# **Chorley District Flood Report**

# **Recommended Actions**

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# 1.Background:

As a Lead Local Flood Authority, Lancashire County Council has a role in coordinating flood risk activities and ensuring the free flow of communication and collaborative works. In order to help achieve this, Lancashire County Council and relevant risk management authorities meet regularly to discuss local flooding issues and to identify opportunities for managing future flood risks. This has worked very well up to now and has allowed risk management authorities to work closely together to tackle often complex and challenging situations. However following the significant flooding that hit Lancashire in December 2015, it became evident that improvements could be made to the way in which these messages get communicated to affected communities.

As such, Lancashire County Council has now developed a series of district level reports which aim to provide affected communities with information about what relevant risk management authorities are doing in their areas to help manage the risk of flooding from a variety of sources. These reports will identify opportunities for further investigation and investment, and will provide concerned homeowners and businesses with information about what they can do to help protect their own properties from flooding in the future. These reports will be compiled and published by the Lead Local Flood Authority based on data that has been provided by relevant risk management authorities. These reports will be updated on a quarterly basis to allow affected communities to see progress and resolution of as many issues as possible, as quickly as possible.

# 2.Key Definitions

## **The Risk Management Authorities**

The risk management authorities are identified in the Flood and Water Management Act, 2010 (FMWA) as follows:

- a) The Environment Agency (EA),
- b) The lead local flood authority,
- c) A district council for an area for which there is no unitary authority,
- d) An internal drainage board,
- e) A water company, and
- f) A highway authority.

Each of these organisations has powers and duties under various legislation and regulations for the responsible management of natural water, flood risk and in some cases coastal erosion. The FWMA requires all the risk management authorities to cooperate with other relevant authorities in the exercise of their flood and coastal erosion risk management functions. In Lancashire, the RMAs support partnership working in the following ways:

- at operational levels by joint investigations and through the Making Space for Water meetings;
- at tactical level by sharing priorities and direction between organisational managers, and
- at strategic level by engaging with Councillors/Cabinet Members/Senior Managers.

Lancashire, Blackpool and Blackburn-with-Darwen are also represented on the North West Regional Flood and Coastal Committee where cross-boundary projects, resources and data are shared with Cumbria, Greater Manchester, Merseyside and Cheshire.

The village of Earby in Pendle District is a special case in that it lies within a river catchment that falls towards North Yorkshire, so its local EA services are supplied through the Yorkshire team. This gives the Lancashire partnership a direct connection to the Yorkshire Regional Flood & Coastal Committee. Earby also receives services from the Earby and Salterforth Internal Drainage Board (IDB), which replaces a number of the lead local flood authority functions. These functions are further explored in Section 3 of this report.

#### **The Risk Management Functions**

The risk management authorities have responsibility for flood risk management functions as defined under Section 4 (2) of the FWMA:

- a) a function under this Part,
- b) a function under section 159 or 160 of the Water Resources Act 1991,
- c) a flood defence function within the meaning of section 221 of that Act,
- d) a function under the Land Drainage Act 1991,
- e) a function under section 100, 101, 110 or 339 of the Highways Act 1980, and
- f) any other function, under an enactment, specified for the purposes of this section by order made by the Minister.

#### **Riparian Landowners**

The legal term 'riparian' is applied to landowners who own land adjoining or containing a river or watercourse. They have certain rights to use the water flowing across their land for their own purposes, and in regard to flood risk management they also have a number of responsibilities, including the following:

- to maintain the bed and banks of the watercourse, and also the trees and shrubs growing on the banks;
- to clear any debris, even if it did not originate from their land. This debris may be natural or man-made;
- to keep any structures within their ownership clear of debris. These structures include culverts, trash screens, weirs and mill gates.

If riparian landowners do not fulfil their responsibilities they may face enforcement action taken by the relevant risk management authority.

#### Interconnections between responsibilities

Public sewers in Lancashire are principally the responsibility of United Utilities plc or Yorkshire Water plc. Copies of the record maps indicating the location of public sewers in Lancashire are held in the water companies' head offices. These companies also keep records of pumping stations and any water treatment works which form part of the public sewage system.

Private drainage systems are the responsibility of each owner whose property it drains. Where more than one property uses a private pipe, responsibility is normally shared proportionately. The private system comprises all the pipes up to the point of connection with a public sewer (this can include the entire system where connected to a septic tank, cesspool or soakaway). Formal records indicating the location of private drainage systems are not held by any RMA. The deeds of a property may include details.

The highway surface water drainage of all adopted public roads, other than trunk roads or motorways, is the responsibility of LCC as the local highway authority, including roadside drainage gullies and certain roadside ditches. Drainage from trunk roads and motorways is the responsibility of Highways

England (formerly the Highway Agency). Drainage of private unadopted roads is normally the responsibility of private property owners who make use of or adjoin the road.

Land drainage comprises systems of rivers, watercourses, ditches, culverts, pipes, lakes and ponds intended to drain water resulting from rainfall and flows from underground sources. Typically the primary responsibility for maintaining responsible flows in land drainage systems lies with the riparian owner or owners, with the LLFA, EA, IDB and local councils holding enforcement powers to use if the land owner/s default in their duties.

All drainage systems eventually discharge into the sea as the lowest possible point for water to collect. In Lancashire, this is at Morecambe Bay or the Irish Sea directly.

All drainage networks are formed from combinations of these systems to overcome historic demands of efficiency, simplicity and convenience. For example, a highway gully may well connect to a length of highway drainage pipe before connecting to a private ditch, or a public surface water sewer, or directly to a main river. The original reasoning for these arrangements may now be forgotten or inappropriate for current needs, but the physical interconnection of drainage systems means that it is often impossible to tell just from looking at flood water exactly where the barrier to flow arises and therefore exactly which organisation may need to take remedial action.

It is therefore vital for the RMAs to share information and collaborate during investigations, and for the investigations to be allocated to the appropriate organisation to lead. Where 'appropriateness' is not immediately clear, the LLFA will usually take the lead until better information is available.

# 3.Key Functions of the Risk Management Authorities

## The Environment Agency

The flood risk management responsibilities of the EA include the following:

- a) strategic overview for all forms of flooding;
- b) provision of a National Strategy for Flood and Coastal Erosion Risk Management (FCERM) to cover all forms of flooding;
- c) a power to request information from third parties in connection with flood risk management duties. Risk management authorities have a duty to co-operate with the EA in the provision of such information;
- d) a duty to co-operate with other relevant authorities in the exercise of flood risk management functions, which may include the sharing of information with other relevant authorities;
- e) a duty to have regard to Local Flood Risk Management Strategies;
- f) a duty to be subject to scrutiny from lead local flood authorities' democratic processes;
- g) responsibility for managing coastal flooding;
- h) responsibility for managing fluvial flooding from main rivers;
- i) responsibility for issuing environmental permits for work that might impact on main river flows;
- j) responsibility for maintaining its own flood risk management assets including pumps and flood basins;
- k) updated provisions for the regulation of reservoirs;
- I) permissive powers to carry out maintenance work on main rivers under Section 165 of the Water Resources Act 1991;
- m) the provision of flood forecasting and warning services;
- n) the provision of flood maps;
- o) the provision of flood related information and advice;
- p) investment in flood defences, supplemented through partnership funding where appropriate;

q) a power to take enforcement action where flow in a main river has been impeded and may cause a flood risk.

# Lancashire County Council

LCC has a dual risk management role, in its capacity as both highway authority and LLFA. The County Council as the LLFA has a number of duties and powers, in addition to the duty to investigate flooding set out above. These include:

- a) a duty to develop, maintain, apply, monitor and consult on an LFRMS for its area (copy available from the LCC website www.lancashire.gov.uk);
- b) a duty to develop and maintain a register of structures or features which might impact on flood risk, including ownership and condition (the Flood Risk Asset Register is available on the LCC website www.lancashire.gov.uk);
- c) the management of the consenting process for works that are likely to affect the flow characteristics of ordinary watercourses (Land Drainage Consent – guidance available on the LCC website www.lancashire.gov.uk);
- d) a power to undertake works for managing flood risk from surface run-off or groundwater;
- e) a power to request information from third parties in connection with flood risk management duties. RMAs have a duty to co-operate with the LLFA in the provision of such information;
- f) a power to designate structures and features that affect flooding or coastal erosion.
- g) a power to take enforcement action where there is an obstruction to an ordinary watercourse that may cause a flood risk.

LCC as the local highway authority has a duty under the Highways Act 1980 to maintain highways that are maintainable at public expense. This includes responsibility for highway drainage, as well as for the condition and safety for users of all highway assets including roads, footways, bridges and culverts, street lighting and traffic signals.

As local highway authority, LCC has a duty to co-operate with other relevant authorities in the exercise of flood risk management functions, which may include the sharing of information with other relevant authorities

LCC also has private responsibilities for land drainage where it is a land owner.

# **City and Borough Councils**

The flood risk management responsibilities of City and Borough councils include the following:

- a) a power to designate structures and features that affect flooding or coastal erosion;
- b) a duty to exercise their flood risk management functions in a manner consistent with local and national strategies, and to have regard to those strategies in their other functions;
- c) a duty to be subject to scrutiny from LLFAs' democratic processes;
- d) a power to do works on ordinary watercourses
- e) a duty to co-operate with other relevant authorities in the exercise of flood risk management functions, which may include the sharing of information with other relevant authorities.

City and Borough Councils have a number of wider functions and roles that can be relevant to flood risk management and response. These include local planning, housing, environmental health and community engagement activity, as well as private responsibilities for land drainage where they are a land owner.

#### Internal Drainage Boards

An Internal Drainage Board (IDB) is a local public authority established in areas of special drainage need in England and Wales. IDBs have permissive powers to manage water levels within their respective drainage districts. IDBs undertake works to reduce flood risk to people and property and manage water levels to meet local needs. The expenses of an IDB are predominantly funded by the local beneficiaries of the water level management work they provide. Each IDB sets a budget for its planned work in the forthcoming year and any investments it needs to make for future projects. More information about IDBs can be found from the Association of Drainage Authorities (www.ada.org.uk).

## Water Companies

The flood risk management responsibilities of water companies (in Lancashire: United Utilities plc and Yorkshire Water plc) include the following:

- a) a duty as sewage undertakers under Section 94 of the Water Industry Act 1991, to provide & maintain sewers for the drainage of buildings and associated paved areas within property boundaries;
- b) responsibility as sewerage undertakers for lateral drains and public sewers, the latter being defined as a conduit, normally a pipe that is vested in a Water and Sewerage Company, or predecessor, that drains two or more properties and conveys foul, surface water or combined sewage from one point to another point and discharges via a positive outfall;
- responsibility for any flooding which is directly caused by its assets i.e. its water or sewerage pipes;
- d) a duty to be subject to scrutiny from lead local flood authorities' democratic processes;
- e) a requirement to exercise flood risk management functions in a manner consistent with the national strategy and guidance and have regard to the local strategies and guidance;
- f) a duty to co-operate with other relevant authorities in the exercise of flood risk management functions, which may include the sharing of information with other relevant authorities.

# **Civil Contingencies Responsibilities**

The RMAs listed above (with the exception of the IDBs) have additional responsibilities under the Civil Contingencies Act 2004, which provides the statutory basis for dealing with a response to flooding in emergency situations. These include flood preparedness planning and flood response.

# **4.Recommended Actions:**

This report is a living document and we want to continue working with relevant risk management authorities and communities to help develop it further. You can help us to do this by providing any additional information or evidence that you may have, along with any further ideas and actions that you feel should be included. It may not be possible to take all ideas and actions forward, but they will all be appropriately considered by the relevant risk management authorities. Please let us know by emailing highways@lancashire.gov.uk

## **County-wide Actions:**

Who	What is needed and when?	What has been done and/or what will be done?
All RMAs	In advance of forecast flood conditions, those risk management authorities with responsibility for flood risk-related assets, public infrastructure and/or flood defences should take preparatory action to minimise the risk of damage to their own property as well as the properties of others who rely on these assets for protection.	In advance of the December 2015 floods, those risk management authorities with responsibility for flood risk-related assets, public infrastructure and/or flood defences carried out a range of activities to minimise the risk of damage to their own property as well as the properties of others who rely on those assets for protection. This included (but is not limited to): arranging for close monitoring of weather conditions; bringing in extra staff resources to be available on the ground or within incident rooms, and out of normal working hours; issuing flood warnings; clearing road gullies and trash screens where possible; activating flood basins in Garstang and Catterall; activating gumps where possible; deploying demountable flood barriers in Ribchester, St Michaels and Whalley; establishing communications with partner organisations; and activating other pre-planned actions. Following its investigation in to the December 2015 floods, the Lead Local Flood Authority concluded that all risk management authorities that had relevant flood risk functions before the December 2015 floods, exercised those functions in regard to the flood event - no such functions are still to be exercised. Examples of planned preparatory activities included (but are not limited to): Whilst risk management authorities remain committed to providing the best possible protection for homes and businesses, it is recognised that the frequency and intensity of rainfall events is changing; making them increasingly difficult to predict and prepare for. In fact, December 2015 saw the highest river flow levels ever recorded, the wettest December on record and also the wettest calendar month overall since records began in 1910. This resulted in a huge impact upon people, homes and businesses, with over 2,500 properties flooded in Lancashire alone. The changing nature of these rainfall events means that flooding can occur almost anywhere and with very little warning. As such, homeowners and

All RMAs	Upon being notified of a flood event, those risk management authorities with relevant flood risk management functions should provide advice and support to local communities to help minimise the impact of the flooding and to help residents and businesses to get back on their feet.	The extreme and unprecented storms and rainfall events of November and December 2015 caused flooding throughout December to over 2,500 properties in Lancashire. These floods also damaged private gardens, garages and out- buildings, business premises, agricultural property and many items of critical public infrastructure including roads, bridges and retaining walls, water treatment plants, power and communications installations, and essential community buildings such as schools, village and town halls. In order to help minimise the impact of the flooding across Lancashire, those risk management authorities with responsibilities under the Civil Contingencies Act 2004 acted under the direction of the Lancashire Resilience Forum (LRF) to provide practical support to the police, fire and rescue and NHS. This involved helping the emergency services contact vulnerable people to make sure they were safe; to help evacuate people from flooded areas; to close flooded roads and bridges; to put diversions in place and to clear blocked drains on the road. The Environment Agency also carried out pumping activities in critical areas, namely St Michaels, Rufford and Croston, and district council's provided sandbags where
		possible. Following its investigation in to the December 2015 floods, the Lead Local Flood Authority concluded that all risk management authorities that had relevant flood risk functions during the December 2015 floods, exercised those functions in regard to the flood event - no such functions are still to be exercised.
		Despite the best efforts of the emergency services and relevant risk management authorities, the impact of the December 2015 floods was significant. In order to help residents and businesses get back on their feet as quickly as possible, risk management authorities arranged and/or attended a number of 'drop-in' events that were held around the county during January and February 2016. These included:
		<ul> <li>21 Jan 2016: New Road Community Centre in Pendle.</li> <li>25 Jan 2016: Parbold Village Hall in West Lancashire.</li> <li>26 Jan 2016: Our Lady's Catholic College in Lancaster.</li> <li>27 Jan 2016: The Grapes Public House in Wyre.</li> <li>28 Jan 2016: Chorley Town Hall in Chorley.</li> <li>01 Feb 2016: Fiveways Public House in West Lancashire.</li> <li>02 Feb 2016: The Civic Centre in South Ribble.</li> <li>03 Feb 2016: St Leonard's Primary School in Burnley.</li> <li>10 Feb 2016: Irwell Vale in Rossendale.</li> </ul>
		The aim of these events was to provide information and support to residents and businesses, as well as to gather eye-witness reports to help improve the collective understanding of the main flood mechanisms. Affected residents were invited to discuss their issues with the relevant risk management authorities and were offered advice and support on flood recovery, flood warnings, property flood resilience measures and opportunities for accessing flood relief grants and other funding mechanisms. Where possible, relevant risk management authorities also attended many community led meetings to further explore local conditions and to identify ways of managing local flood risk. Residents were given support and advice regarding the formation of new Flood Action Groups and the development of community flood plans.
		Since December 2015, many hundreds more households have signed up to receive direct flood warnings from the Environment Agency and many new Flood Action Groups have formed to help residents and other community members to help each other, and to activate local Flood Plans. Lancashire County Council's own communications have been improved to give more useful and interactive information in advance of, during and after a flood event and the multi-agency response to major flood emergencies is in the process of adapting to take account of key lessons learned from December 2015 events.

LCC	Together with other risk management authorities, Lancashire County Council has recorded and verified a significant amount of data relating to the December 2015 floods in Lancashire. This data has been used to establish a reliable flood timeline and to assess whether the event triggers an investigation under Section 19 of the Flood and Water Management Act, 2010 (known as Section 19 investigations). Despite the best efforts of all risk management authorities, some additional data identifying flooded property may yet come to light. This will need be collected when opportunities arise and whilst other functions are being carried out. In assessing whether a Section 19 investigation is appropriate, the Lead Local Flood Authority considers the criteria outlined within the flood investigation policy which was published by Lancashire County Council in October 2014. This policy outlines the legal requirements to investigate flood incidents and provides details on the criteria applied in deciding whether or not an investigation -Policy.pdf Due to the geographical distribution and magnitude of the events, it was concluded that a detailed investigation for each affected community wouldn't be a practical use of resources. As such, it was decided that the most efficient approach was to initiate a countywide investigation that encompassed all of the communities which would have otherwise failed to meet the criteria for a Section 19 investigation. In delivering its countywide investigation, the Lead Local Flood Authority adopted a two-staged approach to ensure that it me its legal obligations as a minimum, but to also ensure that affected communities were identified and that appropriate prioritised actions were put in place.
	Stage one investigated the two major storm events in December 2015 and identified all known communities that experienced flooding as a result of these events, focussing on statutory responsibilities and the duties of flood risk management authorities during the events. The findings of this investigation have now been published and can be accessed via the links below. It should be noted that the Lead Local Flood Authority's responsibility for investigation only extends as far as establishing which of the risk management authorities has a flood risk management function and whether they have, or will be, exercising that function. The publication of this report therefore discharges the Lead Local Flood Authority's responsibility and Water Management Act, 2010.
	Report: <u>http://council.lancashire.gov.uk/documents/s96528/Annex%201.pdf</u>
	Appendix: <u>http://council.lancashire.gov.uk/documents/s96529/Appendix%20A.pdf</u>
	Stage two reports on the progress of all recommended actions which have been identified by relevant risk management authorities following the December 2015 floods. This allows communities to see progress and resolution of as many issues as possible within each of the individual communities listed in Appendix A. The 'stage two' reports will be compiled and published by the Lead Local Flood Authority based on data provided by relevant risk management authorities. Whilst the reports do not form part of the formal Section 19 process, they are recognised as a necessary follow-on from the Section 19 investigation and from the commitments made under the Lancashire and Blackpool Flood Risk Management Strategy. An updated version of the 'stage two' reports will be published by the Lead Local Flood Authority.

# **District-wide Actions:**

Who		What is needed?	What has been done and/or what will be done?	Status
LCC LLFA	as	Review Surface Water Management Plan (Level 2) for Chorley District	LCC consultants have reviewed all known surface water flood risks in the District and propose areas for deeper investigation leading to investment in improvement schemes where these would be cost-effective.	Complete. Recomme ndations will be pursued through other channels.
LCC LLFA	as	Review critical water courses (Ordinary Water Course Study) for Chorley District	LCC consultants have reviewed key water courses related to flood risk in the District and propose areas for deeper investigation leading to investment in improvement schemes where these would be cost-effective.	Complete. Recomme ndations will be pursued through other channels.

# **Community Actions:**

# MSFW278: Adlington (Anderton Area)

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Gullies cleaned in April 16 on Babylon Lane with no problems reported back. Gullies cleaned in February 16 on New Road with no problems reported. Gullies cleaned on Roscow Lowe Brow in February 16 with further works required to repair non running gullies. Also suggestion from Jetting team that as the gullies in the location drop onto a culvert the amount of water on Boxing Day would have meant the gullies would not work.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	LCC HIGHWAYS - Work to some gullies on Roscow Lowe Brow to improve access and unblock where needed. CHORLEY BOROUGH COUNCIL – advising on property level protection at one identified propery.	Open
LCC as LLFA	Further investigations underway to understand sources of flooding	Site inspections and meetings with residents are underway but not yet concluded. Further discussions will be held at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW276: Adlington (Lower Adlington Area)

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Inspected Crawford Avenue following reports that the flood water was only slowly draining away, all gullies found to be clear and runnning. CHORLEY BOROUGH COUNCIL - Site inspection/ and surveys and remedial action (pipe replacement nand highnpressure jetting) complete.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	CHORLEY BOROUGH COUNCIL – Continued liaison with community and work with town council to set up a sandbag store. Liaison with United Utilities and LCC. Consider costs of replacing entire lengths of old stone culverts. Very likely to be cost-prohibitive, especially as this would not guarantee to resolve flood risk – final decision awaited.	Open

# MSFW277: Adlington (Rigshaw Bridge Area)

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	CHORLEY BOROUGH COUNCIL – supporting householders with shared solutions to property level protection and improved drainage capacity.	Open
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Site investigations underway	Affected residents and businesses have measures in hand to reduce flood risk. These are to be reviewed at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW279: Adlington (Waterhouse Bridge Area)

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Cleaned gullies outside property on Market Street in July. One gully remains not running; options under review.	Open
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Site investigations underway	Affected business is contributing data, and site inspections completed up- and down-stream. Situation to be reviewed at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW237: Astley Village

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS – Trash screen over the 1200mm diameter culvert under Chancery Road is at risk of blocking and contributing to flooding. Options for providing improved screening are under review and an operational plan is in development in conjunction with CHORLEY BOROUGH COUNCIL.	Open
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	As above.	Open

# MSFW346: Bretherton

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Reports received of property flooding on Pompian Brow, as well as various locations of carrigeway flooding in Bretherton. Gullies checked and cleared in Pompian Brow with some root cutting where required.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LHA	Investment in improved highway drainage, South Road, Bretherton.	Funding secured; detailed design to be provided and works carried out as soon as resources available.	Open

# MSFW256: Brindle (Hoghton Area)

4 properties are known to have suffered from internal flooding at this location on 26th December 2015. Preliminary reports indicate that the primary source of the flooding was the River Darwen.

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	EA - The peak of the Boxing Day flood event from Storm Eva narrowly exceeded that of the June 2012 event. These were both record flood events on the River Darwen, in living memory. Both the 2012 and 2015 flood events were rare, despite being so close together. Identified that building community level flood defences would likely not be affordable at this location because only a small number of properties would benefit.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
All RMAs	Develop community engagement plan to support householders with property level protection initiatives.	To be progressed alongside other similar plans for other communities.	Open
LCC as LLFA	Site investigations underway	Affected residents are supplying relevant records. These are to be reviewed at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW254: Brindle (Top O' The Lane Area)

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Cleaned gullies in January16 and no problems reported back, tried to clean them again September 16 but vehicles prevented access. CHORLEY BOROUGH COUNCIL – supporting householder with individual property level protection. Adjacent properties were unaffected.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Review need for further investigations	Further discussions will be required in order to identify whether any follow-up action is required at this location. Further discussions are expected to take place at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW255: Brindle (Withnell Area)

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Attended to clean gullies at Goffs Cottage on two occasion in Feb 2016 with no problems reported back. Cleaned gullies on a number of occasions on Bury Lane. Advice given to residents responsible for their own drianage maintenance on private lane.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Review need for further investigations	Further discussions will be required in order to identify whether any follow-up action is required at this location. Further discussions are expected to take place at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# **MSFW91: Brinscall**

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	Following the December 2015 flood event, all relevant risk management authorities carried out a preliminary review of any flood risk related assets, public infrastructure and/or flood defences which were likely to have been significantly impacted by the flooding. No such assets have been identified within this community.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	LCC HIGHWAYS & UU – Review underway to identify whether silted-up systems are private or public. CHORLEY BOROUGH COUNCIL – investigating options for community sandbag storage. Supporting householder with individual property level protection.	Open
LCC as LLFA	Detailed drainage study planned for Brinscall village, to map all drainage systems and identify any cost-effective improvements.	Defra funding provisionally available in 2017/18; investigations to be programmed with other Chorley villages.	Open

# **MSFW202: Charnock Richard (Charter Lane Area)**

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - No information for actions during the event, however Highways have attended to check the highway system in this location on 3 occasions: once in January 16 and twice in February 16. This resulted in excavation of the carrier drain down Charter Lane on the root infested area and provision of a new manhole on the drain to aid future access & cleaning activities. Gully connection into the foul system now removed, and connected this across the road into the highway drain, also cleared a gully that was root infested.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LHA	Monitor & review effectiveness of works completed to date.	Subject to monitoring, further work may be required.	Open

# MSFW203: Charnock Richard (Preston Road Area

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Attended in June 16 to check the gullies in this location which resulted in the provision of a new gully, a buried manhole discovered was brought to the surface and the stone culvert into which the gullies connect was de-silted.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	LCC HIGHWAYS - Monitor to see if works completed have improved the issue. Funding already secured in case additional works required.	Open

# MSFW236: Chorley (Weld Bank Area)

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Gullies and system checked on Weldbank on numerous occasions before and after event with no problems reported. Joint site inspections with CHORLEY BOROUGH COUNCIL and UU carried out.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	LCC HIGHWAYS – considering value of survey of the culvert in Eaves Green Road to check on the cause of the restriction. CHORLEY BOROUGH COUNCIL – supporting householder with individual property level protection.	Open

# MSFW234: Chorley Football Club

Chorley Football Club is known to have suffered from internal flooding on 26th December 2015.

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Reactive gully cleaning to roads near the ground	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Review need for further investigations	Further discussions will be required in order to identify whether any follow-up action is required at this location. Further discussions are expected to take place at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW228: Clayton Brook

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	Following the December 2015 flood event, all relevant risk management authorities carried out a preliminary review of any flood risk related assets, public infrastructure and/or flood defences which were likely to have been significantly impacted by the flooding. No such assets have been identified within this community.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Review need for further investigations	Further discussions will be required in order to identify whether any follow-up action is required at this location. Further discussions are expected to take place at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW227: Clayton Green

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS – Gully cleaning still required between Number 2 and Lord Nelson Pub.	Open
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Review need for further investigations	Further discussions will be required in order to identify whether any follow-up action is required at this location. Further discussions are expected to take place at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW179: Clayton-le-Woods

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	CHORLEY BOROUGH COUNCIL – investigated interactions between local pond and drainage systems (including CBC land). Replacement pipe installed and operational plan established. Private drains were also jetted at the time of remedial works, which identified a private issue for householder to correct.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Review need for further investigations	Further discussions will be required in order to identify whether any follow-up action is required at this location. Further discussions are expected to take place at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW222: Coppull

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Gullies cleaned on Coppull Moor Lane in May 16 following reports of road flooding. New headwall and trash screen installed side of 209 Chapel Lane, gullies in dip reconnected into culvert in road prior to flood event. Surcharging manhole Opp 269 Chapel Lane, blockage cleared February 16. Gullies cleaned on Chapel Lane (no 31 to Church) in March 16, also some root cutting and desilting. During event provided sand bags to householder.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	CHORLEY BOROUGH COUNCIL – supporting householder with individual property level protection.	Open
LCC as LLFA	Detailed drainage study planned for Coppull to map all drainage systems and identify any cost-effective improvements.	Defra funding provisionally available in 2017/18; investigations to be programmed with other Chorley villages.	Open

#### MSFW221: Croston

344 properties are known to have suffered from internal flooding at this location on 26th December 2015. Preliminary reports indicate that the flooding was first caused by surface water drainage unable to discharge into the River Yarrow, however as river levels continued to rise upstream of the town the riverbank was overtopped and more serious flooding was experienced. The Croston Flood Risk Management Scheme (upstream storage basin) was under construction during these floods but unfortunately not in a state to be brought online to reduce the effect of the flooding.

Following the main flooding to the village of Croston, a breach to the raised earth embankment on the River Douglas occurred near Rufford; leading to severe flood warnings being issued to 638 properties on 27th December 2015. Flooding was ultimately limited to farmland between the breach and the village and the severe flood warning was removed once the high tide cycle ended. Works were undertaken to repair the breach with the assistance of military aid.

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Drainage works on Out Lane completed before event. Sand bags delivered during the event, and gullies cleaned following the flood.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	EA - The Croston Flood Alleviation Scheme is now operational. The EA will closely monitor the effects of the storage area. Each use will enable the EA to adjust operational levels to maximise the benefits of the scheme. Once flood water from the River Yarrow is removed from the village, all partners will be able to see residual flood risk issues that were previously masked as multiple flood sources. Study funds allocated by Defra – need to be drawn down – progress to be reported outside of this technical report.	Closed

# MSFW312: Cuerden (Nell Lane Area)

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Capital drainage works completed before the event to repair culvert and install new gullies. Sand bags provided during 26/12/15. Reactive gully cleaning completed January, April and September 16 with root cutting of the culvert under Wigan Road completed in September also. CCTV survey complete August 16 which revealed the root infestation. Jetting crew also attended in September 16 to survey the drainage system further north along Wigan Road to explore the options of a new pipe to bifurcate flows. The survey has revealed the presence of a further system which gullies connect and eventually outfalls into the watercourse crossing Wigan Road approximately 200m north of Nell Lane.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	LCC HIGHWAYS - New manhole to be installed on the system behind first gully north of Nell Lane to fully establish system. Once system extents are known and the condition of the carrier drain, options to be invetsigated of either new pipe across Wigan Road or new pipe along verge on the east side of Wigan Road to first gully on this side to utilise the existing pipe crossing Wigan Road. Residents on Lydiate Lane to be contacted regarding condition of the watercourse at the rear of their properties – needs to remain clear and free of obstructions CHORLEY BOROUGH COUNCIL – supporting householder with individual property level protection.	Open

# **MSFW311: Cuerden (Parkhurst Avenue Area)**

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	Following the December 2015 flood event, all relevant risk management authorities carried out a preliminary review of any flood risk related assets, public infrastructure and/or flood defences which were likely to have been significantly impacted by the flooding. No such assets have been identified within this community.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Review need for further investigations	Further discussions will be required in order to identify whether any follow-up action is required at this location. Further discussions are expected to take place at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

#### **MSFW219: Eccleston**

18 properties are known to have suffered from internal flooding at this location on 26th December 2015. Preliminary reports indicate that the affected properties were largely impacted by Syd Brook and/or drains backing up as a result of high water levels. Reports also indicate that the River Yarrow overtopped its banks near Towngate.

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	Following the December 2015 flood event, all relevant risk management authorities carried out a preliminary review of any flood risk related assets, public infrastructure and/or flood defences which were likely to have been significantly impacted by the flooding. No such assets have been identified within this community.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	<ul> <li>EA - will conduct an Initial Assessment of flood reduction measures that could reduce flood risk, particularly from Syd Brook, in Eccleston.</li> <li>LCC HIGHWAYS - witnessed the flooding at the The Mill Race, Eccleston and this was in part due to the Yarrow River Bridge restriction.</li> <li>CHORLEY BOROUGH COUNCIL - Liaison with community and work with parish council to set up a sandbag store. Supporting a number of householders with property level protection. Also supporting property level protection at the Church and Parish Centre.</li> </ul>	Open
LCC as LLFA	Detailed drainage study planned for Eccleston, to map all drainage systems and identify any cost- effective improvements.	Defra funding provisionally available in 2017/18; investigations to be programmed with other Chorley villages.	Open

# MSFW235: Euxton

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS – investigated ditch culverted by field access & achieved agreement from landowner to remove obstruction to flows.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Review need for further investigations	Further discussions will be required in order to identify whether any follow-up action is required at this location. Further discussions are expected to take place at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW212: Great Knowley

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	EA - 3 properties flooded as a result of 'normal spillway operation' from Heapey Reservoir. That means the reservoir was operating as per its original design (the reservoir pre- dates the housing). 2 other properties were flooded as a result of highway run-off and another as a result of the high discharge in Black Brook. LCC HIGHWAYS - Gullies cleaned January and February 2016 on Kittiwake Road with no problems reported back.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Review need for further investigations	Further discussions will be required in order to identify whether any follow-up action is required at this location. Further discussions are expected to take place at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

## MSFW204: Heskin

1 property is known to have suffered from internal flooding at this location on 26th December 2015. Preliminary reports indicate that the primary source of the flooding was Syd Brook which overtopped its banks.

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	Following the December 2015 flood event, all relevant risk management authorities carried out a preliminary review of any flood risk related assets, public infrastructure and/or flood defences which were likely to have been significantly impacted by the flooding. No such assets have been identified within this community.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	EA - The EA will be conducting an Initial Assessment of flood reduction measures that could reduce flood risk, particularly from Syd Brook, in Eccleston.	Open

# MSFW329: Houghton

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	Following the December 2015 flood event, all relevant risk management authorities carried out a preliminary review of any flood risk related assets, public infrastructure and/or flood defences which were likely to have been significantly impacted by the flooding. No such assets have been identified within this community.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	CHORLEY BC – supporting householder with individual property level protection. LCC HIGHWAYS – investigating scope for further investigation from manhole in highway and into culvert, and considering whether a capacity issue/blockage and identify wherther further improvements would be cost effective.	Open

# MSFW280: Limbrick

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	<ul> <li>EA – support and information to householder.</li> <li>LCC Highways - gully cleaning on Long Lane. Road closure during flood event and bridge damage.</li> <li>Chorley BC – support to individual householder regarding repairs and property level protection.</li> </ul>	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Review need for further investigations	Further discussions will be required in order to identify whether any follow-up action is required at this location. Further discussions are expected to take place at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW341: Lower Copthurst

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	Following the December 2015 flood event, all relevant risk management authorities carried out a preliminary review of any flood risk related assets, public infrastructure and/or flood defences which were likely to have been significantly impacted by the flooding. No such assets have been identified within this community.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Review need for further investigations	Further discussions will be required in order to identify whether any follow-up action is required at this location. Further discussions are expected to take place at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW347: Rivington

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - gully cleaning in Rivington since the floods, including work to some gullies on Roscow Lowe Brow to improve access and flow.	Open
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Review need for further investigations	Further discussions will be required in order to identify whether any follow-up action is required at this location. Further discussions are expected to take place at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW344: Ulnes Walton (Fieldsway Area)

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	EA - Flooding occurred from Holker Brook. High river levels within the River Lostock prevented Holker Brook from discharging. EA have visited the site and provided information and support to affected properties.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	EA - During 2017, the EA will be undertaking a review of flood risk issues in the River Lostock catchment and will assess potential options to reduce flood risk. The flood events at this location will be considered as part of this review. LCC HIGHWAYS - Drainage investigation and works to install new manholes, clean ditiches and clean culverts. A culvert was found to run through Fieldsway which may have surcharged on Boxing Day causing the problems reported. The works completed will help water flow to the west side of Ulnes Walton Lane. Monitor the location following the works completed to see if the issues have been resolved – funding already available if more work required at a future date. CHORLEY BOROUGH COUNCIL – support to householders regarding property level protection.	Open

# MSFW345: Ulnes Walton (Southport Road Area)

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Reports of flooding in the valley point of the road. Cleaned gullies on Southport Road on a number of occasions since the flood with repair to a blockage on the highway system.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	LCC HIGHWAYS – considering benefitd of additional survey of the culvert to check on current condition. CHORLEY BOROUGH COUNCIL – support to individual householder regarding property level protection.	Open

# MSFW309: Wheelton

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	Following the December 2015 flood event, all relevant risk management authorities carried out a preliminary review of any flood risk related assets, public infrastructure and/or flood defences which were likely to have been significantly impacted by the flooding. No such assets have been identified within this community.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Review need for further investigations	Further discussions will be required in order to identify whether any follow-up action is required at this location. Further discussions are expected to take place at the next partnership meeting, which has been scheduled for 1 March. Following these discussions, relevant risk management authorities will then be better placed to determine whether any follow-up action is required at this location. The Lead Local Flood Authority anticipates that further updates regarding this will be made available within the next update which is due to be published in June 2017.	Open

# MSFW315: Whittle le woods (Carr Brook Area)

6 properties are known to have suffered from internal flooding at this location on 26th December 2015. Preliminary reports indicate that the primary source of the flooding was Carr Brook which overtopped its banks.

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC Highways – inspected prior to flood event, and cleaned gullies 19 January 2016.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	EA - During high flow, the culvert underneath Carr Brook Close is unable to convey the full flow. The water level builds up in the upstream length. In this instance, as in June 2012, the backed-up water eventually overtopped the right bank causing flooding. Since 2012 the EA and Chorley Council have looked into measures to reduce risk. The EA modelled the benefits and consequences of building a flood barrier to protect the 6 properties. Unfortunately modelling showed that although the properties could be protected, there was an increased flood risk at Swansey Mill as a result, making this option untenable. The EA will continue to support Chorley Council to pursue property level protection for all the affected properties. Chorley Borough Council - working with EA and individual householders to find a community flood wall solution (with funding through pooled grants for 6 properties).	Open
LCC as LLFA	Detailed drainage study planned for Whittle-le- Woods, to map all drainage systems and identify any cost-effective improvements.	Defra funding provisionally available in 2017/18; investigations to be programmed with other Chorley villages.	Open

# MSFW313: Whittle le Woods (Johnson's Hillock Area)

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Jetting of culverts and cleaning of gullies on Birchin Lane/Copthurst Lane January/February 2016.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	Since the December 2015 flood event, all relevant risk management authorities have met to discuss the primary flood mechanisms and the impacts that this has had on the community. The Lead Local Flood Authority encourages any concerned residents to consider installing property level flood resilience measures in order to further reduce the risk of flood water entering their property in the future. Further advice regarding this can be found via the following link: www.lancashire.gov.uk/flooding	Closed
LCC as LLFA	Detailed drainage study planned for Whittle-le- Woods, to map all drainage systems and identify any cost-effective improvements.	Defra funding provisionally available in 2017/18; investigations to be programmed with other Chorley villages.	Open

# MSFW314: Whittle le woods (Town Lane Area)

Who	What is needed?	What has been done and/or what will be done?	Status
All RMAs	Following a flood event, any flood risk related assets, public infrastructure and/or flood defences which are likely to have been significantly impacted by the flooding, should be inspected and returned to full operation by the relevant risk management authorities and riparian landowner(s).	LCC HIGHWAYS - Installed a new 1200mm diameter culvert to replace old, installed larger catchment gullies. Cleaned gullies and completed survey of drainage system near Pub, new flap valves installed on outfalls from highway gullies, culvert down Town Lane de-silted.	Complete
All RMAs	Following a flood event, all risk management authorities should work together to identify common methods for managing flood risk in the affected communities. They should also work together to identify opportunities for quick wins; site specific investigations; studies and/or major investment projects which may be required in response to the flood event. Where there is scope for future works, this should be commenced at the earliest opportunity.	EA - Have met with their representatives and other flood risk partners to discuss the flood risk issues and potential alleviation options. Partner organisations will continue to work with the Flood Action Group. The EA will look into a community-led flood warning service and, operationally, will continue to inspect and carry out necessary maintenance on the River Lostock. CHORLEY BC - In process setting up a community sandbag and equipment store at Low Mill.	Open

# 5. Useful links

#### Lancashire and Blackpool Flood Risk Management strategy:

http://www.lancashire.gov.uk/council/strategies-policies-plans/environmental/lancashire-andblackpool-flood-risk-management-strategy.aspx

#### Lancashire County Council Flood Investigation Policy:

http://www.lancashire.gov.uk/media/392349/Flood-Investigation-Policy.pdf

#### Lancashire County Council Ordinary Watercourse Consenting & Enforcement Policy:

http://www.lancashire.gov.uk/media/392352/Flood-Risk-Management-Consenting-and-Enforcement-Policy.pdf