage flood risk. Hard engineering can result in adverse effects on each of these receptors, by damaging habitat, reducing connectivity, changing landscape and land use etc. The FRMP includes measures and priorities to promote the application of nature based solutions, it promotes restoration of hydromorphological processes in Heavily Modified Water Bodies (HMWB) and it supports coastal and inland adaptation plans to address increased flood risk through climate change. These priorities will influence the delivery of measures such that adverse effects can be reduced or avoided and beneficial effects can be maximised.

In undertaking the assessment, mitigation and enhancement opportunities were identified:

- Project level environmental assessment in line with Operational Guidance Note (OGN) 87, HRA in line with OGN200 and WFD compliance assessment in line with OGN72 will ensure any adverse impacts are avoided, reduced or mitigated.
- Integration of project level aspects of Health Impact Assessment (HIA) will provide an opportunity to understand populations and communities and the social vulnerabilities to assess the potential direct and indirect impacts on population groups of a specific scheme.
- The Place Appendices have identified where opportunities might be realised where
 priority communities for FRM overlap with other projects and programmes, for
 example: Heavily Modified Waterbodies (HMWB), River Restoration and fish
 passage/habitat improvement priorities. This should promote integrated work
 planning.

- Working with natural processes, good environmental design on projects and sensitive approaches to maintenance activities should seek to enhance recreation and amenity associated with assets, biodiversity, ecosystem resilience, hydromorphology, carbon sequestration / emissions reduction and landscape.
- Nature based solutions and influencing land management practices have potential benefits on soil and land management. Measures to reduce run-off would protect soil from erosion and maintain moisture, preventing desiccation at hotter times of year.
- At initial assessment stage of projects, it is standard practice to seek screening advice from the relevant Welsh Archaeological Trust to ensure the project can be appraised and designed to avoid impact on the historic environment.

The Environmental Report that was made available for public consultation alongside the draft FRMP documented the potential beneficial and adverse effects of the proposed plan objective, priorities and measures and identified mitigation and enhancement opportunities. Whilst the assessment was undertaken at a high level, appropriate to the national scale of the FRMP, it was presented in a manner that NRW can apply to lower level plans, strategies or project level EIA, to ensure the wider environment is considered at every tier of FRM.

4. How opinions expressed in response to the consultation on the Environmental Report have been taken into account

Formal consultation was undertaken with the Strategic Assessment Team of Natural Resources Wales and Cadw as Statutory Consultees in the SEA process, throughout the development of the plan. Given that the plan borders England, we also consulted with the Environment Agency, Natural England and Heritage England. The Environmental Report and the draft HRA were also made publicly available by publishing them alongside the Draft FRMP consultation in Spring 2023.

A detailed summary of the responses received to the consultation on the Environmental Report is in Annex 1. This sets out each response received, summarises the comments made and sets out the actions we have and are taking to address the comments. A summary of the comments received to the specific SEA questions we asked, and the actions we are taking are set out below.

Those that responded to the Environmental Reports were broadly supportive, although many replied "don't know". Whilst SEA requirements are set in legislation, we will need to consider how we can make Environmental Reports more accessible and clearly understandable in future consultations.

Respondents recognised the importance of land management in relation to flood risk management. This will include influencing development and implementation of the Sustainable Farming Scheme, to reduce run off. Opportunities to manage land and water in a collaborative way should be sought.

Respondents wished to see greater consideration of the impacts of flooding on agriculture and wildlife. This impact was recognised in the SEA and will be considered as projects are developed from the FRMP. They also considered there should be greater emphasis on enhancing biodiversity through FRM measures, given that Welsh Government have declared a Nature Emergency. Enhancing biodiversity through our operations is a legal duty and we seek to deliver such opportunities through our activities. The FRMP priorities have been amended to make this more explicit.

Public Health Wales (PHW) supported the inclusion of HIA within the SEA and recommended that HIA is also a part of project development. NRW is developing approaches to HIA in projects ahead of the awaited legislation.

PHW also considered that indicators for population health could be significantly expanded to monitor the physical and mental health and wellbeing impacts of flooding. NRW would welcome collaboration with PHW to draw upon these indicators and work collaboratively to recognise the population health effects, both positive and unintended, of flooding, beyond risk to life.

Concern was expressed at the implementation of Shoreline Management Plan (SMP) Policy at a local scale and in particular through asset management, the respondent considered that the assessment underplayed the impact on climatic factors. One of the key opportunities raised was to consider capturing within local measures the locations where coastal adaptation needs to be implemented as a result of SMP policy during the lifetime of this FRMP. The Coastal Adaptation Programme includes projects around the coast of Wales. Some of these are included in the local measures eg Tidal Dyfi, but some have not been included due to the sensitivite nature of the information. The draft HRA consultation also influenced the consideration of coastal FRM activities to ensure adaptation and consideration of the potentially changing SMP policies during this FRMP cycle.

FRM will work closely with colleagues in Sustainable Land Management in the management of Welsh Government Woodland Estate. The FRMP identifies communities at risk to help determine whether felling programmes may exceed a catchment threshold and therefore need to be phased, or similar adjustments made, to reduce the risk of flooding, as per the 2022 UKFS Practice Guide on designing and managing forests and woodlands to reduce flood risk.

5. The reasons for choosing the NRW FRMP, as adopted, in the light of the other reasonable alternatives dealt with.

Reasonable alternatives have been considered at various scales and stages for the FRMP.

At a national scale the FRMP itself is required under section 25 of the Flood Risk Regulations (2009). This also sets out the approach and contents of the FRMP. The FRMP is also guided by Welsh Governments National FCERM Strategy and NRW's Corporate Plan. So whilst alternatives must be considered, the regulations and Strategy provide important drivers for the content and direction of the FRMP.

NRW considered different approaches to the FRMP:

1. Undertake at RBD scale, as with the first cycle

- 2. Undertake at a Wales wide scale and focus on flooding from sea, main river and reservoir
- 3. Undertake at a Wales wide scale and integrate with LLFA to also include flooding from surface water and ordinary watercourses

It was decided to move towards a Wales wide FRMP for the second cycle. Since the first cycle, the Environment (Wales) Act 2016 has been introduced. This required NRW to produce Area Statements, setting out how we will work with partners to sustainably manage natural resources. This established 7 areas across Wales. To establish opportunities for integrated planning and delivery it was decided that the FRMP should be developed at two scales. National measures that apply throughout Wales and local measures for FRA's aligned with the 6 terrestrial/coastal areas (the seventh area being the Marine Area Statement).

Opportunities were explored with the LLFA's to produce a combined FRMP. However, following discussions with LLFA's and Welsh Government, this was not pursued as there was a desire to embed LLFA FRMPs within their Local Flood Risk Strategies, which are being developed under different timeframes.

The Flood Risk Regulations require NRW to undertake a PFRA to enable the identification of the areas most at risk from flooding from the sea, main rivers and reservoirs. This assessment, along with actual flood events and the CARR has informed the identification of communities requiring local measures.

Implementation of measures will be considered at a local scale during the FRMP cycle. For example, for measures requiring initial assessment and feasibility work for reducing flood risk, projects will commence with identification of a long list of options. Project level environmental assessment will influence the options identification, appraisal and identification of the preferred option. Project options will range from Do Nothing through to major civil engineering works, with many other options also considered. So alternatives are also considered at a project/local scale.

The measures within this plan have been selected after considering:

- the source and severity of the risk;
- what risk management processes are already in place;
- how the risk might change in the future; and
- what the options to address the risk are.

The most appropriate measure was selected after considering all of these factors. At a project delivery scale the technical feasibility, the cost, predicted environmental effects and engagement with stakeholders, including local communities will inform options identification, appraisal and selection.

6. The measures that are to be taken to monitor the significant environmental effects of the implementation of the FRMP

This section sets out the monitoring that we propose to understand the significant effects of the plan in practice. The monitoring is focussed on those receptors where there are potentially significant effects. The FRMP assessment predicted only significant beneficial effects, there were no significant adverse effects. However, given the uncertainty that exists regarding the likely effects of the plan on the other receptors, it is proposed to monitor a wider range.

Significant beneficial effect:

- Population and Human Health
- Climatic Factors
- Material Assets

Adverse/Beneficial effect:

- Biodiversity flora and fauna
- Water quality and resources
- Cultural Heritage

The indicators have to be practical, cost-effective and strategic, and should identify the effects of the plan itself, rather than on wider trends. However, given the national scale of the plan and the nature of the adverse and beneficial impacts, it would be virtually impossible to conclude that any impacts are as a result of the plan. Effects of individual projects will be monitored according to environmental action and/or monitoring plans devised during project level environmental impact assessment.

6.1 Proposed Monitoring

6.1.1 Population and human health / Material Assets

NRW is required to report to the Welsh Government an annual update of the number of properties at different levels of flood risk on an annual basis. It also reports on the number of properties benefitting from its schemes both corporately and to Welsh Government. FRM also will review the measures within the FRMP on an annual basis. This will inform our business planning processes. The progress of delivery of each measure will be assessed and if necessary updated at this point and we will produce updates on our progress as required.

NRW will explore with PHW how monitoring indicators for population health could be significantly expanded to recognise the health and wellbeing impacts of flooding.

NRW will look at the opportunity to collaborate with PHW with the recognition that public health surveillance systems can help identify and address the impacts to health and wellbeing from climate change and flooding.

Recommendation to engage with PHW to explore the public health surveillance systems and associated indicators for population health.

Recommendation to collate information on the protection of existing and creation of new opportunities to access green and natural spaces for physical activity delivered through FRM activities.

6.1.2 Biodiversity, Flora and Fauna

A monitoring programme supports and informs the National Habitat Creation Programme (NHCP), which delivers compensatory habitat provision in relation to flood risk activities. Annual reporting will seek to demonstrate that the extent and type of compensatory habitat delivered keeps pace with predicted losses. This will allow NRW and other Risk Management Authorities to continue to defend coastal communities at risk.

The number of NFM and hybrid schemes undertaken will be reported to Welsh Government annually through grant reporting and reported to Welsh Ministers by NRW through Section 18 Reports.

Recommendation to collate information on enhancements delivered that contribute to the NRP priorities and the Section 6 - Biodiversity and ecosystem resilience duty. This is likely to evolve into the Net Biodiversity Benefit framework that is under development.

6.1.3 Water

Monitoring is undertaken to determine progress towards meeting WFD objectives for water body status, including ecological status. This is reported every 5 years in the RBMPs. In coastal waters, the monitoring programme undertaken for the Marine Strategy Framework Directive (MSFD) applies to those aspects of Good Environmental Status which are not already covered by WFD (e.g. noise, litter, aspects of biodiversity).

6.1.4 Climatic Factors

As one of the purposes of FRM is to enable adaptation to the effects of climate change, evidence such as the Flood Risk Assessment Wales maps, annual topographic surveys by the Wales Coastal Monitoring Centre and the National Asset Database will allow NRW to monitor adaptation to climate change.

Recommendation to utilise the Carbon Calculator and Carbon Modelling Tool (Eric) through projects delivery to raise the profile of resource efficiency and contribute to climate change mitigation.

6.1.5 Cultural Heritage

NRW has a Memorandum of Agreement with Cadw and the Welsh Archaeological Trusts and this established and encourages working together to benefit the natural and historic environment. Regular liaison meetings are held to share progress updates and lessons learnt, specifically through projects.

Project level environmental assessment will identify and record beneficial and adverse effects on cultural heritage.



Annex 1: Summary of Consultation Responses and Actions Taken.

		Vales
Organisation /individual responding	Response to SEA	Action taken
Individual	Could not locate the link to the Environmental Report & questioned whether we have considered Beaver reintroduction.	The Environmental Report was included in the Citizen Space consultation. NRW provided the respondent with the link to the document. Beaver reintroduction has not been considered as part of the FRMP NRW is currently undertaking a review of available evidence on reintroduction of Beavers in Wales. This will inform the development of a policy framework and developing recommendations for Welsh Government on the next steps.
Individual	Totally support the conclusions of the ER. No further significant effects as long as the plan continues to evolve and support as many people as possible and is given increasing funding for the future, then all of the objectives should be achievable.	Noted, no action required.
Individual	Does not agree with the conclusions of the ER. Concerned that the trees that have fallen into the river are hindering swans. Further consideration should be given to dredging the River Gwendraeth to address flooding and encourage wildlife.	n/a
Individual	Further consideration should be given to asset management transparency. Pollution was thinly covered and the link to Pollution Prevention Guidance did not work.	To be considered by the plan itself. In relation to the FRMP, pollution is a risk when undertaking FRM activities. We apply PPG and best practice in our construction and maintenance activities to minimise the risk of pollution, such that this is not considered significant at a national scale.

Organisation /individual responding	Response to SEA	Action taken
Individual	Requested reference to the Future Wales National Plan 2040. Respondent is not familiar with the Ramsar/SAC/SPA/SSSI in North west Wales & would have liked to see these listed.	The National Plan was considered in the review of relevant policies, plans and strategies, documented in the Scoping Report and summarised in the ER. Noted. These are available on our website. We listed those protected sites that are on or near local measures that could result in physical work on the ground, in order to allow the assessments to be focussed on areas where there were pathways for significant effects.
Individual	Further significant effects of the FRMP should include the deforestation of uplands, desilting of rivers and the deepening of reservoirs to reduce flood risk	Comments are relevant for the FRMP itself rather than the SEA. However, measures such as these would be assessed for environmnetal effects at a project level.
Individual	Not enough consideration given to the impact on wildlife of flood events. Dredging of rivers could reduce this impact.	Noted. The focus of the FRMP has to be management of risk to people and property. Dredging in itself would have potential effects on biodiversity and geomorphology of rivers that would have to be taken into account.
	Impacts on wildlife cited as cause for preventing flood risk management projects, when in reality wildlife will return when works are completed.	Environmental assessments of projects aim to avoid or reduce impacts on wildlife. Where this can't be done, and there is a demonstrable need/justification for progressing we would seek to mitigate or compensate any impacts.
Llangattock Community Council	Too much to read and understand. A summary document should cover the main points.	The non-technical summary of the ER provides a summary of the main points of the SEA.
Isle of Anglesey County Council	Whilst the documents (SEA-Environmental report & Appendix G North West Wales) are appropriately thorough, they do not seem to draw any specific conclusions.	A summary of the findings are documented in the Non-technical summary.
Individual	Environmental sensitivity is important but minimising flooding to communities has to be a priority. Lack of vegetation management is slowing the flow of Dulas.	Noted.

Organisation /individual responding	Response to SEA	Action taken
Public Health Wales	We agree that integration of project level Health Impact Assessment (HIA)s is needed to provide an opportunity to understand the impacted population and address socioeconomic and other vulnerabilities. HIAs can also enable flood risk projects to maximise co-benefits for health, and minimise any unintended adverse consequences for health and wellbeing. We would also add the using HIAs can support and facilitate community engagement and involvement with flood risk plans and transparent communications of the risks and benefits of different intervention options. With regards to Section 5.1, Table 6 Monitoring plan: Monitoring indicators for population health could be significantly expanded. Given the strong evidence base on the impacts of flooding on mental health and other health outcomes in the short and long term, we would suggest that this could potentially include: • Indicators of mental health impacts in the affected population (via a range of NHS service data) • Respiratory infections (via a range of NHS service data) • Gastrointestinal infections (via a range of NHS service data) Public Health Wales is currently enhancing our public health surveillance systems to address the health impacts of climate change and would be happy to engage with NRW colleagues on monitoring the health and wellbeing impacts of flooding. Public Health Wales recommends that rather than a duplication of effort, such a collaboration would be more valuable and would help to emphasise the importance of health effects of flooding beyond risk to life.	Noted. Section 5.1, Table 6 Monitoring plan response – We will engage with PHW to explore what public health suveillance systems are available to consider expanding the monitoring of population health indicators. Ideally, these will be linked to NRWs Corporate Plan strategic indicators for human wellbeing (currently under development); - Increasing the proportion of the population who have access to high quality green or blue space, and who use them sustainably* - Increasing the proportion of the population living in places that will continue to support and contribute to their health and well-being in a changing climate* *Subject to change Any public health surveillance monitoring system introduced would need to be aligned to our Corporate Plan strategic indicators and specific enough to meaningfully monitor the health and wellbeing impacts of flooding.

Organisation /individual responding	Response to SEA	Action taken
Conwy County Council	As with any high level strategy the conclusions will need reviewing in relation to the specifics of more detailed scheme development.	Noted
	Members accepted the role of trees in mitigating flood and carbon sequestration when planted in strategic areas. They accepted that in some hill areas, such as monoculture Molinia stands, tree planting, when financially supported, was a worthwhile consideration to mitigate floods. The same arguments do not apply to planting trees on improved, productive agricultural land as apart for generating an income for members, permanent grassland is capable of storing carbon and slowing down water movement from the hills. Members did not accept the Strategic Environmental Assessment's claim of the need to meet	Noted. For FRMP to consider
	the Welsh Government target of planting more than 2000ha of trees per year, rising to 4000ha as rapidly as possible. Members considered this to be a simplistic, blinkered approach to the challenges of land management in Wales, as farmers were tasked to deliver multiple objectives at the same time,	SEA is quoting WG policy/targets.
Farming Union Wales	with the inevitable consequence of a trade off between delivering one objective and another. Members felt that records of when agricultural land was lost to production due to flooding could be informative. They also noted the cost to land managers of recovering the land to production as soil structure and invertebrate populations are damaged and often there are additional fencing costs involved.	Noted. For FRMP to consider. The SEA reflects the impacts to land use, including agriculture flooding and FRM activities.
	When the proposals of the Sustainable farming Scheme are concluded and implemented, farmers may contribute greatly to flood mitigation through sustainable land management. Some examples include, restoration of semi-natural peatland, create new and manage existing agro-forestry and woodland, protect soils from erosion and degradation, manage at least 10% of their land to maintain and enhance semi-natural habitats, protected watercourse banks, introducing additional ponds, and deliver natural flood management schemes.	Noted. NRW are working with WG to maximise opportunities for flood risk benefits through the SFS.
	In addition to the above measures, they believed that they are uniquely placed working alongside miles and miles of rivers to carry out engineering work, such as dredging, which will contribute to preventing the flooding of homes, businesses and land downstream. Farmers are also well placed to control invasive species spreading along rivers and thereby slowing the movement of water, either through chemical control or controlled grazing.	Noted. For FRMP to consider

Organisation /individual responding	Response to SEA	Action taken
Caerphilly County Council	In the National Overview Plan on page 22 Priority 4 states 'Promote opportunities for enhancement to the health and wellbeing of communities and the environment, and the wider benefits they provide, to support NRW's response to the Nature Emergency'. The above should statecommunities, biodiversity and the environment, to be more specific to the declared Wales wide Nature Emergency so that Species specific habitat creation can be a part of each scheme. For example, incorporating sand martin and kingfisher nesting tunnels into suitable natural banks, the creation of otter holts along suitable banks.	The FRMP Priority has been amended to expilicitly mention Biodiversity. Biodiversity and ecosystem resilience is very much part of "environment" in this context. We have a legal duty under the environment act to enhance biodiversity through our activities, including FRM.
Individual	So many county councils have declared a 'nature emergency' together with a 'climate emergency', I would have expected much more radical and immediate proposals than these – e.g. why is there so much construction going on at the moment around Gelynis Farm, in Radyr, on the flood plain of the River Taff?	For the FRMP itself to consider
Wrexham County Borough Council	The Environmental Report sufficiently covers all of the potential environmental impacts of the Flood Risk Management Plan. However, Wrexham County Borough Council remains concerned that a timetable of the works have not been included in the draft. Such a timetable and a detailed description of the works in nature sensitive areas would be useful to local authorities to prevent a combination of two more works negatively impacting a habitat through, for example, sedimentation of watercourses from the creation of attenuation ponds in an ordinary watercourse upstream and the downstream dredging of a main river channel in close proximity. Better work cohesion between NRW and Local Authorities is needed to reduce environmental impacts. However, WCBC feels that we do not receive this communication from NRW as we are often not informed of planned works.	Agree that coordination of flood risk works would be beneficial. Precise timing of projects cannot be provided as it is dependent upon funding and resourcing. The FRMP outlines the priorities for the next 6 years and as projects start to be developed we would contact the local authorities as early as possible.
Natural Resources Wales	 Broadly we agree with the conclusions of the environmental report, and we have the following comment: 1.1 The main areas of interest from a marine and coastal perspective relate to measures under WA 1 and WA 9 in the National FRMP and measures relating to coastal locations, and managing flood risk from the sea, in the Area FRMPs. We agree with the potential for mixed effects identified for Receptors 2 (Biodiversity, Flora and Fauna), 3 (Land Use, Geology, Soil & Contaminated Land), and 4 (Water Resources & Quality) 	Noted

Organisation /individual responding	Response to SEA	Action taken
Natural Resources Wales	1.2 For Receptor 5 (Climatic Factors) we have some reservations about the assessment. The supporting text states that 'The FRMP supports management of the coast in line with SMP policy and will support adaptation and, where appropriate nature-based solutions. This will allow climate change adaptation in line with SMP policies.' The main concern from a marine and coastal perspective is the connection between the National priorities and measures and the Local measures. For example, whilst work to implement Shoreline Management Plans (SMP) is discussed under National measures in WA 9, it is not clear how this work is embedded under asset management measures in WA 1. Furthermore, only the North-West Area FRMP makes any significant reference to coastal adaptation planning (which would support SMP implementation, although this is not explicit). Therefore, whilst the SEA Environment report relies on implementation of all of the National measures, including how these translate into local delivery, it is not clear how this will be achieved in practice. Therefore we consider that the '++' assessment for WA 1 and WA 9 may be over-optimistic in reality.	There are coastal adaptation projects in areas other than the NW, for example Tidal Dyfi. We have also added in a further three which had been omitted from the draft FRMP. There is a programme of CAP projects but some locations are sensitive and so cannot be published. We have also included further text in the FRMP, HRA and ER to make explicit the need to consider SMP policy in any asset maintenance or construction at the coast, particularly in light of the shift from Epoch 1 to 2 in 2025. The HRA and SEA form important strategic context for project level and maintenance programme HRA.
Natural Resources Wales	1.3 For Receptor 7 (Cultural heritage) and Receptor 8 (Landscape/seascape), we query the assessment for WA1 should be '+/-' not '0' for both of these receptors. The supporting text tends to support these suggested amendments as the potential for both positive and negative impacts is described.	Agree, assessment amended.

Organisation /individual responding	Response to SEA	Action taken
Natural Resources Wales	1.4 We have concerns about how the assessment refers to opportunities to achieve change through influencing the UK Forestry Standard (UKFS), which we consider to be misleading at this stage of the 5 year UKFS revision cycle. There are multiple references (pp 3-4, 43, 45-47, 51, 107, 109-10, 113) to the UKFS and typically (in some guise) to the FRMP influencing the UKFS. This is not correct. This FRMP cannot influence the UKFS (as the Standard for Sustainable Forest Management) as a 2 year review has just concluded and a new version will be published in the summer of 2023. However, it can seek to influence (and join up with) delivery under the UKFS and associated guidance. For example, under the National Measures the FRMP can support the process of identifying assets at risk to help determine whether felling programmes may exceed a catchment threshold and therefore need to be phased, or similar adjustments made, to reduce the risk of flooding, as per the 2022 UKFS Practice Guide on designing and managing forests and woodlands to reduce flood risk. Under the FRMP national measures, a commitment to Nature-based Solutions is also compatible with the UKFS.	 We accept that the wording of the ER is misleading. This is partially due to author error as the ER was written and developed as the draft FRMP was developed, some time before publication. This should have been picked up in pre publication proof reading. The final version of the ER has been edited. Flood Risk Management have worked with Sustainable Land Management colleagues within NRW to contribute to the latest update of the UK Forestry Standard and the development of a new UKFS Practice Guide for designing and managing forests and woodland to reduce flooding. We will use the measures set out within the FRMP to identify opportunities for working with and influencing sustainable forest management activities to help reduce downstream flood risk and deliver wider benefits (as set out in the UKFS Practice Guide, Appendix 2).
Natural Resources Wales	 1.5 Please note that some references need updating: 1.5.1 Rather than referring to' UK Forestry Standard 2017 (review due by end of 2022)' (e.g on p 59), it would be more accurate to refer to 'UK Forestry Standard 2017 (new edition due for publication summer 2023)'. 	Noted, as above, we will edit this text accordingly
Natural Resources Wales	1.5.2 The Low Carbon Wales reference (P31, content against 3) to tree planting targets is correct (in that the document has been superseded or withdrawn), however WG has issued a more recent written statement around this topic - Written Statement: Trees and Timber (12 July 2021) GOV.WALES which articulates tree planting targets in a new way. We now typically refer to this statement.	Noted, we will edit this text accordingly

Organisation /individual responding	Response to SEA	Action taken
Natural Resources Wales	1.5.3 The paragraph (p55) on the Sustainable Farming Scheme (SFS) needs updating as an outline scheme was published in July 2022 – see here for the latest Sustainable Farming Scheme GOV.WALES Regarding the Agriculture (Wales) Bill, this needs to be changed to say that it was introduced in the second year of the government's legislative programme (22/23).	Noted, text will be updated – ER was written some time ago.
	Not aware of any further significant environmental effects, either positive or negative, of the draft Flood Risk Management Plan.	The HRA has been edited to include futher details on the principles/conclusions of the SMP HRA. The FRMP has also been edited to recognise that during the FRMP cycle we will enter the 2 nd epoch.
Natural Resources Wales	Are there further opportunities to enhance any positive or mitigate any negative environmental effects that should be considered for the final Flood Risk Management Plan? 4.1 One of the key opportunities that could be considered is to capture within local measures the locations where coastal adaptation needs to be implemented as a result of SMP policy during the lifetime of this FRMP. This would help to ensure SMP compliance and then support the Environment Report conclusions. The local measures should include any 'No active intervention' (NAI) or 'Managed realignment' (MR) policy units in epoch 1 (2005-2025) where NRW currently maintains assets. They should also include any epoch 2 NAI or MR policy units where NRW maintains assets where we need to plan for adaptation. Given that the information may not be available to develop local measures in this detail at this stage, it is suggested that National Measure WA 9.7 includes the work to identify and embed these tasks locally during the lifetime of the FRMP. Progress could be reviewed via monitoring.	National Measures WA9.7 (Support Wales to have a coastline that is sustainable and resilient to climate change. We will plan for coastal adaptation in line with Shoreline Management Plan policy for coastal defence management and enable the National Habitat Creation Programme to deliver compensatory intertidal habitat where required) and WA9.8 (Develop adaptation plans to address the increased flood risks presented by Climate Change both in land and on the coast.) sets out the commitment to implement coastal adaptation. The SMP2 policy will be applied in the delivery of local measures and will inform where we need to withdraw maintenance or seek a policy change.

Organisation /individual responding	Response to SEA	Action taken
Natural Resources Wales	4.2 We consider that more could be made of the opportunities for nature-based solutions and restoration at the coast. There is a wealth of information on the Natural Resources Wales webpage here , which describes options and provides links to case studies and reports for a range of potential management techniques, including management of beaches, sand dunes, shingle and saltmarsh, as well as hybrid approaches (such as polders) and eco-enhancements which can be used where hard infrastructure is necessary. This webpage resource is one of the actions taken in relation to the Marine Area Statement theme: Nature-based solutions and adaptation at the coast, to inform and support implementation of nature-based approaches. There may in addition be cross-cutting benefits in other areas. For example, increasing plant species diversity in planting mexies would increase floral diversity and hence support increase insect/ pollinator diversity whilst delivering a nature-based solutionfor improving seawall and river flood defence integrity. But it may also offer benefits through enhancements to coast path use, health and wellbing and the economy, and these should also be considered.	Noted. This is considered at a project stage. Work is underway to improve approaches to delivery of NBS and the FRMP itself has been edited to set out the framework for delivering nature based solutions
Natural Rsources Wales	4.3 We consider that there is greater opportunity to include biodiversity enhancements in flood asset management and that NRW should be more proactive in exploring and resourcing this. To achieve exemplar asset management multifunctional collaboration and cooperation is needed. For example, place-based Environment Team and Flood Risk Management (FRM) Officers in South East Area have been exploring grassland maintenance across nearly 30 miles of sea wall. Maintenance changes offer a significant SNMR opportunity, but recommendations for delivering resilient ecological networks (e.g. vi different seed mixes or frequency of cuts) are generally at odds with the existing industry guidance and NRW Maintenance Standards. To change how an asset is managed, FRM have requested clear evidence that this will not affect integrity and function. It is possible (even probably) that more diverse grassland swards offer better flood defence properties, but delivering a thorough evidence review or bespoke research to demonstrate this is beyond the capacity of the Environment Team.	Agree. This is undertaken at an operational level but it isn't well reported. Developing metrics and methods to be able to report on this and measure it so that we can aim to improve. FRM are developing an Operational Guidance Note 257: FRM Asset Maintenance Regimes and Natures Recovery. This is currently out for consultation. This will align with FRM Priority 4.