






<p>Cumbria flood action plan</p> <p>Kendal community action table</p> <p>The purpose of this action table is to highlight the flood management that is currently in place and the specific actions that are happening or proposed within Cumbria flood action plan for this community.</p> <p>Please read this table in conjunction with the full Cumbria flood action plan and summary document, which can be found online by visiting www.gov.uk and searching Cumbria flood action plan.</p>	<p>Kendal better protected</p> <p>1) Do now (within next 12 months):</p> <ul style="list-style-type: none"> • Complete repair and recovery work • Set up temporary defences and pump deployment plan before winter 2016 • Complete emergency plans • Register properties on Floodline Warnings Direct • Publish and review flood investigation report • Initiate development of flood risk management improvement works • Work with Children and Young People impacted by flooding. <p>2) Develop (2-5 years):</p> <ul style="list-style-type: none"> • Improvements to flood risk management assets and watercourses in response to the flood investigation report. • Continue to support sharing knowledge and best practice through the network for Community Action Groups <p>3) Explore (5+ years):</p> <ul style="list-style-type: none"> • Implement opportunities for natural flood risk management and engineered storage upstream of Kendal
<p>Catchment: Kent/Leven</p> <p>Impact of December 2015 flood: Approximately 2,150 homes and businesses were flooded</p> <p>Description: Kendal is in the south east of Cumbria on the Kent just downstream of its confluence with the river Sprint and river Mint. The town has a population of around 28,000 and includes the Mintsfeet Industrial Estate. Mintsfeet is the site of a number of nationally significant businesses and is susceptible to flooding.</p>	

	What's already in place	What we're going to do and what this will achieve	When this work will take place	Who's responsible for this work	How much will it cost/ Sources of funding
<p>Strengthening flood defences</p> 	<p>Flooding in Kendal is reduced by over 1.8km of raised embankment and 238m of flood wall. These defences work together to manage river flows through the town. There are also 466m of culvert and numerous flap valves on drainage outfalls. Other structures include Stock Beck Storage Basin and Helsington Mill Sluice.</p>	<p>Improved defences</p> <p>£24m of capital funding has been allocated from within the Flood and Coastal Erosion Risk Management Investment Programme for Kendal, Burneside and Staveley. This funding will be used to promote the options for managing flood risk which may include strengthening defences, improving the capacity of watercourses, urban drainage, surface water drains, upstream storage and 'slow the flow' interventions.</p> <p>Provide access to additional national mobile defences.</p> <p>The recommendations from the Section 19 Flood Investigation Report and National Resilience Review will be reviewed to develop integrated flood risk management solutions and review maintenance practices.</p> <p>Repairing damages from Storm Desmond</p> <p>Work completed; Gravel traps have been emptied and the landslip on the River Sprint has been stabilised.</p> <p>Work ongoing: Remove other significant deposits of gravel and repair the sides of the river channel and embankments.</p>	<p>Medium term (5 years)</p> <p>Flood Investigation Report due summer 2016</p> <p>Complete</p> <p>Short term – autumn 2016</p>	<p>Environment Agency</p> <p>Environment Agency</p>	<p>£24m from central government</p> <p>£1m from central government</p>

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		Modelling and forecasting post-event model re-runs Update the river level model with the most recent flow data available from Storm Desmond to develop and support any future schemes.	Short term (within next 12 months)	Environment Agency	£70,000 (Cumbria wide spend)
		Understanding Bridges Review the role that bridges play in flood risk and their vulnerability during a flood	Short term – strategic review within the next 12 months	Cumbria County Council Environment Agency	
		Understanding railway structures Work with Network Rail to understand the interaction of both the West Coast Mainline and the Windermere branch line with the watercourses in and around Kendal; their effect on flooding and their vulnerability during a flood.		Cumbria County Council	
Upstream management 	Currently there is limited use of Upstream Management in the sub-catchments upstream of Kendal.	Explore opportunities for engineered and natural flood management solutions to be used upstream of Kendal in order to 'slow the flow' and manage peak river levels. Areas of interest include Kentmere, Longsleddale, Kendal Fell and Birds Park reservoir to the east of Kendal.	Medium term (5 years) or long term (over 5 years)	Farmers Landowners Community Groups River and Wildlife Trusts	
	Examples of natural flood risk management that have been completed in recent years include a project led by Cumbria Wildlife Trust to remove an embankment along the river Gowan to re-connect it to the floodplain and river restoration work along the rivers Sprint and Mint led by the RSPB.	Develop proposals for river and peat restoration to slow the flow.	Short term – summer 2017	Cumbria Wildlife Trust RSPB Non-governmental organisations	
		Investigate the use of the redundant Birds Park reservoir to reduce flood risk downstream in Kendal		United Utilities Environment Agency	
		Continue to explore opportunities to reconnect the river with its floodplain at the confluence of the river Kent and the river Gowan, through the removal of raised ground adjacent to the rivers. Explore the potential benefits of peatland restoration and the creation of woodlands in consultation with landowners and farmers.	Medium term (5 years) or long term (over 5 years)	Farmers Landowners Community Groups Trusts	

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Maintenance 	<p>Flooding in Kendal is reduced by over 1.8km of raised embankment and 238m of flood wall. These defences work together to manage river flows through the town. There are also 466m of culvert and numerous flap valves on drainage outfalls. Other structures include Stock Beck Storage Basin and Helsington Mill Sluice.</p> <p>These assets and the river channel are maintained by the Environment Agency on an ongoing basis. This includes managing vegetation and removing gravel. The flood wall, embankment and other structures are also inspected and any necessary works carried out.</p> <p>The planned maintenance programme is available at: https://www.gov.uk/government/publications/river-and-coastal-maintenance-programme</p> <p>Cumbria County Council maintains the ordinary watercourses, surface water drainage and highway drainage.</p>	<p>New Environment Agency system will make it easier for communities to understand maintenance in their area. Improvements will show exactly when, where and what maintenance is being planned each year.</p> <p>Make sure that communities understand how they can access information on planned maintenance at: https://www.gov.uk/government/publications/river-and-coastal-maintenance-programme</p>	Short (within next 12 months)	Communities Environment Agency Parish and district Councils	
Resilience 	<p>The Kendal Community Emergency Plan is an active group. The group with the support of the Environment Agency is currently developing an Emergency Plan</p>	<p>Work with community action group to complete the emergency plan.</p> <p>Continue to work with all communities to establish a network of Action Groups to share learning and best practice.</p>	Emergency Plan to be in place before winter 2016.	Environment Agency (Flood Warning & Community Resilience) Communities Parish & District Councils District Council & Local Government Kendal Town Council	Local Levy, central government Flood Defence Grant in Aid
	Kendal currently receive Flood Warnings with an uptake of 68% of at risk properties registered to the service.	Work with the Emergency Group to increase uptake of residents registered to the flood warning service and promote the new flood warning areas.	Before winter 2016 / complete		
	South Lakeland District Council is administering the Flood Recovery and Resilience Grants.	Provide additional support to DCLG and Local Authorities to improve the uptake of the £5,000 Government resilience grants to help people better protect their homes. Applications can be made up until December 2016. A further £2,000 top up grant can also be applied for from the Cumbria Flood Recovery Fund.	Closing date for Grant applications – end of December 2016		Resilience grants of £5k per property
		Work with Children and Young People impacted by flooding. A project is being run in Kendal at the moment that will be expanded to cover other communities in Cumbria. Children and Young People have an opportunity to share their experience and recover from the trauma of flooding. This project will also support children's participation in community resilience.	Short term winter 2017	Save the Children Lancaster University	

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		Carry out further investigations with respect to the feasibility of local temporary defences and pumping, with the aim of having plans prepared for Winter 2016. With the outcome to increase resilience in communities where either there are no formal defences in place or where additional contingency is required.	Before winter 2016	Environment Agency	
Water Level Management Boards 	There are no Water Level Management Boards in this area				