





# Managing the risk of flooding in the Dee River Basin District

What's being planned and when





This is a joint plan from Natural Resources Wales and the Environment Agency.

#### Natural Resources Wales

On 1 April 2013, Natural Resources Wales brought together the work of the Countryside Council for Wales, Environment Agency Wales and Forestry Commission Wales, as well as some functions of the Welsh Government.

Our purpose is to ensure that the natural resources of Wales are sustainably maintained, used and enhanced, now and in the future.

We will work for the communities of Wales to protect people and their homes as much as possible from environmental incidents like flooding and pollution. We will provide opportunities for them to learn, use and benefit from Wales' natural resources.

We will work for Wales' economy and enable the sustainable use of natural resources to support jobs & enterprise. We will help businesses and developers to understand and consider environmental limits when they make important decisions.

We will work to maintain and improve the quality of the environment for everyone. We will work towards making the environment and natural resources more resilient to climate change and other pressures.

#### **Environment Agency**

We are the Environment Agency. We protect and improve the environment and make it a better place for people and wildlife.

We operate at the place where environmental change has its greatest impact on people's lives. We reduce the risks to people and properties from flooding; make sure there is enough water for people and wildlife; protect and improve air, land and water quality and apply the environmental standards within which industry can operate.

Acting to reduce climate change and helping people and wildlife adapt to its consequences are at the heart of all that we do.

We cannot do this alone. We work closely with a wide range of partners including government, business, local authorities, other agencies, civil society groups and the communities we serve.

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#### **Foreword**

Over the next two years, Natural Resources Wales and the Environment Agency will be undertaking considerable planning work, culminating in the publication of Flood Risk Management Plans (FRMPs) and updated River Basin Management Plans (RBMPs). Together, these plans will shape important decisions, direct considerable investment and action and deliver significant benefits to society and the environment.

RBMPs identify the state of, and pressures on, the water environment. They consider the technical and economic viability of beneficial actions, set objectives and coordinate/monitor delivery of agreed actions. In so doing they set direction to maintain and improve the quality of all surface, ground water and coastal waters.

FRMPs identify the risk from flooding and set out objectives and measures for managing that risk. In so doing, they aggregate information about all sources of flooding - and coastal erosion where appropriate - to better inform prioritisation, decision making and work programming.

Natural Resources Wales, the Environment Agency, Lead Local Flood Authorities and Water Companies carry out a 'Risk Management Authority' role in relation to flooding. We all work together to help communities and businesses understand their flood risk, deliver solutions to minimise this and support them to adapt to flooding and become more resilient, if the worst should happen.

Recently published flood risk maps and flood hazard maps that show the areas that get flooded and what's affected by the flooding means that understanding of flood risk is improving. We and other risk management authorities are in a good position to set out, with communities, how best to manage the risk of flooding. Planning to manage flood risk is something that Natural Resources Wales, the Environment Agency and Lead Local Flood Authorities are already doing in partnership but now Natural Resources Wales and the Environment Agency are setting out plans for flood risk management across each river basin district. These river basin districts (RBDs) are areas identified to manage the water environment effectively. Each RBD has a defined drainage area so that what happens in one RBD is independent of another: this document covers the Dee RBD.

This document is not a consultation, but rather highlights the scope of the FRMPs: what sources of flooding are included and what consultation Natural Resources Wales, the Environment Agency and Lead Local Flood Authorities are carrying out.

Natural Resources Wales and the Environment Agency will be consulting on a draft flood risk management plan for the whole of the Dee RBD that sets out the objectives and measures we are proposing to manage flood risk. The draft plan will also include objectives and measures that some Lead Local Flood Authorities are also proposing.

Consultation on the draft FRMP will be from September 2014 to December 2014. We will publish the final FRMPs in December 2015.

This Scoping Report sets out the approach to the Strategic Environmental Assessment and we have consulted the statutory environmental bodies in developing it.





We hope that in understanding what plans are being developed, by whom and when, you will be able to join us in shaping those flood risk management plans, and be part of a more resilient country.

**Director, Natural Resources Wales** 

Director, Environment Agency





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# 1. Why produce this document

The impacts of flooding on homes and businesses, the communities directly affected, are clear, but flooding can have a much wider indirect effect. We want communities to be actively involved in planning for floods and helping reduce its impact.

#### **Box 1. The purpose of this document**

This document is not a consultation. It sets out:

- what flood risk planning is going on across the River Basin District;
- the timing of specific consultations;
- which organisations lead on those consultations.

By highlighting these activities early on we hope that you will get involved in shaping the plans and be part of managing flooding.

The document also includes the proposed scope of the Strategic Environmental Assessments for the plan that we are preparing. We are sharing our proposals with statutory environmental bodies so they can help shape our proposed approach.





## 2. How we plan for flood and coastal erosion risk

#### **Legislation and strategy in England and Wales**

The roles and responsibilities of different flood risk management authorities (RMAs) in <a href="England">England</a>¹ and <a href="Wales">Wales</a>² are set out in the Flood and Water Management Act, 2010</a>³. This act also requires the Environment Agency and the Welsh Government to set out the approach to managing flood and coastal erosion risk in England and Wales respectively in a <a href="National Flood and Coastal Erosion Risk Management Strategy for England">National Flood and Coastal Erosion Risk Management in Wales</a>⁵. Both strategies aim to improve flood and coastal erosion risk management for communities and businesses, and deliver greater environmental gain.

#### **European requirements**

In addition, the <u>European Floods Directive</u><sup>6</sup> aims to provide a consistent approach to managing flood risk across Europe. The Directive is implemented through the <u>Flood Risk Regulations 2009</u><sup>7</sup> and we are currently in the first cycle of planning which means Flood Risk Management Plans (FRMPs) need to be prepared by December 2015.

#### **How we are delivering Flood Risk Management Plans**

Our <u>previous consultation</u><sup>8</sup> on the approach to developing Flood Risk Management Plans in England and Wales considered options for delivering FRMPs. See the <u>findings from that consultation</u><sup>9</sup>. The preferred approach to FRMPs is for Natural Resources Wales and the Environment Agency to prepare joint FRMPs in partnership with others. For this first cycle of FRMPs, joint FRMPs are not being pursued in Wales.

In parallel to flood risk management planning, we also work with others to improve the quality of the water environment through River Basin Management Planning. As we develop FRMPs we will co-ordinate effectively with River Basin Management Planning so that plans are as joined up as possible and we and others can deliver more for the environment.

#### Box 2. Co-ordinating with River Basin Management Planning

Natural Resources Wales (NRW) and the Environment Agency (EA) also lead on the development of River Basin Management Plans that set out how we and others plan to protect and improve the water environment.

We aim to co-ordinate our work effectively, and support others to do the same, so that we can do more for the environment when we manage flooding.

If you want to know more about River Basin Planning, or get involved, visit the Natural Resources Wales <u>website</u><sup>10</sup> for plans covering Wales and the Environment Agency <u>website</u><sup>11</sup> for plans covering England.





The National Flood and Coastal Erosion Risk Management Strategy in Wales and the National Flood and Coastal Erosion Risk Management Strategy for England provide national frameworks for all Risk Management Authorities to work within. A hierarchy of strategic and delivery plans establish the approach for the various RMAs to deliver the aims and objectives of the national strategies. Over time, FRMPs will consolidate and replace many of the main plans produced by RMAs.

The table below summarises the main plans and who leads on them.

Table 1: Flood and coastal erosion risk management plans and strategies

Plan or Strategy	Purpose and scope of plan or strategy	Drivers	Lead authority
National Strategy for Flood and Coastal Erosion Risk Management 5	Sets out the policies on flood and coastal erosion risk management in Wales.	Statutory requirement under the Flood and Water Management Act 2010.	Welsh Government.
National Strategy for Flood and Coastal Erosion Risk Management	Sets out the policies on flood and coastal erosion risk management in England.	Statutory requirement under the Flood and Water Management Act 2010.	Environment Agency.
Flood Risk Management Plans in Wales <sup>12</sup> Flood Risk Management Plans <sup>13</sup> in England (FRMPs)	To manage flooding from rivers, the sea, reservoirs, surface water and groundwater.	Required under the European Floods Directive; implemented by the Flood Risk Regulations 2009.	Lead Local Flood Authorities for flooding from surface water, groundwater and ordinary watercourses.  Natural Resources Wales and the Environment Agency for flooding from main rivers, the sea and reservoirs.
Local Flood Risk Management Strategy	Sets out responsibilities for managing flooding in each Lead Local Flood Authority, objectives and measures for the management of local flood risk (i.e. from surface water, groundwater and ordinary watercourses).	Statutory requirement under the Flood and Water Management Act 2010.  No statutory deadline for production.	All Lead Local Flood Authorities must prepare a Local Flood Risk Management Strategy.





Surface Water Management Plans in England (SWMPs)	To establish preferred approach to managing surface water flooding.	Voluntary plans.	Likely to be Lead Local Flood Authorities, in partnership with others.
Catchment Flood Management Plans (CFMPs)	Current and future inland flood risk management across all catchments.  These plans set out preferred policies for river flooding in England and Wales.	Voluntary plans. Published in 2009-10.	Natural Resources Wales and the Environment Agency
Shoreline Management Plans (SMPs)	Current and future coastal flood and coastal erosion risk management.  These plans set out preferred policies for the coastline of England and Wales.	Voluntary plans. Second round of SMPs published in 2010-13.	Coastal Groups (comprising NRW, EA, LLFAs and others)
River, estuary and coastal strategies	Outline investment proposals for flood and coastal erosion risk management. Prepared to support an investment proposal for funding.	Voluntary plans.	Risk Management Authorities
Water Level Management Plans (WLMPs)	Approach to managing water levels in environmentally sensitive areas. These plans are developed to enable agreement between different users of water.	Voluntary plans.	Natural Resources Wales, Environment Agency, Drainage Authorities and land owners
Reservoir Flood plans	These include on-site and off- site flood plans that set out procedures for the management of flood risk in the event of an emergency.	Voluntary plans.	On-site Flood Plans are developed by the owners of the reservoir.
	On-site plans deal with the management of the on-site risk and off-site plans deal with the risk in areas adjacent to the reservoir.		Off-site Flood Plans are developed by the Local Resilience Forums.
System Asset Management Plans	Plans that set out the maintenance regime for asset systems.	Voluntary plans.	Owners and operators of assets.



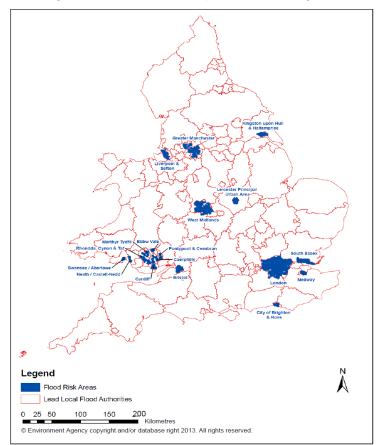


## 3. What planning is happening now

Flood risk management planning is something that risk management authorities (RMAs) do already, but new European legislation, the Floods Directive, has formalised this. The Floods Directive aims to provide a consistent approach to managing flood risk across Europe. The Directive is implemented through the Flood Risk Regulations and we are currently in the first cycle of planning which means Flood Risk Management Plans (FRMPs) need to be prepared by December 2015.

For this cycle of plans, Lead Local Flood Authorities (LLFAs) need to prepare Flood Risk Management Plans that cover surface water flooding for the 10 Flood Risk Areas<sup>1</sup> in England and eight in Wales (see Figure 1). The Environment Agency, and Natural Resources Wales need to prepare FRMPs, for main rivers the sea and reservoirs covering the whole of England and Wales.

FRMPs are important because they set out how risk management authorities and communities will work together to reduce the impacts of flooding.



#### Note:

All Lead Local Flood Authorities in England and Wales under took a Preliminary Flood Risk Assessment in 2011 to prioritise planning for flood risk management. They determined a number of areas where local flooding was particularly significant (Figure 1). The priority for the first planning cycle under the Flood Risk Regulations is to prepare FRMPs by December 2015 for these "Flood Risk Areas".

All Lead Local Flood Authorities also need to prepare Local Flood Risk Management Strategies but there is no statutory deadline to develop these.

Figure 1: Flood Risk Areas (for surface water flooding risk only) in England and Wales

Flood Risk Areas have been identified through a Preliminary Flood Risk Assessment published in December 2011. In this first cycle of planning, to 2015, LLFAs are only required to prepare FRMPs in Flood Risk Areas (as described in <a href="Government guidance">Government guidance</a>).





#### 4. What that means for the Dee River Basin District

#### **Overview**

#### Wales

Natural Resources Wales will work with the Environment Agency to produce the Dee Flood Risk Management Plan for managing the risk of flooding from main rivers, reservoirs and the sea.

The LLFAs that fall within Wales in the Dee RBD have already produced their Local Flood Risk Management Strategies to meet the requirements of the Floods and Water Management Act, covering local sources of flood risk. They have all made the commitment on a voluntary basis to produce FRMPs despite not having flood risk areas as designated under the Flood Risk Regulations, as this will supplement their Local Flood Risk Management Strategies. These will be produced to a timetable determined by each LLFA.

#### **England**

Under the Flood Risk Regulations, the Environment Agency is required to develop Flood Risk Management Plans for managing the risk of flooding from main rivers, reservoirs and the sea for the whole of England. There are three LLFAs in the English part of the Dee RBD – Cheshire West and Chester, Cheshire East and Wirral MBC. Although none of these LLFAs have flood risk areas as designated under the Flood Risk Regulations, we have offered them the opportunity to work with us to include local sources of flood risk in our FRMP on a voluntary basis. Cheshire West and Chester and Cheshire East have indicated they will work with us and we await a final decision from Wirral MBC.

Lead Local Flood Authority areas are shown in Figure 2.





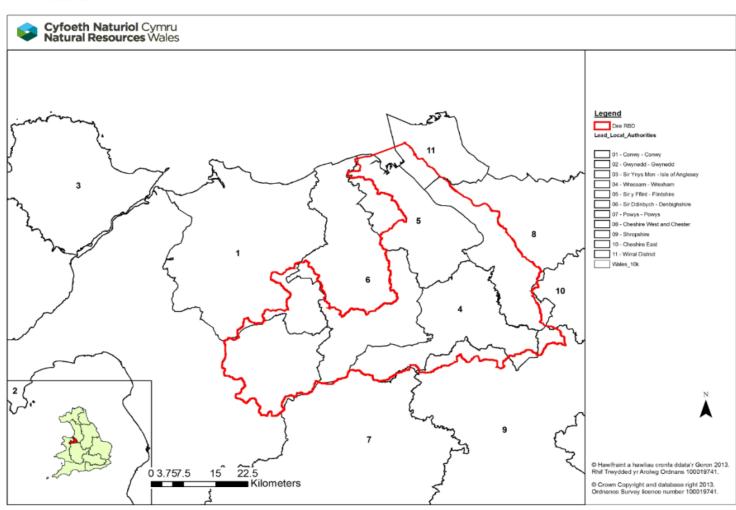


Figure 2: Lead Local Flood Authorities in the Dee River Basin District





Box 3, and Figure 3 below, shows the LLFAs within the Dee River Basin District (RBD) that will produce FRMPs on a voluntary basis, as separate or joint plans. They also show what will be covered by Natural Resources Wales and the Environment Agency.

In developing Flood Risk Management Plans, we will seek to include information about coastal erosion risk management that is set out within Shoreline Management Plans where this corresponds with communities at greatest risk of flooding in England only.

Annex 1 lists the plans and strategies that will be drawn from to develop the draft FRMP for the Dee RBD, and the dates of previous consultation.

#### Box 3. FRMPs in the Dee RBD being prepared and consulted on

For the Dee River Basin District, for the first cycle of planning under the Flood Risk Regulations, risk management authorities will prepare the following plans and consult the public on draft plans during the dates set out below:

# Consultation from September 2014 to December 2014 on a draft single Flood Risk Management Plan for the Dee RBD that covers:

- flooding from main rivers the sea and reservoirs for the RBD (as a statutory requirement);
- coastal erosion risk management (where applicable) for the English coastline (as voluntary information).
- all sources of flooding for the following areas:
  - Cheshire West and Chester (voluntary contribution);
  - Cheshire East (voluntary contribution);
  - The Wirral (voluntary contribution).

#### **PLUS**

Consultation on separate draft Flood Risk Management Plans that cover only local sources of flooding for the following areas:

- Gwynedd Council (voluntary);
- Conwy County Borough Council (voluntary);
- Flintshire County Council (voluntary);
- Denbighshire County Council (voluntary);
- Wrexham County Borough Council (voluntary).

These areas and sources of flood risk are shown in Figure 3.





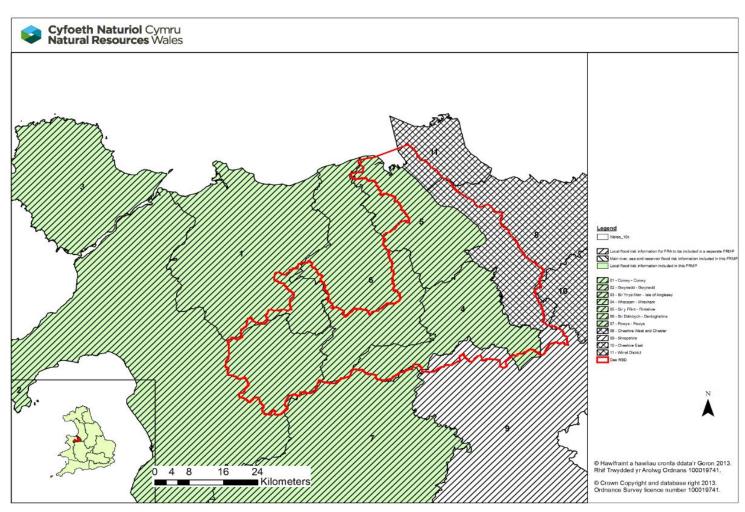


Figure 3: Scope of Flood Risk Management Planning for the Dee River Basin District





## 5. Strategic environmental assessment

The primary purpose of a strategic environmental assessment (SEA) is to ensure that wider environmental effects are considered during the development of a plan. SEA aims to contribute to a higher level of protection of the environment and promote sustainable development. The relevant legislation sets out the <u>requirements for SEA</u> <sup>14</sup>.

The FRMP for each River Basin District is intended to consolidate information from a number of existing and developing plans covering different sources of risk, prepared by different authorities across the River Basin District. A list of the plans from which information has been drawn to compile the FRMP, alongside a record of any SEA reports, is shown in Annex 1.

SEA is a statutory requirement under the SEA Regulations for FRMPs. We propose that FRMP SEA will need to include:

- a summary of baseline information covering environmental and social indicators of current status and trends for the Dee RBD;
- a summary of other policies and plans that will have an influence on the objectives of the FRMP or will be influenced by it;
- a cumulative assessment of all existing SEA reports in relation to their aggregated effects on the RBD baseline of environmental and social indicators plus their contribution or impact on other policies and plans relevant to the RBD spatial scale;
- a cumulative assessment of the measures assigned in the FRMP;
- a detailed assessment of any measure transferred from existing plans where this is scoped in;
- a detailed assessment of any new measure (derived, for example, through our work with communities at risk) where this is scoped in.

#### Other polices and plans

We have set out the plans that we consider to be relevant to the FRMP in Annex 3 to this document. We will be producing an Environmental Report to be published with the draft Flood Risk Management Plan, that will provide a brief commentary of the key issues arising from the plans, policies and programmes and how we have taken them into account.

#### **Environmental effects and baseline**

Water environments provide a range of benefits which the FRMPs seek to protect and enhance, including economic, social and environmental benefits. There is a strong link between these benefits and the environmental factors that we will address as part of the SEA. Additionally, we will assess the significant effects on the wider environment.

The SEA regulations set out a number of environmental factors to be considered during the assessment. In our assessment we want to focus on those effects that are likely to be significant, whether positive or negative. The following table sets out the environmental issues referred to in the regulations along with key baseline information for the River Basin District and indicates whether we intend to address the issue as part of the assessment.





**Table 2: Scoping environmental topics** 

		addressed by the SEA?
Biodiversity, flora and fauna	<ul> <li>The Dee River Basin District is small but hugely varied, from the mountains and lakes of Snowdonia to the internationally important mudflats of the Dee Estuary.</li> <li>7 Special Areas of Conservation</li> <li>3 Special Protection Areas</li> <li>3 Ramsar sites</li> <li>The river Dee itself is a SAC and SSSI. The interest features include Floating Water Plantain, Atlantic Salmon, Lamprey, Otter and fluvial geomorphology. The tidal Dee Estuary is also a SPA and Ramsar wetland.</li> <li>Many of the Sites of Special Scientific Interest (SSSI) within the district (approximately 70) have close links with the water environment.</li> <li>Water bodies and wetland areas within the district support a number of protected species (e.g. otter, water vole) and priority species listed in the UK Biodiversity Action Plan (e.g. White-clawed Crayfish and Freshwater Pearl Mussel).</li> <li>The highly modified nature of the Dee has lead to there being 45 barriers to fish migration in the district.</li> <li>Invasive species in the district include Japanese Knotweed, Himalayan Balsam and North American Signal Crayfish.</li> </ul>	Yes
Population and human health	<ul> <li>The population of the district is generally stable at around 500,000. There are some health inequalities evidenced by greater social deprivation in urban areas.</li> <li>Significant housing growth along with creation of jobs and services is proposed in many towns.</li> <li>A number of outstanding recreational opportunities</li> </ul>	Yes





	<ul> <li>quality of life, provide employment and other potential economic benefits. Tourism is a major part of the local economy, especially within Snowdonia National Park, Llangollen, Chester and Erddig near Wrexham.</li> <li>The Dee is an important source of drinking water for nearly 3 million people, including many living outside of the district.</li> </ul>	
Geology & Soils	<ul> <li>The bedrock geology is characterised by sandstone and limestone.</li> <li>Stone quarries are concentrated in the sandstone outcrop between Wrexham and Llangollen and the sandstone on the Lower Dee is an important aquifer. Thick deposits of unconsolidated clays, sands and gravels occur throughout the district and a wide range of minerals are extracted.</li> <li>Within the district there are numerous SSSIs designated for geology and earth science features.</li> <li>Soil types are strongly influenced by topography. Soil quality has been adversely affected by inappropriate management, reliance on pesticides and loss of nutrients and organic wastes from agricultural sources, all of which also impact on water.</li> <li>The upper catchment contains some areas of peatland habitat (eg upland blanket bogs). When in good condition these areas are valuable for biodiversity, carbon storage and sequestration, regulation of stream base flows, water runoff and nutrient regulation and retention.</li> </ul>	Yes
Water	<ul> <li>Reservoirs in the upper part of the catchment store water and regulate flow in the Dee. They sustain abstractions for public and industrial water supply and modify flood response in the river.</li> <li>The River Dee is an important source of drinking water for nearly 3 million people in Wales and North West England. Given the importance of maintaining this supply, opportunities to abstract for other purposes are very limited and carefully regulated.</li> <li>The strategic importance of the Dee for water supply has led to it becoming one of the most regulated</li> </ul>	Yes





	rivers in Europe and in 1999, the lower part of the Dee was designated as the UK's first Water Protection Zone.	
	<ul> <li>The Dee Estuary supports an important cockle fishery.</li> </ul>	
	There are 115 water bodies across the district comprising rivers, lakes, groundwater and the Dee estuary. In 2009, 28% of the water bodies were at "good" status, this rose to 30% in 2013.	
	Significant water issues identified for the Dee are:     Physical modifications, pollution from sewage and waste water, pollution from rural areas, pollution from mines and invasive non native species.	
Air	While individual actions may have a small localised impact on air quality, at a strategic level, it is very unlikely that the Flood Risk Management Plan would have a significant effect on air quality within the River Basin District.	No
Climatic factors	<ul> <li>UKCIP predicts that, by the 2050s, temperatures across Wales could rise by 1.1 to 4.1°C. Annual average rainfall in Wales is predicted to remain roughly the same as present, but there is likely to be a large difference in the patterns of summer and winter rainfall. Increased winter rainfall is expected as a result of increased storminess, leading to intense, but short-lived, rainfall events. Summer rainfall may decrease and short duration droughts (12-18months) are likely to become more frequent.</li> <li>Future sea level rise along Wales' coast is likely to result in more severe coastal erosion and inundation events in low-lying coastal areas. The relative sea level rise around Wales is predicted to be 36cm by the 2080s.</li> </ul>	Yes
Infrastructure	<ul> <li>Includes railways (eg the Chester to Holyhead mainline), primary roads (eg. A55 and A483), energy infrastructure, canals, the Broughton airbase, ports (including the Port of Mostyn) and industrial and commercial development alongside the Dee Estuary.</li> </ul>	Yes





	Sea Fishing, salmon net fisheries and cockle beds are important to the local economy.	
	<ul> <li>Recently there has been an increasing demand for hydropower, with a number of sites being investigated.</li> </ul>	
	<ul> <li>Flood defences line much of the estuary, protecting homes, businesses, industry and farmland.</li> </ul>	
	There are small areas of Grade 1 and 2 agricultural land in the Cheshire Plains, with lower grades of land throughout the remainder of the district.	
	Recycling rates have increased but continuing waste production and limited landfill capacity in the district means waste management is an ongoing challenge.	
Cultural heritage	Pontcysyllte Aqueduct and Canal World Heritage Site.	Yes
	<ul> <li>Around 400 scheduled ancient monuments and numerous registered park and gardens, listed buildings and heritage sites.</li> </ul>	
	There are 5 landscapes listed on the Register of Landscapes of Historic Interest in Wales.	
	<ul> <li>Many structures directly associated with the water environment have listed status e.g. mills, bridges, weirs and sluices.</li> </ul>	
	Archaeological features associated with the flood plain and land saturated by groundwater can be put at risk from drying out, erosion or inundation.	
Landscape	Agriculture and forestry dominate the upper reaches of the district and there are a variety of landscape and settlement patterns.	Yes
	The most tranquil areas of the district are in the upper catchment with the mid to lower catchment being more disturbed by traffic and settlements around Wrexham and Chester.	
	The upper catchment includes part of the Snowdonia     National Park and is predominantly rural in character.	
	In the mid to lower catchment, the landscape changes to rolling hills that gradually form the Cheshire Plain.	





- In the lower catchment, urban development has had a significant impact and many river channels and floodplains do not function naturally.
- There is one Area of Outstanding Natural Beauty on the north-western boundary of the catchment; the Clwydian Range.

#### The approach to FRMP and its associated SEA

It is the intention that SMP2 policies, having recently been developed, will remain current and actions will be taken forward in the FRMP, where they correspond with those communities at greatest risk from flooding. The CFMP's are more dated and contain a number of completed actions. The CFMP policy units will be taken forward along with any incomplete actions that are still relevant into the FRMP. The SEA will identify whether such transition actions included in the FRMP are likely to have significant environmental effects.

In Wales, the Communities at Risk Register is a tool to allow prioritisation of flood risk management operations for rivers and the sea using a risk based approach. This tool includes actions for managing flood risk at those locations at greatest risk. This can include actions to improve flood warning and undertake awareness raising activities, as well as operations on the ground to actively reduce flood risk. The Communities at Risk Register will be developed further and used for community scale actions within the Dee FRMP. The SEA will require screening of the measures from the Communities at Risk Register to ensure the SEA is focussed on those that could have a positive or negative environmental effect.

In England, Communities at Risk work is at an earlier stage of development. We anticipate being able to include a list of Communities at Risk and some actions for them, most of which will be to further investigate the risk at these locations and identify options for future actions. There will be a SEA of all proposed measures which could have a positive or negative environmental effect.

#### How the SEA assessments relate to the FRMP content

Table 3 outlines the content of the draft FRMP and describes the parts of the FRMP that will be included in the SEA.





Table 3: Proposed scope of the assessment

Content of the FRMP	Will it be considered in the SEA?
Flood risk maps	No, this provides factual information
Flood risk management objectives	Yes, we will assess the likely impacts of our objectives. This will be a high-level assessment at a River Basin District scale.
Flood risk management measures transferred from existing plans	Yes, we will provide a summary of the significant environmental effects and use this to help identify cumulative impacts. The existing Environmental Report can be used to provide evidence and information.
New flood risk management measures (e.g. from communities at risk register)	A scoping exercise will be undertaken to consider whether new measures are likely to have significant environmental effects. The scoping exercise will be clearly documented in the Environmental Report.
Flood Risk Area FRMP	Yes, we will provide a summary of the significant environmental effects and use this to help identify cumulative impacts.

#### **Habitats Regulations Assessment**

We will undertake a Habitats Regulations Assessment (HRA) as the FRMP is developed. At this stage, it is likely that HRAs undertaken for existing plans will remain valid and the need for new assessments will depend upon whether there are new actions included in the FRMP. We will discuss HRA requirements with Natural England and Natural Resources Wales as the FRMP is formulated.

#### **Water Framework Directive Assessment**

The FRMP will be closely aligned with the River Basin Management Plan. As the plans are both being prepared at the River Basin District scale and following the same timescales, we will use much of the same information (environmental baseline and contextual information) for the SEAs. Opportunities for the FRMP to contribute to WFD objectives will be explored as part of the FRMP preparation process and will be highlighted in the Environmental Report.

WFD compliance assessment requirements will be incorporated into the SEA and reported in the Environmental Report.

#### **Environmental Report and draft FRMP**

An Environmental Report will be published with the draft FRMP for consultation. It will describe the environmental baseline of the River Basin District, explain how the environmental assessment was carried out, identify the environmental impacts of the plan along with mitigation measures and set out our proposals for monitoring.





#### Statement of Environmental Particulars and Final FRMP

Feedback from consultation on the draft FRMP and Environmental Report will be reviewed and taken into account by Natural Resources Wales, the Environment Agency and the LLFAs contributing to the FRMP. The draft FRMP will then be finalised and published alongside a Statement of Environmental Particulars that will include how feedback on the draft plan and Environmental Report have been taken into account and how environmental impacts will be monitored.





#### References

- 1. <a href="https://www.gov.uk/flood-risk-management-information-for-flood-risk-management-authorities-asset-owners-and-local-authorities">https://www.gov.uk/flood-risk-management-information-for-flood-risk-management-authorities-asset-owners-and-local-authorities</a>
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- 4. <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/228898/9780108">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/228898/9780108</a> 510366.pdf
- 5. <a href="http://wales.gov.uk/topics/environmentcountryside/epq/flooding/nationalstrategy/strategy/?lang">http://wales.gov.uk/topics/environmentcountryside/epq/flooding/nationalstrategy/strategy/?lang=en</a>
- 6. http://ec.europa.eu/environment/water/flood\_risk/
- 7. <a href="http://www.legislation.gov.uk/uksi/2009/3042/contents/made">http://www.legislation.gov.uk/uksi/2009/3042/contents/made</a>
- 8. <a href="https://consult.environment-agency.gov.uk/portal/ho/flood/plans/approach">https://consult.environment-agency.gov.uk/portal/ho/flood/plans/approach</a>
- 9. <a href="http://webarchive.nationalarchives.gov.uk/20140328084622/http://www.environment-agency.gov.uk/research/planning/135520.aspx">http://webarchive.nationalarchives.gov.uk/20140328084622/http://www.environment-agency.gov.uk/research/planning/135520.aspx</a>
- 10. <a href="http://naturalresourceswales.gov.uk/our-work/policy-advice-guidance/water-policy/water-framework-directive/?lang=en">http://naturalresourceswales.gov.uk/our-work/policy-advice-guidance/water-policy/water-framework-directive/?lang=en</a>
- 11. http://www.environment-agency.gov.uk/research/planning/33106.aspx
- 12. <a href="http://naturalresourceswales.gov.uk/our-work/policy-advice-guidance/flood-risk-management-plans/?lang=en">http://naturalresourceswales.gov.uk/our-work/policy-advice-guidance/flood-risk-management-plans/?lang=en</a>
- 13. https://www.gov.uk/government/collections/flood-risk-management-plans-frmps
- 14. http://www.legislation.gov.uk/uksi/2004/1633/contents/made





# **Annex 1: A summary of information for inclusion in the Flood Risk Management Plan**

This annex sets out the information that will be drawn from other flood and coastal erosion risk management plans in order to develop the RBD FRMP. Of particular relevance are the Catchment Flood Management Plans (CFMPs) and Shoreline Management Plans (SMPs) that have been developed for the whole of England and Wales. Figure 4 shows which of these plans are relevant for the Dee River Basin District.

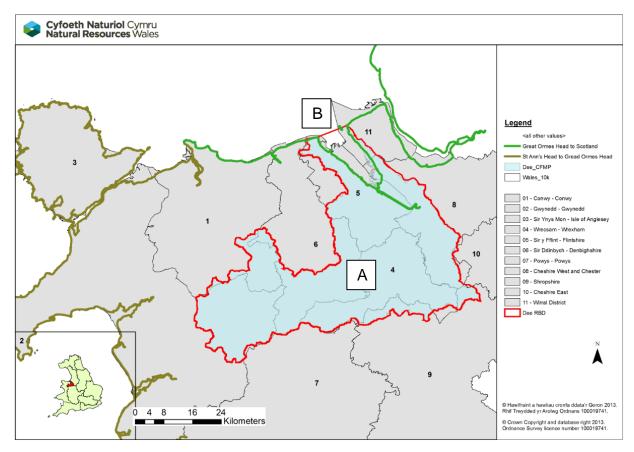


Figure 4: CFMPs and SMPs in the Dee River Basin District

Tables A1 and B1 list the plans that risk management authorities are specifically drawing on and where previous consultation has been undertaken. They also show, if environmental assessment has been undertaken and any assessment related to the Habitats Regulations. The table also highlights how we intend to use existing plans as we develop FRMPs.

Importantly, both tables also show if the information being used is for statutory purposes (used to fulfil a legal requirement of the FRMP), or voluntarily by the RMA to help present a more complete picture of flood and coastal erosion risk for the River Basin District.





Contact details for the lead authorities are also included in the table so that the public can contact the relevant authorities should they want further information about specific plans.

Of particular importance for FRMPs and Local FRM Strategies are the Lead Local Flood Authorities (see figure 5 below).

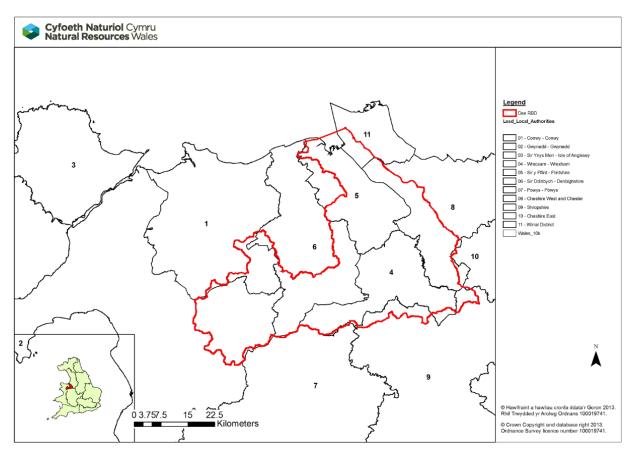


Figure 5: LLFAs in the Dee River Basin District





Table A1. Information compiled by the Environment Agency related to flooding from rivers, the sea and reservoirs, and by local authorities related to coastal erosion risk management

No. on CFM P / SMP map	Title of plan used to develop draft FRMP	Sources of risk drawn from plan	Status of information in FRMP (statutory or voluntary)	Comments on proposed changes to the information contained in the original plan for inclusion in the FRMP	Dates of consultation on draft plan	Was an Environmental Assessment of the plan undertaken?	Was a Habitats Regulations Assessment undertaken?	Was an Appropirate Assessment (under the Habitats Regulations) undertaken?	Was compensatory habitat needed (and a case agreed with the relevant Minister(s)1?	Publication date of final plan	Lead Authority (Who to contact for further information)
	nation from the										
Catch	ment Flood Ma	nagement Pla	ins:								
А	River Dee	Flooding from main rivers	statutory: this information informs the statutory requirements for Flood Risk Management Plans under the Flood Risk Regulations	We will retain the CFMP Policy Units and agreed strategic direction for management of flood risk (current and future) as set out in the River Dee catchment flood management plan. We will take forward any ongoing or planned CFMP actions that are still appropriate and relevant. We will supplement those with specific community level actions that are targetted at those communities of greatest risk.	09/10/08 until 29/10/08	Yes, a voluntary Environmental Report was prepared to accompany the draft plan and consulted on at the same time.	Yes	Stage 3	No	Mar-09	Natural Resources Wales: General enquiries on: 0300 065 3000 or email: enquiries@naturalresourceswales.gov. uk
	nation from the L. coastal and e		sian and plans								
Illiand	Dee estuary strategy	Flooding from main rivers and the sea	statutory: this information informs the statutory requirements for Flood Pisk Management Plans under the Flood Risk Regulations	We will not be making changes to the existing Dee estuary strategy. We will take forward any actions that are appropriate and coincide with those communities of greatest risk within the River Basin District.	01/10/10 to 27/12/10	Yes	Yes	Yes	Yes	Jul-10	Natural Resources Wales: General enquiries on: 0300 065 3000 or email: enquiries@naturalresourceswales.gov. uk
Inform	nation from the	following									
	SMP20: North Vest and North Vales (Great	ent Plans:	statutory: this information informs the statutory requirements for Flood Risk Management Plans under the Flood Risk Regulations	We will not be making changes to the existing North West and North Wales shoreline management plan. We will retain the SMP Policy Units and agreed strategic direction for the management of the coast. The Shoreline Management Plans and associated action plans will remain as plans in their own right but we will bring in agreed actions in relation to flooding from the sea where they correspond with those communiciates of greatest risk from	Oct 2009 to Feb 2010	Yes	Yes	Yes	Yes (case awating agreement from WG, DEFRA agreement in place)	Final plan approved by Local Authorities, submitted to WG late 2011, awaiting sign off	Blackpool Borough Council General enquiries on: 01253 477477 or email: customer.first@blackpool.gov.uk





# Wales Table B1. Information compiled by Lead Local Flood Authorities related to 'local' sources of flooding (flooding surface water, groundwater and ordinary watercourses)

Number on LLFA map	Lead Local Flood Authority	Sources of risk drawn from plan	Within a Flood Risk Area identified in the PFRA?	Is local flood risk information included in the Dee FRMP?	Will the LLFA be producing a separate FRMP?	Local Strategy progress (as of December 2013)	Lead Authority (Who to contact for further information)
2	Gwynedd Council	Local	No	No	Yes - voluntary		Gwynedd Council Tel: 01766 771000
1	Conwy County Borough Council	Local	No	No	Yes - voluntary	Complete.	Conwy County Borough Council Tel: 01492 574000 Email: information@conwy.gov.uk
5	Flintshire County Council	Local	No	No	Yes - voluntary	Complete.	Flintshire County Council Tel: 01352 752121
6	Denbighshire County Council	Local	No	No	Yes - voluntary	In progress.	Denbighshire County Council Tel: 01824 706101
4	Wrexham County Borough Council	Local	No	No	Yes - voluntary	Complete.	Wrexham County Borough Council Tel: 01978 292000 Email: contact- us@wrexham.gov.uk
9	Shropshire Council	Local	No	No	No		Shropshire Council Tel: 0345 678 9000
11	Wirral Borough Council	Local	No	Yes - voluntary	No	In progress.	Wirral Borough Council Tel: (0151) 606 2000
8	Cheshire West and Chester Council	Local	No	Yes - voluntary	No		Cheshire West and Chester Council Tel: 0300 123 8 123
10	Cheshire East Council	Local	No	Yes - voluntary	No	In progress.	Cheshire East Council Tel: 0300 123 5500





# Annex 2: Policies, plans and programmes to be considered by the Strategic Environmental Assessment

Table A2 sets out the national plans, policies and programmes and Table B2 those that are only relevant to the catchment or River Basin District. Rather than identify every possible plan or programme we intend to focus on those that are likely to significantly influence the plan or our consideration of the environmental effects.

Table A2: National plans, policies and programmes to be considered in the SEA

Policy / Plan / Programme	Year	Published by
People, Places, Future – The Wales Spatial Plan	2008	Welsh Government
Planning Policy Wales (including Technical advice Notes: Nature Conservation and Planning, Design, Tourism, Development and Flood Risk, Transport, Waste, Renewable Energy, Coastal Planning)	2012	Welsh Government
Environment Strategy for Wales	2006	Welsh Government
Wales Biodiversity Framework	2010	Wales Biodiversity Partnership
Welsh Assembly Government (2008) One Wales One Planet: The Sustainable Development Scheme for Wales (Consultation)	2008	Welsh Government
Sustaining a Living Wales: A Green Paper on a New Approach to Natural Resource Management in Wales	2012	Welsh Government
Wales Fisheries Strategy	2008	Welsh Government
The Welsh Government Strategy for Tourism 2013 – 2020. Partnership for Growth	2013	Welsh Government
Climbing Higher – The Welsh Government's 20 year strategy for sport and physical activity in Wales	2005	Welsh Government
Metal Mines Strategy for Wales	2002	Environment Agency Wales
Wales Soils Action Plan (Consultation)	2008	Welsh Government
Welsh Government Strategic Policy Position on Water	2011	Welsh Government
A Water Strategy for Wales (Consultation)	2014	Welsh Government
Low Carbon Wales	2010	Welsh Government
Climate Change Strategy for Wales	2010	Welsh Government





Low Carbon Revolution – the Welsh Government	2010	Welsh Government
Energy Policy Statement	0010	
Preparing Wales for Climate Change. Energy Wales A Low Carbon Transition	2012	Welsh Government
Minerals Planning Policy Wales	2001	Welsh Government
Farming, Food and Countryside: Building a Secure future – A New Strategy for Farming	2009	Welsh Government
Wales Transport Strategy	2008	Welsh Government
National Waste Strategy for Wales: Towards Zero Waste 2009- 2050	2010	Welsh Government
Rural Development Plan for Wales (2007- 2013 and 2014-2020)	2010	Welsh Government
Woodland Strategy for Wales	2009	Forestry Commission Wales
Valuing the Welsh Historic Environment	2010	Valuing Our Environment Partnership
Making the Most of Wales' Coast: The ICZ Management Strategy for Wales	2007	Welsh Assembly Government
Wales Sustainable Development Scheme: One Wales, One Planet	2009	Welsh Assembly Government
Emerging Welsh Marine Plan	-	Welsh Government
Drought Plan	2012	Environment Agency Wales
Water white paper: Water for life	2011	Defra
Water for people and the environment: Water resources strategy for England and Wales	2009	Environment Agency
National Planning Policy Framework	2012	Communities & Local Government (CLG)
Natural environment white paper: The natural choice: Securing the value of nature	2012	Defra
Biodiversity 2020: A strategy for England's Wildlife and Ecosystem Services	2012	Defra
Government Forestry & Woodlands Policy Statement	2013	Defra
The invasive and non-native species framework strategy for Great Britain	2008	Defra, Scottish Government, Welsh Assembly Government
Coastal squeeze: Implications for flood management. The requirements of The European	2005	Defra





Birds and Habitats Directives. Defra policy guidance.		
Safeguarding our soils: A strategy for England	2009	Defra
Understanding the risks, empowering communities, building resilience: The national flood and coastal erosion risk management strategy for England	2011	Defra & Environment Agency
UK Marine Policy Statement	2011	HMG, NI Executive, Scottish Government, Welsh Assembly Government
National Policy Statements (Overarching Energy, Renewable Energy, Fossil Fuels, Oil and Gas Supply and Storage, Electricity Networks, Nuclear Power, Ports, Hazardous Waste, Waste Water Treatment)	2011- 12	HMG
Managing the Environment in a Changing Climate	2010	Environment Agency
The Government's Statement on the Historic Environment for England 2010	2010	HMG
All Landscapes Matter	2009	Natural England

When identifying plans, policies and programmes relevant to the RBD, we have concentrated on those plans that are similar in scale to the River Basin Management Plan or are likely to directly impact on the catchments within the RBD. We anticipate that as plans and projects are implemented, the implications of any local plans will also be considered. There are some plans that provide comprehensive coverage across the RBD, for example local authority core strategies. Rather than list these individually, we have identified the type of plan, and when we undertake the assessment we will consider all of the plans of this type that are relevant to the RBD.





Table B2: Plans, policies and programmes relevant to the Dee RBD

Policy / Plan / Programme	Year	Published by
Unitary Development Plans, Local Development Plans, Core Strategies (Snowdonia National Park Authority, Gwynedd, Conwy, Denbighshire, Conwy, Wrexham, Shropshire, Cheshire West and Chester, Flintshire, Wirral)	Various	Local Authorities - Various
Minerals and Waste Plans	Various	Local Authorities - Various
Snowdonia National Park Management Plan 2010-15	2010	Snowdonia National Park Authority
Shoreline Management Plan 22 Great Ormes Head to Scotland (North West England and North Wales)	2011	North West England and North Wales Coastal Group partnership
Heritage at Risk Register 2012: North West	2012	English Heritage
The Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009 – 2014	2009	Clwydian Range AONB
Tourism Strategy for North Wales 2010-2015	2010	Tourism Partnership North Wales
Dee Catchment Abstraction Management Strategy (CAMS)(Water Abstraction Getting the Balance Right)	2008	Environment Agency Wales
Tidal Dee Flood Risk Management Strategy	2010	Environment Agency Wales
River Dee Catchment Flood Risk Management Plan	2009	Environment Agency Wales and Environment Agency
Surface Water Management Plans (England) Surface Water Management Strategies (Wales)	Various	Lead Local Flood Authorities
Water Resources Management Plans	Various	Water Companies - Welsh Water, Dee Valley and United Utilities
Drought Plans	Various	Water Companies - Welsh Water, Dee Valley and United Utilities
Eel Management plans for the United Kingdom: Dee River Basin District	2010	Defra
North Wales Regional Waste Plan	2009	North Wales Regional Waste Group
The River Dee / Afon Dyfrdwy Site of Special	2013	Natural Resources Wales, Natural
Scientific Interest (SSSI) Restoration Plan	(TBC)	England
Dee Catchment Salmon Action Plan	1997	Environment Agency Wales
Regional Transport Strategies (England)	Various	Local Authorities
Creating a Better Place 2010-15 North West Local Contribution	2010	Environment Agency
Water Resources Strategy: Regional Action Plan for North West Region	2009	Environment Agency
Emerging Western Wales, Dee, North West and	2014	Natural Resources Wales
Severn River Basin Management Plans		Environment Agency

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