

Appendix A



A.1 Planning Framework and Flood Risk Policy

A.1.1 EA Floods Directive & the Flood Risk Regulations

The European Floods Directive (2007) sets out the EU's approach to managing flood risk and aims to improve the management of the risk that floods pose to human health, the environment, cultural heritage and economic activity. The Directive was translated into English law by the Flood Risk Regulations which require LLFAs and the EA to produce Flood Risk Management Plans (FRMPs).

The Directive puts in place a six-year cycle of producing Preliminary Flood Risk Assessments (PFRAs) with the aim of identifying significant Flood Risk Areas; preparing flood hazard and risk maps; and preparing FRMPs. The first six-year cycle was completed in December 2015 and the second six-year cycle is currently underway.

PFRAs should cover the entire LLFA area for local flood risk (focusing on ordinary watercourses, surface water and groundwater flooding). Where significant Flood Risk Areas are identified using the national approach (and locally reviewed), the LLFA is then required to undertake flood risk hazard mapping and to produce FRMPs. FRMPs are also completed for each RBD in England and Wales by the EA.

The FRMP should consider objectives for flood risk management (reducing the likelihood and consequences of flooding) and measures to achieve those objectives. Significant Flood Risk Areas were not identified in Pendle, therefore the LLFA was not required to produce a FRMP. A FRMP was however completed by the EA for the North West RBD. See Section A.1.4.

Figure A.1-1: EU Floods Directive



The EA has implemented one of the exceptions for creating PFRAs, etc. for Main Rivers and coastal flooding, as they already have mapping (i.e. EA Flood Map for Planning (Rivers and Sea), Risk of Flooding from Rivers and Sea Map) and plans (i.e. CFMPs, SMPs) in place to deal with this. The EA has therefore focused their efforts on assisting LLFAs through this process.

A.1.2 LCC Preliminary Flood Risk Assessments¹

The first cycle PFRA for LCC was submitted to the EA in June 2011. The PFRA provides a high-level overview of local flood risk, from sources including surface water, groundwater, ordinary watercourses and canals.

The second cycle PFRA, reviewed during 2017, used all relevant current flood risk data and information to update the 2011 version, and was agreed with the EA in December 2017.

The changes made to the PFRA for publication in 2017 were that the LLFA would work with Lancashire Resilience Forum partners through emergency planning and review exercises, as well as with Flood Risk Partnerships to contribute to a number of community resilience projects. Also, the understanding of 'significant flood risk' has developed as a consequence of information relating to actual flood events, climate

¹ NYCC PFRA:



change and long-term development. With learning from SFRAs, development is being directed away from areas of highest flood risk, and/or development proposals are being modified to ensure they are resilient and sustainable for the local conditions of natural and formal drainage. No Flood Risk Areas have been identified in the PBC area.

A.1.3 Catchment Flood Management Plans (CFMPs)

The CFMPs were carried out by the EA in 2009 and were designed to establish flood risk management policies which will deliver sustainable flood risk management for the long term. The CFMPs were used by the EA to help direct resources to where there are areas of greatest risk.

The CFMPs contain useful information about how the catchments work, previous flooding and the sensitivity of the river systems to increased rainfall. The EA draw on the evidence and previous measures and proposals set out in the CFMPs to help develop the FRMPs for RBDs. Pendle includes watercourses that form part of two CFMPs, shown below in Figure A.1-3. The Ribble CFMP² covers the majority of the Borough including the Ribble and Calder sub-catchments. The River Aire CFMP³ covers the northeast of the borough (including Earby, Kelbrook and Salterforth).

A.1.4 Flood Risk Management Plans (FRMPs)

Following on from the CFMPs, completed in 2009, FRMPs are designed to set out the risk of flooding from rivers, sea, surface water, groundwater and reservoirs within each RBD and to detail how RMAs will work with communities to manage flood risk up to 2021 for the current cycle, at the time of writing.

Both the River Basin Management Plans (RBMP) and FRMPs have been developed by the EA in tandem to ensure that flood defence schemes can provide wider environmental benefits during the same six-year cycle. Both flood risk management and river basin planning form an important part of a collaborative and integrated approach to catchment planning for water. Each EU member country must produce FRMPs as set out in the EU Floods Directive 2007.

The majority of the Borough of Pendle is within the North West RBD with a smaller section of the east within the Humber RBD, as shown in Figure A.1-2. There are two main river catchments in Pendle; the Ribble catchment is the most important for Pendle in terms of planning and flood risk.

³https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/289346/River_Aire Catchment Flood Management Plan.pdf



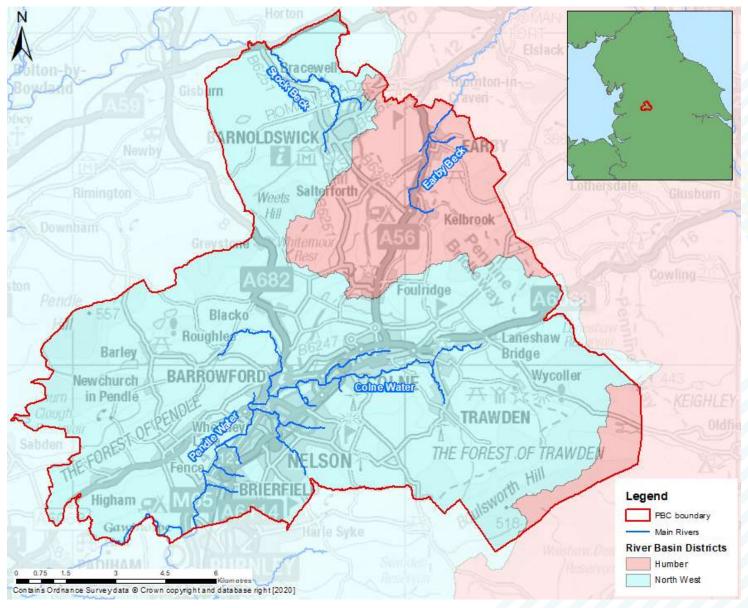


Figure A.1-2: North West and Humber River Basin Districts

North West River Basin District Flood Risk Management Plan, 2016⁴

The Borough of Pendle is mainly located within the North West RBD which covers an area of approximately 13,160 km² and contains 7 million people. The North West RBD extends from Cumbria in the north to Cheshire in the south, with Lancashire, Mersevside and Great Manchester in between.

The North West RBD comprises 12 river catchments; there are over 51,000 people at high risk of surface water flooding (more than a 1 in 30-year chance of being flooded in any year) and 31,000 people at high risk of flooding from rivers and sea (more than a 1 in 30-year chance of being flooded in any one year) within the North West RBD.

⁴ https://www.gov.uk/government/publications/north-west-river-basin-district-flood-risk-management-plan



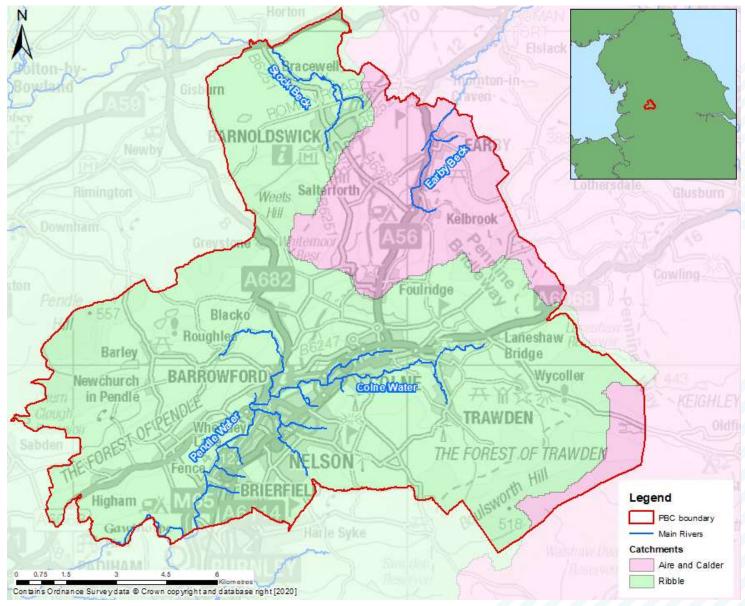


Figure A.1-3: Management catchments across the PBC area Ribble catchment

The Ribble catchment drains an area of 1,490 km² in North Yorkshire / Lancashire. The principal river in the catchment is the River Ribble, which rises in the Yorkshire Dales and flows south westwards towards the Ribble estuary downstream of Preston, where it discharges into the Irish Sea. The Ribble has three main tributaries; the River Hodder which drains much of the Forest of Bowland Area of Outstanding Natural Beauty, the River Calder which flows through the industrial towns of East Lancashire and the River Darwen which joins the Ribble, from the south, on the outskirts of Preston. The total length of Main Rivers draining the catchment is 445 km. There are also three canal systems in the catchment, the Leeds and Liverpool Canal, the new Ribble Link Canal and a short section of the Lancaster Canal.

The Ribble catchment contains extensive areas of rural land containing numerous villages, together with some major urban areas including Burnley, Blackburn and Preston. There are also areas of high-quality agricultural land, particularly in the west of the CFMP area, where there is a history of agricultural drainage. The main sources of flood risk are from rivers, surface water flooding, and sewer flooding from



the drainage system. The lower reaches of the catchment are also at risk of tidal flooding (although tidal flooding does not apply to the Borough of Pendle)

Whilst the majority of the lower catchment is flat low-lying river floodplain, elevated moorland areas are present near to the urban settlements of East Lancashire. Many of the key urban areas within the catchment lie in the industrialised areas of East Lancashire adjacent to the River Calder, the River Darwen and their tributaries, including Accrington, Blackburn, Burnley, Colne and Nelson.

Within the catchment, over 32,000 people are at risk of flooding from rivers and the sea, representing approximately 4% of the total catchment population. Approximately 5,500 non-residential properties are at risk of flooding in the Ribble catchment. Approximately 16% of the agricultural land in the catchment is at risk of flooding from rivers and the sea.

Figure A.1-4 is an extract from the North West RBD FRMP showing an overview of the Ribble catchment.



Figure A.1-4: Ribble catchment (North West RBD FRMP)

The North West RBD FRMP summarised various measures to help manage flood risk in the Ribble catchment. Those that may apply within the Pendle Local Plan area include:

Preparation for risk:

 Seek opportunities for habitat enhancements during strategy development as part of flood / erosion risk management works.



Humber River Basin District Flood Risk Management Plan, 2016⁵

There are portions to the north-east and south-east of the Borough of Pendle that are located within the Humber RBD which covers an area of approximately 26,000 km² and contains 11.7 million people. The Humber RBD extends from the North York Moors in the north to Birmingham in the south, and from the Pennines in the west to the North Sea.

The Humber RBD comprises 15 river catchments; there are almost 78,000 people at high risk of surface water flooding (more than a 1 in 30-year chance of being flooded in any year) and just over 58,000 people at high risk of flooding from rivers and sea (more than a 1 in 30-year chance of being flooded in any one year) within the Humber RBD.

Aire and Calder management catchment

The management catchment is large at 2,064 km². The middle and lower reaches are dominated by the industrial towns of West Yorkshire; much of the upper reaches are a landscape of high, sparsely populated uplands with strings of villages and small towns within the valley floors. The largest rivers are the Aire and Calder, with the Calder joining the River Aire near Castleford. The Leeds and Liverpool Canal flows through the upper catchment and in many places, is in close proximity to the River Aire.

Within the management catchment, approximately 80,000 people are at risk of flooding from rivers and the sea, representing approximately 4% of the total population. Nearly 16,000 non-residential properties are at risk of flooding from rivers and the sea, covering mainly high, medium and low risk, with less than 1% of that total representing very low risk. The varied landscape within the Aire and Calder catchment gives rise to differing fluvial response to rainfall. The upper reaches of the Calder can experience rapidly responding rivers where the onset of localised flooding can be very quick and have significant impacts. The lower reaches of the Aire are slower to respond.

https://www.gov.uk/government/publications/humber-river-basin-district-flood-risk-management-plan



Figure A.1-5 is an extract from Humber RBD FRMP showing an overview of the Aire and Calder management catchment.

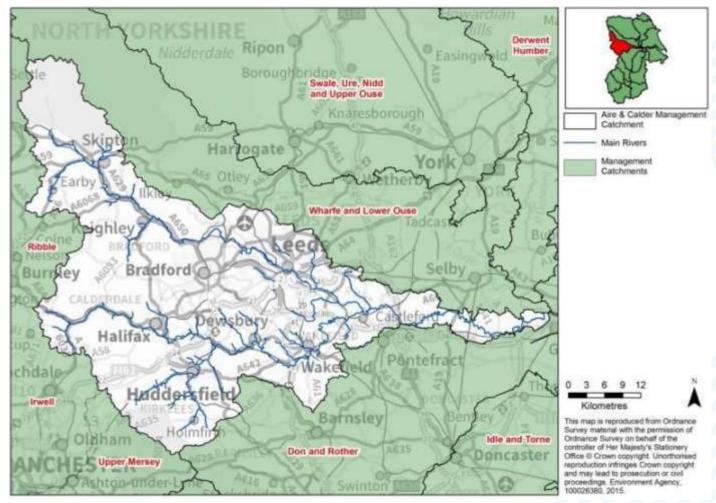


Figure A.1-5: Aire and Calder management catchment (Humber RBD FRMP)

The Humber RBD FRMP summarised various measures to help manage flood risk in the Aire and Calder management catchment. Those that may apply within the Pendle Local Plan Area include:

Protection from risk:

- The ongoing development and delivery of a prioritised programme of projects.
- Opportunities to incorporate flood risk measures as part of proposed environmental improvement projects. The environmental improvement projects proposed include working in partnership on creating habitats and improving SSSIs.
- The maintenance and inspection of existing assets such as culverts, river banks and river defences.
- Ensuring the environmental consequences of implementing Local FRM Strategies is assessed within catchment-wide flood risk planning.

Prevention of risk:

 Programme of modelling projects to improve flood risk knowledge of areas with existing modelled data, create new models for areas with little known



current modelled information , improve the Environment Agency's flood forecasting and warning service and inform future scheme development as appropriate

- Providing input to Local Development Plans and planning consultations.
- Working with RMAs and other organisations to ensure that local policies and flood risk programmes contribute to and complement other catchment initiatives
- Recording of Drainage and Flood Assets and carrying out flood investigations
- Implementing a responsive, reactive maintenance regime based on flood risk

Preparation for risk:

- Carrying out engagement campaigns within Rapid Response Catchments to raise the awareness of the dangers of flash flooding and where possible encourage the development of personal flood plans
- Ensuring communities understand the benefits of registering to the Environment Agency's Flood Warning Service and encouraging uptake of registrations
- Providing support & updates to the LRF Response Plans
- Develop a pilot monitoring & warning system for groundwater flood risk with a view to deployment at appropriate key locations across the county
- Working with partners to manage the flood risk to critical infrastructure across the catchment.

A.1.5 Flood & Water Management Act (FWMA)

The Flood & Water Management Act (FWMA) was established in April 2010. It aims to improve both flood risk management and the way we manage our water resources.

The FWMA has created clearer roles and responsibilities and helped to define a more risk-based approach to dealing with flooding. This included the creation of a lead role for LAs, as LLFAs, designed to manage local flood risk (from surface water, groundwater and ordinary watercourses) and to provide a strategic overview role of all flood risk for the EA.

The content and implications of the FWMA provide considerable opportunities for improved and integrated land use planning and flood risk management by LAs and other key partners. The integration and synergy of strategies and plans at national, regional and local scales, is increasingly important to protect vulnerable communities and deliver sustainable regeneration and growth.

The FWMA gives Risk Management Authorities specific powers and duties for local flood risk management. A duty is something the RMA is legally obliged to do; a permissive power can be used at the RMA's discretion. All RMAs have a duty under Section 13 of the FWMA to cooperate with one another when exercising functions relating to flood and coastal erosion risk management.

Table A.1-1 provides an overview of the key LLFA responsibilities as a RMA, under the FWMA.



FWMA responsibility	Description of duties and powers	LLFA status
Local Flood Risk Management Strategy (LFRMS)	Under Section 9 of the FWMA, the LLFA has a responsibility to develop, maintain, apply and monitor a local strategy for flood risk management in its area. The local strategies will build on information such as national risk assessments and will use consistent risk-based approaches across different LA areas and catchments. The local strategy will not be secondary to the national strategy; rather it will have distinct objectives to manage local flood risks important to local communities.	Final version produced 2014 (see Section A.6.3). Note the LFRMS will require updating in 2020 to stay consistent with the new National Strategy published July 2020
Duty to contribute to sustainable development	The LLFA has a duty to contribute towards the achievement of sustainable development.	Ongoing
Duty to comply with national strategy	The LLFA has a duty to comply with national flood and coastal risk management strategy principles and objectives in respects of its flood risk management functions.	Ongoing (see above)
Investigating flood incidents	Under Section 19 of the FWMA, the LLFA, on becoming aware of a flood in its area, has (to the extent it considers necessary and appropriate) to investigate and record details of "locally significant" flood events within their area. This duty includes identifying the RMAs and their functions and how they intend to exercise those functions in response to a flood. The responding risk management authority must publish the results of its investigation and notify any other relevant Risk Management Authority's.	Ongoing
Asset register	Under Section 21 of the FWMA, the LLFA has a responsibility to maintain a register of structures or features, which it considers having a significant effect on flood risk, including details on ownership and condition as a minimum. The register must be available for inspection and the Secretary of State will be able to make regulations about the content of the register and records.	The Asset Register is an on-going project with watercourse inspections being carried out when conditions are appropriate.
Duty to co-operate and powers to request information	The LLFA must co-operate with other relevant authorities in the exercise of their flood and coastal erosion management functions.	Ongoing
Ordinary watercourse consents	Under Section 23 of the FWMA, the LLFA has a responsibility to deal with enquiries and determine watercourse consents where the altering, removing or replacing of certain flood risk management structures or features that affect flow on ordinary watercourses is required. It also has provisions or powers relating to the enforcement of unconsented works.	Ongoing



FWMA responsibility	Description of duties and powers	LLFA status
Works powers	Section 25 of the Act provides a LLFA with permissive powers to undertake works to manage flood risk from surface runoff, groundwater and on ordinary watercourses, consistent with the local flood risk management strategy for the area.	Ongoing
Designation powers	The Act provides a LLFA with powers to designate structures and features that affect flooding or coastal erosion. The powers are intended to overcome the risk of a person damaging or removing a structure or feature that is on private land and which is relied on for flood or coastal erosion risk management. Once a feature is designated, the owner must seek consent to alter, remove, or replace it.	Ongoing
Duty to drain the local highway network	The Highways Authority has a duty under the Highways Act (1980) to drain the local Highway network (not Trunk roads) of surface water where it creates a nuisance. Where drainage infrastructure is provided to assist in this duty then the Highways Authority must maintain it to be fit for purpose. Maintenance of roadside drainage ditches may be the direct responsibility of the Highways Authority or the adjacent landowner.	Ongoing
Emergency planning	A LLFA is required to play a lead role in emergency planning and recovery after a flood event.	Lancashire Local Resilience Forum (see Section 7.1.1 of the main report)
Community involvement	A LLFA should engage local communities in local flood risk management issues. This could include the training of community volunteers, the development of local flood action groups and the preparation of community flood plans, and general awareness raising around roles and responsibilities plans.	Various ongoing - Lancashire Community Risk Register (see Section 7.1.2 of the main report)
Planning Requirements for SuDS	Sustainable Drainage Systems (SuDS) are a planning requirement for major ⁶ planning applications of 10 or more residential units or equivalent commercial development schemes with sustainable drainage. The LLFA is now a statutory planning consultee and it will be between the LPA and the LLFA to determine the acceptability of these proposed sustainable drainage schemes subject to exemptions and thresholds. Approval must be given before the developer can commence construction. Planning	Ongoing

⁶ For housing, development where 10 or more homes will be provided, or the site has an area of 0.5 hectares or more. For non-residential development it means additional floorspace of 1,000m2 or more, or a site of 1 hectare or more, or as otherwise provided in the Town and Country Planning (Development Management Procedure) (England) Order 2015.



FWMA responsibility	Description of duties and powers	LLFA status	
	authorities should use planning conditions or obligations to make sure that arrangements are in place for ongoing maintenance of any SuDS over the lifetime of the development.		
Latest changes to FWMA legislation ⁷			

Table A.1-1: Key LLFA responsibilities under the FWMA

A.2 Flood and water focused policies and plans

A.2.1 25 Year Environment Plan

This Plan sets out Government action to help the natural world regain and retain good health. It aims to deliver cleaner air and water in our cities and rural landscapes, protect threatened species and provide richer wildlife habitats. It calls for an approach to agriculture, forestry, land use and fishing that puts the environment first. The Plan also sets out how government will tackle the effects of climate change, considered to perhaps be the most serious long-term risk to the environment given higher land and sea temperatures, rising sea levels, extreme weather patterns and ocean acidification. The Plan aims to show that government will work with nature to protect communities from flooding, slowing rivers and creating and sustaining more wetlands to reduce flood risk and offer valuable habitats.

Focusing on flood risk, Government has updated the national flood and coastal erosion risk management strategy for England which was published July 2020, which looks to strengthen joint delivery across organisations. In terms of funding, government will look at current partnership arrangements ahead of a review of funding needs beyond 2021, seeking to attract more non-public sector investment, and make sure all relevant agencies are able to respond quickly and effectively to support communities if and when flooding does occur. The Plan states that the EA will use its role in statutory planning consultations to seek to make sure that new developments are flood resilient and do not increase flood risk.

For flood mitigation, government will focus on using more natural flood management solutions; increasing the uptake of SuDS, especially in new development; and improving the resilience of properties at risk of flooding and the time it takes them to recover should flooding occur.



25 Year Environment Plan

Our 25-year goals

We will achieve:

- · Clean air
- · Clean and plentiful water
- · Thriving plants and wildlife
- Reduced risk of harm from environmental hazards such as flooding and drought
- · Using resources from nature more sustainably and efficiently
- Enhanced beauty, heritage and engagement with the natural environment

We will manage pressures on the environment by:

- · Mitigating and adapting to climate change
- Minimising waste
- · Managing exposure to chemicals
- Enhancing biosecurity

Our policies will focus on:

- Using and managing land sustainably
- · Recovering nature and enhancing the beauty of landscapes
- . Connecting people with the environment to improve health and wellbeing
- · Increasing resource efficiency, and reducing pollution and waste
- · Securing clean, productive and biologically diverse seas and oceans
- · Protecting and improving the global environment

Figure A.2-1: Main goals and policy areas the Plan is intended to help work towards



A.2.2 Water Framework Directive, Water Environment Regulations and River Basin Management Plans

The purpose of the Water Framework Directive (WFD), which was transposed into English Law by the Water Environment Regulations (2003), is to deliver improvements across Europe in the management of water quality and water resources through RBMP. The PBC area is covered by the North West RBMP for the majority with areas to the east being covered by the Humber RBMP. Both are managed by the EA and were published in 2015.

Water quality and flood risk can go hand in hand in that flood risk management activities can help to deliver habitat restoration techniques. The EA is responsible for monitoring and reporting on the objectives of the WFD on behalf of Government. They work with Government, Ofwat, local government, non-governmental organisations (NGOs) and a wide range of other stakeholders including local businesses, water companies, industry and farmers to manage water⁸.

The second management cycle of the WFD⁹ has begun and the second RBMPs were completed in 2015, building upon the first set completed in 2009. RBMPs are designed to address the pressures facing the water environment in the river basin management plan districts and the actions that will address them. The plans describe required objectives and measures to protect and improve the water environment over the next 20 years and aim to achieve WFD targets from 2015 onwards to 2021.

The RBMPs, like the Catchment Flood Management Plans, are important documents relevant to the development of the SFRA. The SFRA should take into account the wider catchment flood cell aims and objectives and understand how it can potentially contribute to the achievement of them.

The main responsibility for PBC as the LPA and LCC as the LLFA, is to work with the EA to develop links between river basin management planning and the development of local authority plans, policies and assessments. In particular, the general programme of actions (measures) within the RBMPs relevant to Richmondshire highlight the need for:

- Strategic working with United Utilities and Yorkshire Water Services to seek partnership opportunities for improved infrastructure management e.g. reduced Combined Sewer Overflows (CSOs);
- Water Cycle Studies to promote water efficiency in new development through regional strategies and local plans;
- Surface Water Management Plan implementation;
- Consideration of the WFD objectives (achieving good status or potential as appropriate) in the spatial planning process, including LDDs and Sustainable Community Strategies; and
- Promotion of the wide scale use of SuDS in new development.

⁸ https://www.gov.uk/government/publications/2010-to-2015-government-policy-water-quality/2010-to-2015-government-policy-water-quality/4010-to-2015-govern

⁹ http://ec.europa.eu/environment/water/water-framework/info/timetable_en.htm



A.3 Other related plans and policies

A.3.1 Catchment partnerships

The Catchment Based Approach (CaBA) embeds collaborative working at a river catchment scale to deliver cross cutting improvements to our water environments. The CaBA partnerships drive cost-effective practical delivery on the ground, resulting in multiple benefits including reduced flood risk and resilience to climate change.

Catchment partnerships are groups of organisations with an interest in improving the environment in the local area and are led by a catchment host organisation. The partnerships work on a wide range of issues, including the water environment but also address other concerns that are not directly related to river basin management planning. Government is also working to strengthen or establish partnerships in the areas most affected by the December 2015 floods, caused by Storm Desmond, to encourage a more integrated approach to managing risk across all catchments.

The National Resilience Review will align closely with Defra's work on integrated catchment-level management of the water cycle in the Government's 25-year Environment Plan. Government's aspirations for the next cycle of planning (now to 2021) is for more integrated catchment planning for water, where Flood and Coastal Risk Management, nature conservation and land management are considered together.

Catchment partnerships relevant to PBC include:

- Ribble Life hosted by Ribble Rivers Trust
- Aire and Calder Catchment Partnership hosted by Aire Rivers Trust.

A.4 Planning legislation

A.4.1 Housing and Planning Act, 2016

The Act provides the statutory framework to build more homes that people can afford, expand home ownership, and improve housing management. The Act places a duty on local authorities to promote the development of starter homes, custom and self-build homes. The Act simplifies and speeds up the neighbourhood planning process to support communities that seek to meet local housing and other development needs through neighbourhood planning. In addition, the Act seeks to ensure that every area has a Local Plan and gives the Secretary of State further powers to intervene if Local Plans are not effectively delivered.

The Secretary of State must also carry out a review of planning legislation, government planning policy and local planning policies, concerning sustainable drainage in relation to the development of land in England.

A.4.2 Localism Act, 2011

The Localism Act was given Royal Assent in November 2011 with the purpose of shifting power from Central Government back to local councils, communities and individuals. The Government abolished Regional Spatial Strategies, providing the opportunity for councils to re-examine the local evidence base and establish their own local development requirements for employment, housing and other land uses through the plan making process.

Additionally, this act places a duty to cooperate on local authorities, including statutory bodies and other groups, in relation to the planning of sustainable development. This duty to cooperate requires local authorities to:



"...engage constructively, actively and on an ongoing basis in any process by means of which development plan documents are prepared so far as relating to a strategic matter." (Provision 110).

This act, together with the Neighbourhood Planning (General) Regulations 2012, also provides new rights to allow Parish or Town Councils to deliver additional development through neighbourhood planning (Neighbourhood Plans). This means local people can help decide where new homes and businesses should go and what they should look like. Local planning authorities can provide technical advice and support as neighbourhoods draw up their proposals. Neighbourhood Plans have a number of conditions and requirements as set out in the NPPF. Also refer to Paragraph 061-064 of the FRCC-PPG for information on neighbourhood planning and flood risk.



A.5 Planning policy

A.5.1 National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) was published in March 2012 and received a significant revision in July 2018. The latest update took place in July 2021. It forms the national policy framework in England and is based on core principles of sustainability. It must be taken into account in the preparation of local plans and is a material consideration in planning decisions. The NPPF is accompanied by Planning Practice Guidance (PPG) notes which are updated as the need arises.

The PPG documents will, where necessary, be updated in due course to reflect the changes in the latest version of the NPPF.

The key changes compared to the 2012 NPPF include:

- Strategic policies should also now consider the 'cumulative impacts in, or affecting, local areas susceptible to flooding' (para 160), rather than just to or from individual development sites (see Section 6.5 of the main report);
- Future risk from climate change. The 'sequential approach should be used in areas known to be at risk now or in the future from any form of flooding' (para 162) (see Sections 6.6 of the main report and Appendix B)
- Natural Flood Management. 'Using opportunities provided by new development and improvements in green and other infrastructure to reduce the causes and impacts of flooding (making as much use as possible of natural flood management techniques as part of an integrated approach to flood risk management)' (para 161c) (see Section 5.7.4 of the main report and Appendix B)
- Sustainable Drainage Systems (SuDS). 'Major developments should incorporate sustainable drainage systems unless there is clear evidence that this would be inappropriate' (para 169) (see Section 6.7 of the main report) and;
- Emergency planning. Emergency plans are required as part of an FRA that includes the inclusion of safe access and egress routes (para 167e) (see Section 7 of the main report)

As explained, the FRCC-PPG sits alongside the NPPF and sets out detailed guidance on how this policy should be implemented.

A.5.2 Flood Risk and Coastal Change Planning Practice Guidance (FRCC-PPG)

At the time of writing, the current FRCC-PPG was published on 6 March 2014 and is available online via:

https://www.gov.uk/guidance/flood-risk-and-coastal-change

The Government will, where necessary be updating the FRCC-PPG to reflect the changes discussed above in Section A.5.1. It is advised that any hyperlinks within the FRCC-PPG that direct users to the previous 2012 NPPF should be disregarded.

Whilst the NPPF concentrates on high level national policy, the FRCC-PPG is more detailed. The practice guidance advises on how planning can take account of the risks associated with flooding and coastal change in plan making and the development management process. This is in respect of local plans, SFRAs, the sequential and exception tests, permitted development, site-specific flood risk, Neighbourhood Planning, flood resilience and resistance techniques and the vulnerability of development to make development safe from flooding.



A.5.3 Local Plan

A Local Plan¹⁰ is a statutory document prepared in consultation with the local community. It is designed to promote and deliver sustainable development. Local Plans have to set out a clear vision, be kept up to date and to set out a framework for future development of the local area, addressing needs and opportunities in relation to housing, the economy, community facilities and infrastructure as well as safeguarding the environment and adapting to climate change and securing good design.

Local Plans set the context for guiding decisions and development proposals and along with the NPPF, set out a strategic framework for the long-term use of land and buildings, thus providing a framework for local decision making and the reconciliation of competing development and conservation interests.

The aim of a Local Plan is to ensure that land use changes proceed coherently, efficiently, and with maximum community benefit. Local Plans should indicate clearly how local residents, landowners, and other interested parties might be affected by land use change. They are subject to regular periods of intensive public consultation, public involvement, negotiation and approval. The Local Plan should be the starting point when considering planning applications.

The NPPF requires that the evidence base for the Local Plan must clearly set out what is intended over the lifetime of the plan, where and when this will occur and how it will be delivered. The NPPF states that Local Plans should be supported by a SFRA and should take account of advice provided by the EA and other flood risk management bodies. This SFRA should be used to ensure that when allocating land or determining planning applications, development is located in areas at lowest risk of flooding. Policies to manage, mitigate and design appropriately for flood risk should be written into the Local Plan, informed by both this SFRA and the Sustainability Appraisal.

Government guidance on Local Plans can be found via:

https://www.gov.uk/guidance/local-plans--2

For more information on the Pendle Local Plan, see Section 4.2 of the main report.

A.5.4 Sustainability Appraisals

The Sustainability Appraisal (SA) is a key component of the Local Plan evidence base, ensuring that sustainability issues are addressed during the preparation of local plans. The SA is a technical document which has to meet the requirements of the Strategic Environmental Assessment Directive 2001/42/EC which assesses and reports on a plan's potential impact on the environment, economy, and society. The SA carries out an assessment of the draft policies at various stages throughout the preparation of the Local Plan, and does this by testing the potential impacts, and consideration of alternatives are tested against the plan's objectives and policies. This ensures that the potential impacts from the plan on the aim of achieving sustainable development are considered, in terms of the impacts, and that adequate mitigation and monitoring mechanisms are implemented.

PBC Sustainability Appraisal

In the SA Scoping Report (October 2017) the Council determined that the Local Plan Part 2: Site Allocations and Development Policies is likely to have significant environmental effects and that a Strategic Environmental Assessment (SEA) is

¹⁰ Town and Country Planning, England. The Town and Country Planning (Local Planning) (England) Regulations 2012



required. The Sustainability Appraisal Report, incorporating the EU requirement for SEA, was published in January 2021.

A.6 Flood risk management policy

A.6.1 Pendle Strategic Flood Risk Assessment (SFRA), 2006¹¹

In 2006, a Level 1 SFRA was commissioned by Pendle Borough Council. This SFRA was prepared in accordance with the now superseded PPS25 and its Practice Guidance. The Council undertook an internal update to the Level 1 SFRA in 2018 to bring it in line with updates to guidance such as the NPPF and FRCC-PPG.

A number of conclusions were drawn from the report which are still relevant within this update, including:

- Regularly review and update the SFRA due to climate change projections and changes in national guidance.
- The broad-scale and settlement-level assessments show that whilst flood risk exists it does not pose a widespread and significant issue for the allocation of development sites.

A.6.2 Water Cycle Studies (WCS)

The purpose of a WCS is to investigate whether the local water environment has the capacity to support planned levels of growth and provide a comprehensive and robust evidence to support Local Plan production.

To achieve this, the WCS investigates the capability of the water and sewerage suppliers to provide the services to enable housing and economic growth and identify key risks to the timing of housing delivery and impacts on customers and the local environment. A WCS is certainly useful in the Local Plan Examination, where there is large growth and urban expansion planned within a local authority area.

There is currently no water cycle study for the PBC area.

A.6.3 National and Local Flood Risk Management Strategies

As presented in Figure 4-1 in Section 4.1 of the main report, the FWMA establishes how flood risk will be managed within the framework of National Strategies for England and Local Strategies for each LLFA area.

The National Strategy for England has been developed by the EA with the support and guidance of Defra and was released July 2020¹². The National Strategy sets out principles for how flood risk should be managed and provides strategic information about different types of flood risk and which organisations are responsible for their effective management. The FWMA requires risk management authorities (local authorities, EA, sewerage companies and highways authorities) to work together and act consistently with the National Strategy in carrying out their flood and coastal erosion risk management functions effectively, efficiently and in collaboration with communities, businesses and infrastructure operators to deliver more effective flood risk management.

LLFAs have responsibility for developing a LFRMS for their area covering local sources of flooding (see Table A.1-1). **The local strategy produced must be consistent with the National Strategy**. The local strategy should set out the framework for local flood risk management functions and activities and should raise awareness of local organisations with responsibilities for flood risk management in the area. The

¹¹ https://www.pendle.gov.uk/info/20072/planning_policies/277/evidence_base_documents/12

¹² https://www.gov.uk/government/publications/national-flood-and-coastal-erosion-risk-management-strategy-for-england--2



strategy should also facilitate partnership arrangements to ensure co-ordination between local organisations and an assessment of flood risk and plans and actions for managing risk, as set out under Section 9 of the FWMA.

The following link provides links to guidance for RMAs and local authorities on various subjects of flood risk management, including tools to support LLFAs in developing their LFRMS.

https://www.gov.uk/guidance/flood-risk-management-information-for-flood-risk-management-authorities-asset-owners-and-local-authorities

LCC Local Flood Risk Management Strategy 2021

The LFRMS for Lancashire exists, at the time of writing, as a consultation draft. Blackburn with Darwen Borough Council, Blackpool Council and Lancashire County Council, as Lancashire's LLFAs have worked together to produce the joint strategy for managing local flood risk for the period 2021 to 2027. The aim of the Local Strategy is to ensure the overall context of the National Strategy is met through the management of flood risk across Lancashire.

The LFRMS provides an overall picture of flood risk across Lancashire and outlines how the LLFAs will coordinate and manage flood risk along with its RMAs. The strategy sets out the policy direction for flood defence consenting, thresholds for formal flood investigations, formal partnership and management arrangements, details regarding the asset register, and a great deal of general advice and guidance relating to flood mitigation and resilience.

In the 2020 budget, the Government committed expenditure of £5.2 billion to flood and coastal risk management. The proposed allocation of funding in 2021-2027 for Lancashire as a whole is an investment of £230 million to better protect 32,000 properties from coastal erosion and surface water flooding.

The strategy proposes the vision for Lancashire in which 'by 2027, Lancashire will be a flood resilient place responsive to risks, challenges and opportunities supporting a sustainable future for the people of Lancashire' with six key themes:

- Theme 1 Delivering effective flood risk management locally
- Theme 2 Understanding our local risks and challenges
- Theme 3 Supporting sustainable flood resilient development
- Theme 4 Improving engagement with our flood family
- Theme 5 Maximising investment opportunities to better protect our businesses and communities
- Theme 6 Contributing towards a climate resilient Lancashire.

A.6.4 Surface Water Management Plans (SWMP)

In June 2007, widespread flooding was experienced in the UK. The Government review of the 2007 flooding, chaired by Sir Michael Pitt recommended that...

"...Local Surface Water Management Plans (SWMPs) ...coordinated by local authorities, should provide the basis for managing all local flood risk."

The Government's SWMP Technical Guidance document¹³, 2011, defines a SWMP as:

Surface Water Management Plan Technical Guidance https://www.gov.uk/government/publications/surface-water-management-plan-technical-guidance



- A framework through which key local partners with responsibility for surface water and drainage in their area, work together to understand the causes of surface water flooding and agree the most cost-effective way of managing surface water flood risk.
- A tool to facilitate sustainable surface water management decisions that are evidence based, risk based, future proofed and inclusive of stakeholder views and preferences.
- A plan for the management of urban water quality through the removal of surface water from combined systems and the promotion of SuDS.

As a demonstration of its commitment to SWMPs as a structured way forward in managing local flood risk, Defra announced an initiative to provide funding for the highest flood risk authorities to produce SWMPs.

Defra's framework for carrying out a SWMP is illustrated by the SWMP wheel diagram, as shown in Figure A.6-1. The first three phases involve undertaking the SWMP study, whilst the fourth phase involves producing and implementing an action plan which is devised based on the evidence gained from the first three phases.

At the time of writing, there is no surface water management plan in place for the Borough of Pendle.



Figure A.6-1: Defra wheel (taken from SWMP Technical Guidance)



A.6.5 Critical Drainage Areas (CDAs)

Certain locations known to be susceptible to localised flooding can be defined as Critical Drainage Areas (CDAs) and are based on areas of surface water flood risk and where the sewer network may be at capacity. Areas with Critical Drainage Problems (ACDPs) may be designated where the EA is aware that development within a certain catchment / drainage area could have detrimental impacts on fluvial flood risk downstream, and / or where the EA has identified existing fluvial flood risk issues that could be exacerbated by upstream activities. There are currently no CDAs within the Borough of Pendle; however, work at a local level may identify locations susceptible to localised flooding where such advice might be applied in the future (see Section 5.3.3 of the main report).

A.6.6 Green Infrastructure assessments

Open space, or Green Infrastructure (GI), should be designed and managed as a multifunctional resource capable of delivering a wide range of environmental and quality of life benefits for local communities and should be provided as an integral part of all new development, alongside other infrastructure such as utilities and transport networks.

Open space can provide many social, economic and environmental benefits close to where people live and work including:

- Places for outdoor relaxation and play;
- Space and habitat for wildlife with access to nature for people;
- Environmental education;
- Local food production in allotments, gardens and through agriculture;
- Improved health and well-being lowering stress levels and providing opportunities for exercise;
- Climate change adaptation for example flood alleviation and cooling urban heat islands.

Paragraph 118b of the NPPF (2021) explains that open space can perform many functions, including flood risk mitigation, and that Local Plans should account for increased flood risk, resulting from climate change, through the planning of Green Infrastructure. GI can have an important role to play in reducing the likelihood of flooding by providing space for flood storage, reducing runoff and increasing infiltration, whilst also providing other benefits as stated above.

Alongside GI should be the implementation of SuDS, specifically within potential development sites, where possible. The suitability of GI and SuDS can be informed by this SFRA through utilisation of open space for water in the areas of greatest flood risk, which would be key to helping deliver sustainable development. Examples include:

- Restoration of natural character of floodplains;
- Reduction of downstream flood risk;
- Preserving of areas of existing natural floodplain; and
- Introduction of new areas and enhancing existing areas of greenspace whilst incorporating sustainable drainage within new development.

The Town and Country Planning Association together with the Wildlife Trusts produced a guidance document for Green Infrastructure¹⁴. The guidance states that

¹⁴ Planning for a Healthy Environment - Good Practice Guidance for Green Infrastructure and <mark>Biodiversity, Published</mark> by the Town and Country Planning Association and The Wildlife Trusts, July 2012



local plans should identify funding sources for GI and provision should be made for GI to be adequately funded as part of a development's core infrastructure. For new developments, GI assets can be secured from a landowner's 'land value uplift' and as part of development agreements. LPAs may include capital for the purchase, design, planning and maintenance of GI within the Community Infrastructure Levy (CIL) programme.

PBC's GI strategy

As part of the evidence base to inform the Pendle Local Plan Part 2: Site Allocations and Development Policies, the Council commissioned a Green Infrastructure Strategy in 2019. This study will be used to identify Pendle's Green Assets and provide a strategy for their protection and enhancement through the planning system.

A.6.7 Flood risk partnerships and partnership plans

PBC has been involved in the development of several partnerships designed to provide collaboration between public agencies, businesses and the community. Partnerships and plans that affect the district include:

- Lancashire Local Resilience Forum (LLRF) see Section 7.1.1 of the main report
- Lancashire Flood Risk Management Group
- Lancashire County Council Community Risk Register see Section 7.1.2 of the main report
- Lancashire Strategic Partnership Group
- Flood warning and awareness in partnership with the EA
- Local flood plans see Section 7.1.4 of the main report
- Lancashire Evacuation Plan¹⁵
- Pendle Making Space for Water Group
- Key businesses and organisations PBC has ongoing relations with major land owners, employers and organisations such as LCC, Environment Agency, Neighbouring Local Authorities, Yorkshire Water, United Utilities, Canal and Rivers Trust, National Trust, Natural England, Highways England and Network Rail.

See Section 7 of the main report on Emergency Planning for more information.

¹⁵ https://www.lancashire.gov.uk/flooding/during-a-flood/



A.7 Roles and responsibilities

The responsibilities for the Risk Management Authorities under the Flood & Water Management Act and Flood Risk Regulations, as summarised by Government¹⁶, are set out below.

A.7.1 EA as a RMA

- Has a strategic overview role for all forms of flooding;
- · Provides and operates flood warning systems;
- Carries out work to manage flood risk from the sea and main rivers;
- Carries out works in estuaries to secure adequate outfalls for main rivers;
- Carries out surveys to inform FCERM works and has the right to enter private land to carry out such works;
- Issues permits and byelaws with the Environmental Permitting (England and Wales) Regulations 2016 and remaining Environment Agency North West Region byelaw prohibitions for works on or near main rivers, and works affecting watercourses, flood and sea defences and other structures protected by its byelaws;
- Designates structures and features of the environment that affect flood or coastal erosion risk;
- Has the power to request information from any partner in connection with its risk management functions;
- Must exercise its flood or coastal erosion risk management functions in a manner consistent with the National Strategy and Local Strategies;
- Must be consulted on Local Strategies, if affected by the strategy, by the LLFA;
- Must help advise on sustainable development.

A.7.2 LPA as a RMA

- Has a duty to act in a manner that is consistent with the National Strategy and have regard to Local Strategies;
- Must be consulted on Local Strategies, if affected by the strategy, by the LLFA;
- Has a duty to be subject to scrutiny from the LLFA;
- Has a duty to cooperate and share information with other RMAs.

A.7.3 LLFA as a RMA

- Must develop, maintain, apply and monitor a strategy for local flood risk management. This must be consulted on with all RMAs, the public and all other partners with an interest in local flood risk, and must comply with the National Strategy;
- Should prepare and maintain a preliminary flood risk assessment, flood hazard maps, flood risk maps and flood risk management plans;
- Is required to coordinate and share information on local flood risk management between relevant authorities and partners;
- Is empowered to request information from others when it is needed in relation to its flood risk management functions;

¹⁶ https://www.gov.uk/government/collections/flood-and-coastal-erosion-risk-manage<mark>ment-authorities</mark>



- Must investigate significant flooding incidents in its area where it considers it necessary or appropriate;
- Has a duty to establish and maintain a record of structures within its area that it considers having a significant impact on local flood risk;
- Is empowered to designate structures and features that affect flooding;
- Has powers to undertake works to manage flood risk from surface runoff, groundwater and ordinary watercourses;
- Must exercise its flood and coastal erosion risk management functions in a manner consistent with the National Strategy and the Local Strategy;
- Can carry out work that may cause flooding or coastal erosion in the interests of nature conservation, preservation of cultural heritage or people's enjoyment of the environment or cultural heritage;
- Can acquire land in or outside of their district for use in flood risk management if necessary;
- Is permitted to agree the transfer of responsibilities for risk management functions (except the production of a local strategy) to other RMAs;
- · Can take the lead on preparing SWMPs;
- Must aim to contribute to sustainable development;
- Should consider flooding issues that require collaboration with neighbouring LLFAs and other RMAs.

A.7.4 United Utilities and Yorkshire Water Services as a RMA

- Has a duty to act in a manner that is consistent with the National Strategy and have regard to Local Strategies;
- Must be consulted on Local Strategies, if affected by the strategy, by the relevant LLFA;
- Has a duty to be subject to scrutiny from LLFAs;
- Has a duty to cooperate and share information with other RMAs;
- Is responsible for managing the risks of flooding from water and foul or combined sewer systems providing drainage from buildings and yards.

A.7.5 Highways Authority (LCC) and Highways England as RMAs

- Have a duty to act in a manner that is consistent with the National Strategy and have regard to local strategies when:
 - Carrying out highway drainage works,
 - Filling in roadside ditches,
 - Diverting or carrying out works on part of a watercourse;
- Have responsibility for ensuring effective drainage of local roads in so far as ensuring drains and gullies are maintained;
- Must be consulted on Local Strategies, if affected by the Strategy, by the LLFA;
- Have a duty to be subject to scrutiny from LLFAs.

A.7.6 The local community

Must be consulted on Local Strategies by the LLFA;



• Has a key role in ensuring local strategies are capable of being successfully delivered within the community. They should actively participate in this process and be engaged by the LLFA.

A.7.7 Riparian owners

A riparian owner is someone who owns land or property alongside a river or other watercourses. A watercourse is any natural or artificial channel through which water flows including through a culvert, ditch, cut, dyke, sluice or private sewer.

Riparian owners have statutory responsibilities, including:

- Maintaining watercourses;
- Allowing the flow of water to pass without obstruction;
- Controlling invasive alien species

Further guidance for riverside property owners can be found via:

https://www.gov.uk/guidance/owning-a-watercourse

A.7.8 Developers

Have a vital role in ensuring effective local flood risk management by avoiding development in areas at risk of flooding. Local Strategies should form a key element of local planning guidance, along with consultation on this SFRA.