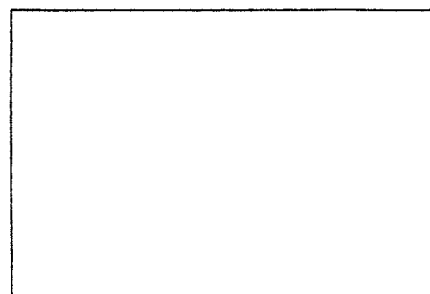


Calderdale MBC

**Wards Affected:
All**

**Council meeting
as a Committee**

27 April 2016



Report of the Calderdale Flood Commission

1. Issue

1.1 This report outlines progress to date of the Calderdale Flood Commission and proposes next actions. It also makes some recommendations for immediate action in advance of the final report.

2. Need for a decision

2.1 Cabinet requested that an initial report be produced within three months.

3. Recommendation

It be recommended to Council that

3.1 Progress made to date by the Flood Commission be noted and that a full and final report of the Commission be presented to a meeting of Council to be held on 20 July 2016.

3.2 A review of the system of alerting residents and businesses to take evasive action based on intelligence received be undertaken. This includes escalation levels and types of alerts e.g. sirens.

3.3 There is further recruitment of flood wardens, along with the rolling out of flood groups down the Calder valley to include Sowerby Bridge, Brighouse and Elland.

3.4 There is a review of the emergency command structure to ensure it is fit for purpose and that Flood Wardens know what this involves locally

3.5 A flood emergency practice day be held annually in each locality, probably in autumn.

3.6 Water companies be encouraged to manage reservoir levels during times of flood risk based on intelligence provided with a priority of flood alleviation.

3.7 Action is taken to ensure that those in high risk areas are encouraged to prepare personal emergency plans and to have flood boxes and remove all important possessions to a safe place.

- 3.8 A laminated card containing all vital information (including vital health and safety advice), key contact numbers including the flood groups, key locations (central flood hubs, local emergency flood stores, etc) to be distributed to households in flood risk areas.
- 3.9 A review of flood hubs and containers is undertaken to ensure they are suitably sited and equipped.

4. Background and/or details

- 4.1 Following the devastating floods of Boxing Day, 2015, the Leader of Council brought a paper to Cabinet on January 11th, 2016. The paper proposed the setting up of a Flood Commission *“to consider the causes, impact of and response to the Boxing Day floods in Calderdale, and to make recommendations to Government, Calderdale Council, the Environment Agency, the community, and other public and private bodies about the lessons to be learnt and future actions required to reduce the risks of similar flooding and to reduce the impact of any flooding that occurs.*
- 4.2 *The Commission will also consider the emergency response to the Boxing Day floods and whether any recommendations should be made for the emergency planning and response system.*
- 4.3 *The commission will consist of seven members appointed on a 3-3-1 basis. It will be chaired by an Independent Chair.*
- 4.4 *The commission will invite written submissions from local residents, community groups, businesses, and key agencies. Based on those submissions, it may invite any or all of those making submissions to attend and discuss their views.”*
- 4.5 The Commission was asked to produce an initial report within 3 months.
- 4.6 Following a recruitment process, Paul Cobbing, Chief Executive of the National Flood Forum was appointed as the Independent Chair of the Commission
- 4.7 The work was divided into a number of themes. These were:
- Emergency Preparedness and Response
 - A Place Where People Want to Live
 - The Economy
 - Physical Infrastructure
 - Upland and Countryside Management
 - National and Regional Policy
- 4.8 Five public meetings were held in localities throughout Calderdale, with each meeting focussing on one of the themes. In total, around 250 people attended these meetings. Their willingness to engage and to relate their experiences, some very traumatic, is greatly appreciated by the Commissioners.
- 4.9 We heard from many organisations with roles and responsibilities in relation to elements of flood response at the meetings, and we'd like to thank them for their help in contributing to the work of the Commission. These included Northern Powergrid, the Community Foundation for Calderdale, West Yorkshire Police, Yorkshire Water, Environment Agency, Canal and River Trust, Aire and Calder Catchment Partnership, South Pennines Local Nature Partnership and Council officers from a variety of teams including Housing, Planning, Public

Health, Business Support, Community Safety, Highways and Countryside and Woodlands.

- 4.10 Additionally, we have received many emails and submissions from individuals and organisations. Some offered suggestions for ways forward; others gave detailed information about the event itself.
- 4.11 We also had a meeting in Westminster with Rory Stewart MP, Minister from the Department for Environment, Food & Rural Affairs (DEFRA), along with civil servants from both DEFRA and the Department for Communities and Local Government (DCLG) who had responsibilities for various elements of flood response and policy formulation. Subsequently, civil servants from DCLG met with us in Halifax to talk specifically about the Property Level Resilience grants.
- 4.12 The Chair has had a number of additional meetings with individuals.
- 4.13 We have also looked at existing research and information from other areas.
- 4.14 We held a further public meeting to test some of our initial findings.
- 4.15 There is further work to do. We have identified a number of issues which we need to look at in detail. These include important areas such as climate change, health and transport. There are also individuals and groups we wish to speak with and hear from.
- 4.16 We need to further review all of the evidence we've received so far and weigh it in terms of relevance. There are also pieces of work going on which we need to look at, such as the Council's Section 19 flood investigation report, which is currently being prepared. A Section 19 Investigation is a statutory requirement for Lead Local Flood Authorities (LLFA) under the Flood and Water Management Act (FWMA, 2010). On becoming aware of a flood in its area, the LLFA (in this case Calderdale Council) must, to the extent that it considers it necessary or appropriate, investigate:
- Which Risk Management Authorities (RMAs) have relevant flood risk management functions; and
 - Whether each of those RMAs has exercised, or is proposing to exercise, those functions in response to the flood.
- 4.17 For the reasons outlined in 4.15 and 4.16 above, and in line with the original Cabinet request, this report is an initial one. It outlines some findings to date and requests that Council agree to a full and final report coming for consideration in the very near future.
- 4.18 The findings to date are presented below in the themes mentioned in 4.7 above, but there are also some overall findings drawn from evidence from multiple sources. These are:
- NOW is the time for a step-change
 - There needs to be a vision

- The most important single fact that should never be forgotten is that the Calder Valley is somewhere that people choose to live and work and call “Home”, and this place matters to them
- Flood risk management has had insufficient focus, funding and management over a number of years
- Systems of governance and accountability have been insufficient to enable people to feel confident that progress is being made and that they are safe
- There has been a lack of a sufficiently strategic, systems based approach
- There has been a lack of maintenance of key components
- The role of different sectors in flood risk management has not always been properly understood

Emergency Preparedness and Response

- 4.19 The most important fact in relation to the flood is that there were no fatalities. One of our senior police officers, with almost 30 years of service, said that he’d never experienced anything as challenging as this before. The fact that it was a bank holiday and so resources were reduced, as well as the fact that there were calls for those resources from areas outside Calderdale, makes the efforts of those involved even more praiseworthy. Many people went beyond the call of duty. This includes members of the emergency services, local authority, military, search and rescue teams, flood groups and wardens and the very many members of the public who rose to the occasion.
- 4.20 However, we also have to accept that we were lucky. Occurring on Boxing Day may have meant that resources were reduced, but it also meant that the schools which were flooded were empty, and that many people were away for Christmas.
- 4.21 The Commission will continue to examine evidence relating to the emergency period and the recovery period, including some of the areas of inquiry outlined in 4.15 and 4.16 above. We also recognise the work done so far, including the setting up of a Strategic Recovery Group which met weekly in the first months post-flood to coordinate action, and the creation of the Strategic Integrated Recovery Plan (<http://www.calderdale.gov.uk/environment/flooding/calderdalefloodingsingleintegratedrecoveryplan.html>), which continues to operate.
- 4.22 A number of debriefs have been conducted by various organisations and partnerships and we will look at these in detail as part our work leading up to our final report.
- 4.23 However, based on what we have heard so far, we wish to make some observations and also some recommendations for immediate action as outlined in section 3 of this report.
- 4.24 We heard from a number of people that the levels and breadth of warnings before the emergency were inadequate. This included a number of people telling us that due to the topography of the upper valley there are “blind spots” where the siren warnings can’t be heard. People also suggested that the siren warnings be more frequent, and that there be a more understandable way of communicating risk. We understand work is ongoing to address this issue.

- 4.25 In some localities it was difficult for Authorities to provide clear and visible leadership in the immediate aftermath of the flood. The main road was closed and power and, to an extent, communication systems stopped working. However, individuals and communities demonstrated extraordinary leadership.
- 4.26 The widespread severe impact across West Yorkshire, and the timing of the flood, meant it took some days for command structures to become fully developed and effective.
- 4.27 There was a variable level of preparedness and resilience by utilities (power, communications etc) and agencies. It is not just the assets that are important, but the linkages between them, particularly where they use shared infrastructure, such as bridges.
- 4.28 Communication has been constantly cited by people as a major issue throughout our evidence-gathering to date. This is not just the physical ability to use infrastructure to get messages out, but the lack of clear communication. We heard many times that people just didn't know what was happening. It has to be recognised that the emergency services were rightly focussed on preserving life, but there needs to be a review of how information can be delivered in a timely and concise way to people. Social media played an important part this time, and can perhaps be expanded further.
- 4.29 Although the flood groups and flood wardens established in some communities post-2012 worked well, there are not enough of them. Support is needed to establish groups in Sowerby Bridge, Elland and Brighouse, and to recruit more flood wardens throughout the valley.
- 4.30 Also following on from the experiences of 2012, flood containers were set up. Some of them worked well, others need to be better sited or better equipped and there need to be more of them. Flood hubs also need to be well equipped and accessible.
- 4.31 Many homes and business had put flood resistance measures in place after 2012. Some worked well. Others were simply overwhelmed by the floods this time. It is important to learn what works well and what doesn't.
- 4.32 A further action in the wake of 2012 was that people should prepare personal emergency plans for what to do in the event of a flood. We don't believe this was sufficiently widespread and needs further support and encouragement, as does the provision of flood boxes in which households can keep important documents and possessions, which can then be easily protected in the event of a flood.
- 4.33 Central Government provided broad guidance to Local Authorities alongside financial provision for homes and businesses affected by the flood. This allowed Local Authorities some room to develop and evolve locally relevant policy facilitating the deployment of aid and create a model which would continue to deliver should there be a need for future replication.
- 4.34 The Property Level Resilience grant has been something which people have struggled with, partly because of the level of detail required and partly because of the availability of the required professionals. We recognise this grant has

evolved over time, and also that some government resource has been offered to assist.

- 4.35 Health is an area which the Commission wish to work further on. The traumatic impact of flooding on the emotional wellbeing of people must be recognised as being important and with an ongoing need for support. We also wish to look further at health authority responses both on the day and subsequently, and also public health information and provision during a flood event. This will include health involvement in emergency planning.
- 4.36 Special mention must be made of the Community Foundation for Calderdale, whose incredible fundraising efforts saw over £3million donated, and grants paid out to people in need in the immediate post-flood period.
- 4.37 Likewise, council staff worked long hours helping with the recovery process and getting more grants to people.

A place where people want to live

- 4.38 Calderdale has many diverse and vibrant communities. For them to continue to thrive, residents have to be assured that it is somewhere they can live safely and securely. Many of the factors which will help make this happen are covered in other sections of this report, such as flood alleviation measures, insurance, helping our businesses, upland management etc.
- 4.39 With over 2200 homes and 1600 businesses affected, Calderdale has had the largest flooding impact on any local authority in relation to its size and population.
- 4.40 There is a need to create a sustainable strategy for the valley as a whole, and the individual settlements within it. People want to see a sense of direction and a viable future for the place where they live and work.
- 4.41 Communities have shown a willingness to have discussions about how they feel their local area may need to transform to mitigate against further flooding in the future.

The Economy

4.42 The impact of the flooding on the economy of Calderdale is large and potentially long-lasting. A study has been undertaken by the University of Leeds, Upper Calder Valley Renaissance and Calderdale Council and published earlier this month. The Commission needs to study the report further and follow up on certain elements in more detail; however, it identifies the following main impacts:

- Over 1600 businesses affected by flooding
- Nearly £47 million losses to the local economy so far
- For every £1 reported in direct losses, another £0.6 on average was lost indirectly throughout the regional economy
- The total economic impact to the Calderdale and Kirklees regional economy amounted to a total of approximately £170 million
- 45% of flooded premises suffered structural damage, 75% of flooded businesses lost stock, 46% of flooded businesses lost office equipment

- Businesses with more than 20 employees experienced higher losses but for businesses with less than 4 employees the losses were twice as costly relative to their income.
- Employees have been laid off and more than a hundred jobs are at risk in the next 3 months.
- It is taking double the amount of time to recover compared with the 2012 floods, and businesses experienced 1.35 times more damage to their businesses and the losses almost doubled.
- Hundreds of businesses will become uninsurable

4.43 The vast majority of Calderdale businesses are small and medium sized enterprises (SMEs), many try to use local suppliers (the report commissioned by Calderdale Council and DEFRA after the 2012 floods, "Impact of flooding and flood risk on community economic resilience in the Upper Calder Valley" suggests this may have increased after those incidents), and many of their employees also live and spend locally. These factors help to create the vibrant communities that exist in Calderdale, but they also mean that the impact of flooding is felt even more acutely.

4.44 The combination of homes and businesses both being flooded in a local area leads to the possibility of unintended but selective abandonment.

4.45 The introduction of Flood:Re is welcomed for the insurance opportunity it creates for many homeowners. However, it brings into stark contrast the lack of such a scheme for SMEs, and the plight they face in trying to find adequate cover. We have heard many accounts of businesses being unable to find insurance, or being offered insurance with such high premiums and/or excesses that it is financially not worth their while taking it up. Community Foundation for Calderdale has launched an innovative scheme called Flood Save, which will match fund regular savings made by households and SMEs up to a maximum of £1,000. This will be very helpful but will not be a replacement for adequate insurance cover.

4.46 The lack of a solution to providing adequate or indeed any insurance cover for small businesses threatens not just those companies but the towns and villages where they are based.

4.47 The impact of the floods and ongoing risk of further flooding combined with lack of reasonable insurance cover threatens the viability of some businesses in their current locations.

4.48 The support provided to assist affected businesses in the short-term, such as business rate holidays and recovery and resilience grants, is welcome. However, continuing support is needed for businesses in Calderdale as they struggle to recover to pre-flood trading levels.

4.49 A further effect of the impact on the economy will be felt by the council. The potential loss of business rates is a threat to the council's ability to deliver some services, particularly given the changes to funding mechanisms over the next four years.

Physical Infrastructure

- 4.50 The floods caused severe damage to the physical infrastructure of Calderdale. By this we mean, amongst other things, roads, bridges, railways, canals, drains, power supplies and communications. Transport infrastructure is a particular issue in the Calder Valley. As it often carries electricity, water, gas and telephone communications, the consequences of disruption can be severe.
- 4.51 Some of the communities of Calderdale are concerned that little progress appears to have been made in reducing flood risk since 2012 and that their concerns are not being listened to and acted on. That said, those communities which have benefitted from alleviation works in the interim seem to feel that they have worked for their locality. Working with the active participation of communities needs to be central to all work streams. We feel that planned activities have not always been communicated effectively. This is a missed opportunity. The communities of Calderdale have great resilience and resourcefulness, but need to see that matched by determination and action from all partners and agencies.
- 4.52 We acknowledge the work undertaken by key agencies and infrastructure providers in the period since Boxing Day in repairing and, in some cases, upgrading or relocating assets. We will continue to look at this area.
- 4.53 Any solution must involve the full range of risk management techniques in a systems based approach, as no one solution will address the problems. This should be based upon the concept of managing water throughout the Calder catchment, understanding the water cycle and starting at the point the rain falls. It should include a combination of traditional engineering and natural flood risk management solutions, management and maintenance of watercourses, drainage and assets, property based approaches and community initiatives, as part of a menu of options. Solutions are required urgently, but there is a recognition that it will take many years to implement all measures.
- 4.54 Ongoing maintenance is a recurring issue raised by people and one which needs to be acknowledged. It needs to be properly funded and strategically managed. It also needs to tap into community activity, skills and knowledge.
- 4.55 Combined sewage and surface water drains are a major issue of concern to residents which caused added distress in the Boxing Day floods. Any solution to this requires significant capital investment and the cooperation of OFWAT.

Upland and Countryside Management

- 4.56 The issue of upland and countryside management is probably the most contentious one. There are many different ideas and opinions. What is very clear is that managing what happens to water when it falls on upland areas is an important part of managing flood risk in Calderdale and the Calder catchment.
- 4.57 The announcement that the Environment Agency would be charged with producing a Catchment Plan by the end of October is welcomed, but further detail is needed on how this will be produced.

- 4.58 From the meetings we have held, it is clear that there is a significant appetite amongst residents to adopt catchment-based approaches, but there is also a need to see action as soon as possible. Furthermore, the community needs to be involved in the development of such approaches. Similarly, engagement with landowners is important to ensure the success of an overall plan. We have heard from some upland landowners and will be speaking with others.
- 4.59 There are a range of tools under the banner of Natural Flood Risk Management that offer opportunities to reduce flood risk. These include managing land drainage, water storage, tree planting, moorland restoration, agricultural practice, especially in upland and moorland areas.
- 4.60 However, it is difficult to quantify the benefits of Natural Flood Risk Management and Community approaches to managing risk, and consequently there are difficulties in accessing funding. We *believe* these approaches have worked elsewhere, and *think* they would be effective here, but work needs to be done to develop the evidence base.
- 4.61 The current cost benefit analysis-based funding mechanisms such as Grant in Aid do not, in our view, support the move to a catchment based approach including Natural Flood Risk Management and community participation, and actually work against it and in favour of a traditional hard engineering approach.
- 4.62 We recognise that there is work already underway regarding upland management, and particularly welcomed the evidence we heard from Yorkshire Water and the South Pennines Local Nature Partnership in this regard. We also recognise the work undertaken by community groups such as Treesponsibility.
- 4.63 There are, in fact, many different organisations and groupings with views and undertaking projects. These need to be aligned to ensure that they are all working in a coordinated way towards a common vision.
- 4.64 Whilst we understand that it will only contribute a limited amount to upland water attenuation, and that there are potential knock-on effects which have to be considered, we feel there is a need for water companies to manage water levels in reservoirs to contribute to flood risk management in each catchment. There is currently no duty upon them to do this.
- 4.65 There is a lack of formalised knowledge about many of the rural and urban drainage systems, but some of that knowledge is still held with individuals and needs to be captured. We heard many examples of this, often in specific local areas.
- 4.66 There are still some issues we need to do more work on. We agree with the view of Calderdale Friends of the Earth that there needs to be more evidence about the causal relationship between what happened up the valley and the effect at the bottom. There is also work to be done on better understanding the effects of climate change on flooding, both its frequency and its severity. This is vitally important because it informs future flood resistance planning. Estimates of the impact vary and the Commission would like to hear more evidence.

National and Regional Policy

- 4.67 We welcome the additional funding provided by the Government, along with the £3million agreed by Calderdale Council agreed at Budget Council. We also welcome the establishment of the Calderdale Flood Partnership, one of five such in the country. This is a welcome initiative for taking forward many of the flood risk management solutions in a coordinated way. However, further detail is needed on how it will work with existing structures and take into account the final findings and recommendations of this Commission.
- 4.68 We have looked at governance structures, but need to do further work on this. Whilst partners have powers to ensure actions are taken, there are different governance models such as Rivers Authorities or Internal Drainage Boards which may be able to use these powers in a different, more effective way.
- 4.69 We are also conscious that structures are focussed, understandably, on issues relating directly to flooding. But we have heard throughout our work the importance of also taking into account other factors such as economic and health impacts and feel that these need to be part of a holistic approach.
- 4.70 Whatever the governance arrangements are going forward, it is important that they are not overly complex and that there are clear lines of responsibility and accountability.
- 4.71 The River Calder affects a bigger area than the borough of Calderdale. Many of the solutions will also require coordinated action of other organisations outside Calderdale but relevant to the Calder catchment, such as other local authorities, the Local Enterprise Partnership and West Yorkshire Combined Authority.
- 4.72 There are a number of national policy issues which we believe should be reviewed to take into account the very different nature of flood-prone areas. These include:
- Current sustainable drainage (SuDS) regulations and practice
 - National design standards
 - The timescale for adoption of a Local Plan, which we feel creates a risk in the context of wider plans based on catchment-based approaches

5. Options considered

- 5.1 Part of the remit of the Flood Commission is to consider and evaluate all options in relation to flood alleviation, resistance, resilience and recovery.

6. Consultation

- 6.1 As mentioned in part 4 of this report, the Commission has consulted widely and will continue to do so.

7. Financial implications

7.1 There are financial implications within all aspects of this report. Further detail will be included in the final report

8. Environment and Health implications

8.1 There are measures within this report designed to improve both environment and health outcomes for the communities of Calderdale

9. Conclusion

9.1 This report represents the initial findings of the Flood Commission. A lot of work has been undertaken and much evidence heard, but we recognise that there is more work to do. This must be done effectively and efficiently and within the timescale suggested.

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The documents used in the preparation of this report are:

- 1.
- 2.
- 3.

The documents are available for inspection at: