Calderdale
Flood Commission

Final Report

July 2016

Introduction

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.”

We brought out an Interim Report in April which contained findings and identified a number of “quick win” recommendations. The report before you now is the culmination of the work of the Flood Commission. Over the last six months we’ve met, spoken with and listened to many people about the floods, their impact and what can be done to protect people better in the future. We’ve heard lots of ideas and opinions, occasionally contradictory, and sometimes people disagreed with each other. But the common thread throughout has been the desire of everyone to make sure that the Calder Valley never again suffers the way it has since Boxing Day.

The report sets out a number of recommendations, arranged in themes. Some of the recommendations are made to Government and national agencies, some to the Council and its partners, locally and regionally, and some are intended to help people individually. We realise that not everyone will agree with all of the recommendations. We know that for every person or organisation who feels that a recommendation has been too strongly worded there’ll be others who feel it hasn’t gone far enough.

Some of our recommendations will be quick and straightforward to implement. Others will require changes to legislation or will take many years to fulfil their potential. In the meantime the risk of flooding remains.

Flooding is no stranger to the Calder Valley. Indeed, the abundance of water and its potential to foster economic growth is writ large in our history, as are the consequences when too much flows too quickly. But now, due to climate change, the threat of even more severe and more frequent flood events grows greater every year.

So solutions must not just tackle risk as it exists now; they must take into account year-on-year increased risk due to something which is a global problem and beyond the control of the people of Calderdale. We can and must try to lead by example, though. We can do this not just by ensuring our defences are future-proofed, but by reducing our impact on the environment and reducing our carbon emissions**.**

Reducing flood risk in the Calder Valley does not begin or end with this report, but we hope and believe that the recommendations of the Flood Commission will contribute significantly to improving the lives of the people who live here.

Foreword from the Chair

The flooding in Calderdale on Boxing Day was terrible, on a scale not previously seen by many, the latest in a list of incidents going back decades. The consequences for people, businesses and communities were horrific. Flooding will happen again, whatever we do, and incidents are projected to get worse due to changing weather patterns, climate change, development, ageing infrastructure and changes in land use. So we need to act now, both to deal with the immediate issues, but also to deal with future risk. There are actions that can be undertaken immediately; many others will take years to bring to completion. That makes tackling flood risk all the more urgent.

1. **Dealing with flood risk and managing flood incidents and their consequences must be a very high priority for Calderdale, including Calderdale MBC and its partners, and be reflected in all relevant strategic documents**

2. **No matter whatever the weather, our overriding aim is to make sure that the events we experienced on Boxing Day 2015 will never impact our communities and businesses in the same way again.**

Principles

1. The Council has a target to reduce carbon emissions by 40% by 2020. It needs to lead by example on its own property and working with the community
2. Water will be managed on a catchment and a water cycle basis from the heads of the valleys through to the River Ouse, taking account of the needs for water supply and the risk of drought as well as flooding.
3. Flood risk management is complex and requires the involvement of many different organisations who might not necessarily see this as part of their role
4. Future flood risk from all sources of flooding and its impacts needs to be addressed, not just to maintain current risk levels. To do this a mosaic of interventions is required, based on evidence and a clear plan of action.
5. Communities, businesses and land managers all have a vested interest, as well as useful knowledge, skills and capacity. They will be fully involved in the development and implementation of the full range of projects
6. Flood risk can never be eliminated, but it can be reduced and its impacts lessened through good planning, preparation and practice by all institutions, businesses, communities and individuals. We need to learn to live with the risk of flooding, as well as reduce it.

This summary report contains the recommendations of the Calderdale Flood Commission. All background evidence which was gathered and led to these recommendations will be published online.

Paul Cobbing, Chair of the Calderdale Flood Commission

The members of the Calderdale Flood Commission were:

Paul Cobbing (Independent Chair)

Councillor Andrew Tagg

Councillor Barry Collins

Councillor James Baker (from June 2016)

Councillor Janet Battye (until May 2016)

Councillor Mike Payne

Councillor Rob Holden

Councillor Steve Sweeney

Councillor Susan Press

Communities

People, businesses and communities are those who were most affected by flooding on Boxing Day 2015 and who will have to endure the consequences. They also have the greatest vested interest in trying to ensure that flooding does not happen again.

Communities have shown enormous energy, commitment, skills and knowledge. In some places they led the response during the incident last winter. From the evidence provided it was clear that they are also feel that they are frequently not listened to and ignored. Many are demanding change, rapid progress and involvement in future flood risk management. At the other end of the spectrum are communities that are not well developed, are not particularly resilient and have suffered in the recent flooding.

Communities must feel that they have a thriving future, that the can shape it with support from agencies and organisations and that they are valued. Where communities are willing to lead, in partnership with others, they should be supported to do so.

Develop a people centred programme of support for communities in Calderdale, where people feel valued and can engage positively and effectively with other stakeholders to reduce flood risk and cope with incidents.

To support this objective we recommend the following:

1. The work of organisations should encourage flooding to be at the centre of people's way of thinking throughout the valley and translate this in to their behaviours and actions in order to reduce their risk and keep them safe during incidents.
2. All schools in the valley to raise the flood awareness of students on an annual basis and to help develop knowledge and skills on managing flood risk and keeping safe in incidents
3. Support the development of Watermark for long term investment
4. Provide support, training and information to empower people to take decisions and act as a volunteer during peacetime to help reduce flood risk within an organised framework
5. Develop a training and implementation programme for staff in the use of social media
6. Build an interface with communities, not just through Hubs, but also through a range of community channels
7. Establish trust at grass roots levels

8. Flooding should be at the centre of people's way of thinking throughout the valley and translate in to their behaviours and action in order to reduce their risk and keep them safe during incidents.
9. A programme of people centred support for communities to:
    a. Develop flood Action Groups in those settlements where they don't exist or are incipient – Sowerby Bridge, Elland, Brighouse and Copley
    b. Support the development of existing community groups to help them to develop and participate in flood risk management activities and preparing for future flood incidents, including individual and community incident plans
    c. Create a network of flood action groups that can provide peer to peer support
    d. Provide emotional and psychological support to people affected by the trauma of floods
10. Support the future development of EyeonCalderdale
11. A communication programme is developed, publicised and maintained covering all the work of the Board and the Calderdale Flood Catchment Partnership, so as to reduce the confusion around who is responsible for what, reduce the impact of misinformation and disseminate progress on the various programmes and projects.

Resilience

The floods on Boxing Day tested resilience plans to the limit. The learning from this must lead to significant improvements, so that communities know what they can expect and what they have to do.

Develop, resource and practice plans for keeping people, businesses and services safe during an incident, working with communities to ensure that these are locally relevant and effective

To support this objective we recommend the following:

1. Improve the ability of the Local Resilience Framework (LRF) to respond to incidents and test this on a regular basis
2. The LRF to develop an evidence based approach to assessing risk during incidents to inform how it deploys resources
3. Improve the ability to support communities during and following incidents by installing temporary mobile phone masts, internet access and cash points.
4. Establish a radio communication system between organisations and hubs
5. Develop plans that also take account of situations where it is not possible to get to communities in a timely fashion. Plans should also recognise that

communities will always be there. These plans should be coordinated and aim to support communities during an incident. The plans should be developed with the communities (and local representative organisations), and where appropriate led by them, using their skills and knowledge of previous events to shape what is needed. Incorporate within this linkages to Business Continuity Planning **Calderdale Council (CMBC)**

6. The Health and Wellbeing Board to be responsible for planning the public health element of future floods, working through the Community Resilience Operational Group to coordinate activity. This should include pre-flood preparations to support communities during and immediately after an incident, as well as longer term support for physical and mental health issues **CMBC Public Health**
7. Develop an annual Emergency Day where individuals, businesses and communities can practice their plans, where progress on flood risk management and incident planning can be discussed and where the success of the Calder Valley in living with floods can be celebrated. ALREADY AGREED IN THE FOLLOWING WORDS “A flood emergency practice day be held annually in each locality, probably in autumn.” **CMBC, Environment Agency (EA)**
8. 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. ALREADY AGREED
9. 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. ALREADY AGREED
10. 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. ALREADY AGREED
11. Improve communication between on-line informal and official processes of post-flood emergency help Ref 7 **CMBC**
12. Review how hubs such as the HB Town Hall can create systems for slightly more normal times the volunteer effort and continue and reignite, perhaps with a part-time paid volunteer, that bank of volunteers. Update the CMBC volunteering base Ref 7 **CMBC**
13. Consider the financial, insurance, reputational and legal risks and liabilities that Trustees face when using buildings such as Town Halls as flood hubs Ref 7 **CMBC**
14. 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. ALREADY AGREED
15. 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. ALREADY AGREED

16. A review of flood hubs and containers is undertaken to ensure they are suitably sited and equipped. ALREADY AGREED
17. Incident management plans and resilience to include a community centred approach, as well as a "Plan B" – how things can operate when resources are not sufficient to allow a full response. ALREADY AGREED
18. Further development of systems and protocols for use of social media, particularly alongside other forms of communication. These need to be locally specific and part of a Calderdale approach **CMBC**
19. Restoration of power – clear communication of when this will happen is required, in order to avoid accidents. **Northern Powergrid and CMBC**
20. Promote Flood Re, the flood risk element of household insurance for those at high risk and undertake a survey in April 2018 to establish how many people are still lacking insurance. **CMBC, EA**
21. As part of the emergency response, at the sound of the siren, for people to refrain from flushing toilets, running washing machines, etc. **CMBC**
22. Encourage Network Rail to run more stopping trains during flood incidents, particularly when roads are closed. **CMBC**.
23. Review grant processes in order to learn from and improve processes

Infrastructure

Calderdale has a very particular infrastructure due to its topography and location. 200,000 people live and work in a valley with limited transport infrastructure. Over 30,000 Calderdale residents travel outside the borough each day to work in some of the key Northern Powerhouse cities, and a further 30,000 people travel into Calderdale to work, so whilst we may not have sites of national infrastructure importance, what happens here matters. Therefore, a coordinated programme is required to ensure that the infrastructure needed for people to undertake their daily lives is as resilient as possible.

Develop a programme to ensure that the infrastructure that people depend on to lead normal lives is as resilient to flooding as possible

To support this objective we recommend the following:

1. Sharing data and coordinating action between utilities to maximise the understanding of risk, the capacity to make assets more resilient and the ability to respond, particularly in relation to vulnerable people.
2. Improve resilience of critical infrastructure. Map and maintain for critical infrastructure and their connections; in particular where connections are especially vulnerable, such as where they use assets such as bridges or are

vulnerable to landslips. Utility providers – **Northern Powergrid, Yorkshire Water, British Telecom, Northern Gas Networks**

3. Investigate measures to improve the resilience of the main highway routes in Calderdale in particular the A646 trunk route in the Upper Calder Valley. **CMBC**.
4. Encourage Network Rail to improve resilience of the Caldervale Line to flood risk. **CMBC**.

Business and the Economy

However quick and effective flood risk measures are there will still be floods and businesses will be affected. Recurring floods are likely to weaken the overall economic outlook for the communities of the Calder Valley. Therefore, measures need to be put in place to support both businesses and the economy in the coming years.

Develop a planned programme of work to support the economic viability of the Calder Valley whilst flood risk measures are put in place. This needs to be linked to the Local Plan and Neighbourhood Plans

To support this objective we recommend the following:

1. A planned programme of work should include
    a. Creation of business parks and other sites in Calderdale for businesses at high risk of flooding to move to, in order to retain businesses in the valley
    b. Accessing funding and support through the Leeds City Strategy
    c. Supporting the future development of Flood Safe for businesses
    d. Developing a project to actively promote business resilience, including incident planning, supply and demand chain management, business continuity planning and site protection.
2. Develop planned business support measures in anticipation of future flooding events Ref 5 **CMBC**
3. In order to deal with abandonment, loss of labour from the land and increased flood risk, undertake a review of the economic futures of upland areas, in particular in-bye land, with a view to developing a range of proposals for economically, socially and environmentally sustainable systems. In doing all of this we need to recognise the economic opportunities of a changing landscape**. CMBC, EA, Natural England, land managers and representative organisations, wider stakeholders**

Managing Flood Risk

We believe that there is a strong relationship between land management in upland and hillside areas and the way water runs into and through the Calder Valley. Therefore, there is an overriding need to develop, deliver and monitor a strategic catchment based plan to tackle flood risk, based upon the water cycle, that uses the full range of tools available.

Flood risk management measures include, but not exclusively, natural flood risk management tools, traditional engineering, urban and rural drainage and sewerage management, designing settlements for a low flood risk future, incident and resilience plans, insurance, business support, management of critical infrastructure and maintenance of assets.

There is both a need to act quickly to reduce risk and to plan for action that might take 10-20 years to achieve.

Develop, deliver and monitor a strategic catchment based plan to tackle flood risk, based upon the water cycle. The plan should be ambitious enough to reduce overall flood risk over time significantly, not just keep the status quo as risk rises, it should involve communities in its development and delivery and through governance arrangements should be transparent.

To ensure this moves forward with pace and purpose we make the following recommendations:

1. Develop a programme of fully costed proposals for funding to the Regional Flood and Coast Committee
2. Government funding needs to follow catchment planning that reflects the level of ambition for Calderdale
3. Develop and share Climate Change Allowances and Hazard Maps specific to Calderdale, that can be used for planning and flood risk management purposes and to help inform people about their flood risk. – **Environment Agency**
4. Develop a quantified assessment of rain and water flows in December 2015 to form the basis of future work and be made publicly available. – **Environment Agency**
5. Develop and implement a plan for natural flood risk management to enable a range of existing and future projects to work within. The challenge for land managers is that they can, over a period of years, significantly contribute to people's wellbeing by reducing flood risk, through land management practices. On in-bye areas this is about managing land so that water is retained longer, reducing the rate of water runoff and helping to direct it away

from settlements, where possible. On moorland this is about enabling sphagnum to develop and grow, retaining water and reducing the rate of run-off.

6. The plan to contain several specific elements: **Calderdale Catchment Flood Partnership**
    a. A catchment, water cycle based approach should be used
    b. Identify initial action that will produce significant results and enable existing projects to deliver effective coordinated work, such as stock fencing ghylls where there is erosion.
    c. Develop specific plans for each sub-catchment
    d. Land managers (lowland, upland and moorland) and communities from across the catchment should be involved and engaged in developing and implementing proposals
    e. Capturing existing knowledge about drainage systems and assets from the public and land managers on to a coherent, shared database in order to inform and monitor future action
    f. Use the full range of mechanisms available to manage water, including mapping and monitoring features and assets, reducing soil compaction, riparian management, vegetation management, in river management, in field drainage, ditch management, fencing off ghylls from stock to prevent erosion, tree planting, the creation of “slow the flow” features such as attenuation ponds and woody debris dams, off-line and on-line storage, as well as the management of water from fields on to and off roads.
    g. An evidence based approach should be used. At the same time, this should not stop action that can start immediately where it is clear that there will be benefits, such as stock fencing ghylls where there is erosion or maintenance where there are critical points such as bridges, culverts and river confluences.
    h. Long term management of mature and overmature woodland to generate structural diversity and ground flora, maximise leaf area and evapotranspiration
    i. Inclusion of the Upper Calder Valley Special Area of conservation in the MoorLIFE 2020 programme
    j. Investigate the role of invasive species such as Himalayan Balsam *Impatiens glandulifera* in promoting soil instability, erosion and landslips
7. Communities should be engaged at an early stage in modelling and capital works schemes to fully understand their local knowledge and incorporate issues of design and Neighbourhood Plan priorities.
    a. Put in place monitoring systems, such as soil moisture dip wells on peat and road water sensorslinked by telemetry to publicly available media, such as Watergauge, LoraWAN and EyeonCalderdale, so that both public and

organisations can see the levels of soil saturation and water levels across the catchment in real time. **CMBC, EA**

8. Create a coordinated approach to using volunteers **CMBC**
9. Develop a coordinated approach to managing surface water around each settlement so that, so far as is possible, it is shed away from populations. **CMBC, Yorkshire Water (YW)**
10. Develop mechanisms for long term management of the rural drainage infrastructure, taking account of riparian responsibilities, changing land use practices, the economics of land management. A focus on developing appropriate interventions for farmland that is no longer managed, particularly around riparian responsibilities, drainage and the opportunities for reducing flood risk. **EA, NE, CMBC**
11. Consider the introduction of *banksmen* and *lengthsmen* to improve the maintenance of assets, riparian management and upland (and lowland) road and lane ditches by all those responsible for the maintenance of assets. **EA, CMBC, Landowners**
12. Review the interconnectedness of the two canals, roads, railway and the river with proposals on how this can be mitigated in the future **EA, Canal & River Trust, CMBC**
13. Develop a better understanding of flood risk throughout the valley, focussing particularly on the levels of risk, better recording of incidents to identify hotspots and using local knowledge to make better use of modelled data on the interaction of different sources of flooding.
14. Complete, and make publicly available, a flood risk asset database for the whole of Calderdale and then use it to monitor and manage the condition of assets.
15. Develop a publicly promoted plan for river maintenance, involving community expertise in its development
16. Identify flood storage areas along the river valley, such as mill ponds, for inclusion in the Local Plan as protected against development
17. Consider the practice of annually emptying the river silt traps at Todmorden
18. Consider reducing water levels in canals prior to heavy rain events, together with ensuring that mud banks are cleared
19. Bunding the sewage treatment works in the upper valley
20. Complete Surface Water Management Plans for outstanding areas – Hebden Bridge, Ripponden, Halifax, Elland and Brighouse
21. To develop proposals, with partners, for management of the sewerage and drainage system in the urban areas of the Calder Valley to significantly reduce the risk of flooding through the network. Proposals should form part of the PR19 and AMP7 submission **YW**
22. To investigate what is practicably possible in the way of managing reservoir water levels, both over a period of time on a seasonal basis and as short term interventions. ALREADY AGREED. **YW**

23. Formally investigate of how reservoir water levels, in a variety of ownerships, can be best managed across the Calder Valley in a coordinated way to minimise flood risk. We note the proposals of the Cumbria Catchment Plan in relation to Thirlmere in this regard**. YW**
24. Review of management of contour drains feeding reservoirs with a view to slowing down run-off **YW**

Resources and funding

Although considerable funds have been made available following the floods on Boxing Day, this will inevitably be insufficient. There needs to be significant investment in flood risk management in Calderdale. The current increased level of funding is welcomed but must be seen as only a first step. We don't know yet what the true overall costs will be, but require commitment from funders to meet the needs as they emerge. This investment is likely to be necessary for a number of years.

In addition, the capacity and capability of staff in key organisations and communities needs to be developed to meet the scale of the challenge ahead. Without this, attempts to manage flood risk will inevitably fail, however ambitious they are.

Build the financial and resource capacity in key organisations and communities to deliver the level of ambition required to manage flood risk and respond to incidents.

To support this objective we recommend the following:

1. Access additional funding, particularly where a multi benefit approach to schemes is taken and using some of the funding above to lever in additional sums, such as:
    - LEP Growth Deal Round 3
    - European funding such as Interreg and LIFE, if available
    - Big Lottery, Heritage Lottery, etc.
2. The draft Local Flood Risk Management Strategy has identified the resources required by the Council as the Lead Local Flood Authority to deliver the strategy:

- Flood Risk Manager
- Four flood risk drainage engineers
- Flood risk asset manager
- At least two civil engineers
- Strategic partnership manager
- Sustainable Land management officer

A project should be undertaken identify where additional capacity and capability is required in partners and stakeholders, including public health, resilience, planning, communities, and how this might be resourced.

Planning

Settlements throughout the valley should be designed to live with the likely flood risk 30 years from now, including programmes with full community participation to reshape settlements to reduce risk and create new opportunities for thriving communities for the future.

We must use planning in a strategic way to reduce flooding and create thriving communities. As part of this we must establish and implement a robust Local Plan and Neighbourhood Plans to actively reduce flood risk

To support this objective we recommend the following:

1. Flooding and flood risk management should be a priority on the Local Plan list of strategic priorities. It should be clear how it fits into Core and Thematic policies and clearly reference the Local Flood Risk Management Strategy and other key documents. **CMBC.**
2. The Local Plan should use updated baseline information using the revised Climate Change Allowances specific to Calderdale, rather than the region, together with revised hazard maps in determining its policies. **CMBC.**
3. Individual settlements should be actively encouraged and supported by CMBC to develop Neighbourhood Plans that shape a future which mitigates against flooding based on the best examples from elsewhere in the UK and internationally. Each plan should set out a vision of how it will thrive in the future whilst managing water and shape its plan accordingly. There are considerable skills in the valley in this area and elsewhere and these should be sought and utilised. An alternative approach would be to establish a design competition for particular areas **CMBC.**
4. As part of their work in creating vibrant communities living with floods, Neighbourhood Plans and the Local Plan should consider the future positive role of land that may be abandoned by businesses due to flood risk. Ref 8 amongst others. **CMBC.**
5. A Calder Valley-wide Neighbourhood Plan to be developed to include Kirklees and Wakefield (and by the three Councils) that addresses water storage and carriage throughout the valley. **CMBC.**
6. Develop a West Yorkshire wide SPD on building design, referring to forthcoming guidance from the Defra Resilience Project consider whether this needs tailoring for Calderdale. **CMBC.**

7. The Local Plan should not compromise future flood risk management through allowing development that communities would later regret, perhaps 50 years later. Identify areas in the Local Plan that will be retained for future flood storage and/or carriage, future flood risk management schemes and future drainage and sewerage schemes **CMBC.**
8. The Local Plan should identify business parks and other areas for businesses at risk to move to whilst flood risk is reduced, in order to retain them within the valley when they decide to move due to flood risk. **CMBC.**
9. Develop policies and programmes for retrofitting SuDS. **CMBC.**
10. Ensure that land allocations in the Local Plan include all potential functional floodplain areas and highlight them for future flood storage. **CMBC.**
11. Work with the Development Control Section to review planning controls, Ordinary Watercourse Consent, SuDS enforcement and ensure policies are implemented fully and robustly. **CMBC.**
12. Complete Surface Water Management Plans for Critical Drainage Areas. **CMBC**
13. Produce a policy on grey water recycling for new build properties. **CMBC**
14. Consider and develop the most effective ways of ensuring that planned and non-planned development does not result in increased flood risk and leads instead to more resilient communities, including, **CMBC**:
    a. Article 4 Direction removing certain permitted development rights as a way of managing hard surfaces
    b. Stronger national policy
    c. Green infrastructure plans
    d. Townside SuDS schemes
    e. Projects that combine a range of local interventions, such as greywater schemes, leaky water butts, raised plant beds, permeable driveways

National

In order for the recommendations to be delivered effectively, the Calderdale Flood Commission considers that a number of measures need to be delivered by national Government, its agencies and other organisations..

To support this objective we recommend the following:

1. To introduce flood risk insurance for small, medium and large businesses as a matter of urgency
2. Water companies should become statutory consultees on all planning applications of 10 or more dwellings or over 1 hectare and on all planning applications in flood risk areas identified in Local Flood Risk Management Strategies

3. Water companies to be given the statutory power to use higher standards of protection than 1:30 for sewerage and drainage in areas that experience exceptional flows, such as the Calder Valley
4. Properties that flood from a sewer that can't discharge due to high river levels or flooding, should be eligible for water company funding and investment on the same basis as DG5 register properties.
5. Water companies should be given the power to refuse to connect to new development where there is insufficient capacity in the sewerage and/or drainage system to cope with high flows
6. Review and strengthen guidance in the following areas:
    a. Lead Local Flood Authorities
    b. Local Flood Risk Management Strategies
    c. Section 19 reporting
7. Government to consider legislation to place a statutory duty on water companies to manage reservoir levels to minimise flooding through an action plan for each reservoir, in the context of water management for each catchment and each water supply area
8. Water companies be encouraged to manage reservoir levels during times of flood risk based on intelligence provided with a priority of flood alleviation. AGREED
9. Ofwat to consider, how would water level management in relation to flood risk work in the context of competition proposals?
10. Proposals to be brought forward for PR19/ AMP7 to specifically reduce flood risk through investment in the drainage and sewerage of urban settlements of the Calder Valley, due to the very high risk of flooding from surface water and backed-up sewers which was experienced by many people on Boxing Day, 2015 Yorkshire Water
11. Undertake a review of the post flood recovery grants, including the Property Resilience Grant in conjunction with local authorities and grant recipients in order to improve its design and also to consider its guidelines on access, equality and disability
12. Issues for the design of prescriptions for Countryside Stewardship
    a. Dealing with area based payments for fenced off ghylls and land for treeplanting. Ensure that all plots of land are aggregated for payment calculation purposes and that areas maintain their area payments.
    b. Consider area payments being conditional on Code of Good Agricultural Practice – with enhance payments for additional activities, such as subsoiling, the use of low impact vehicles only, low stocking rates and
    c. Ensure that prescriptions and payments allow for moving gateways, reprofiling ditches to drain in different directions, temporary ponds, bunds and beetlebanks, water supply, etc. Ref Treesponsibility
13. Partnership Funding to be reformed to better address natural flood risk management and community schemes, as well as support for business

14. Reflect on how to manage flood risk assets in private ownership that may fail, where there is no insurance and where the owner has no means to repair them. Consider how to make people aware that they are owners of flood risk assets and their responsibilities
15. Review how flood warnings are delivered and how they can be made more effective
16. Actively support the Local Plan and Neighbourhood Plan processes in Calderdale to ensure that they are coordinated and do not jeopardise future opportunities to better protect people and create communities with new opportunities for the future.
17. Ensure that specific development proposals are not allowed to scupper future safety when planning applications are referred to the Secretary of State.
18. Redesign SuDS proposals as recommended by the Pitt Review.
19. Review the work of the Local Government Ombudsman in relation to decisions on development in areas of flood risk
20. Request that a proportion of the central funds to encourage tourism in the North be cascaded down to Calderdale and its constituent towns so that local tourism can be promoted
21. Review Ofgem regulations so that future consumers are compensated for outages that fall under the exceptional clause where network providers are unable to access substations for repair work
22. Review Ofgem regulations so that network providers are required to use the exception clause during flood situations and compensate customers equitably

Governance

Flooding in the Calder Valley will occur again. The level of risk is of such significance that it requires a strategic coordinated approach at the highest levels. The Calderdale Flood and Resilience Steering Group has been in existence since 2012, but it has recently made significant changes to its structure which we feel will better meet the challenges ahead. It is proposed that it becomes a Partnership Board and the powers held by its members, particularly the Environment Agency and Calderdale Council, means that it should have the ability to ensure delivery without needing to change to a different legal framework. We looked at some of the alternatives, such as Internal Drainage Boards, and note the continued development in Cumbria of Water Level Management Boards. These options may be worth revisiting at a future time, but the lead-in time and lack of significant extra powers means we are not recommending such models at this stage.

However, we feel the Partnership Board needs to be strengthened further in terms of transparency and accountability. Our recommendations reflect this. **CMBC**

We welcome the move to develop the Calderdale Flood Recovery & Resilience Steering Group into a Flood Risk Management and Resilience Partnership Board to drive forward, coordinate and monitor all flood risk management and response in Calderdale, whilst being accountable and transparent to the wider community. The proposals of the Calderdale Catchment Flood partnership will inform ongoing interventions which will be overseen by the Board. It will also be informed by the Local Flood Risk Management Strategy and Yorkshire Water Strategy

To support this objective we recommend the following:

1. We recommend that the Partnership Board will consist of:
    a. A Calderdale Flood Risk Management and Resilience Board chaired by Calderdale MBC Council Leader. It will meet at least quarterly, with meetings held in public.
    b. A Core Senior Officers Group to coordinate the work of the operational groups and link with the Board
    c. Five Operational subgroups, chaired by senior officers from CMBC and external partners to drive forward each of the workstreams:
        i. Flood Damage Repair
        ii. Flood Prevention and Investment
        iii. Natural Flood Management
        iv. Community Resilience, including representation from community, business and health interests
        v. Communications, working across all of the subgroups
    d. The operational groups will direct and be informed by the work of the Calderdale Local Flood Risk Management Strategy.

2. In order to be transparent and accountable, the Calderdale Flood Risk Management and Resilience Board should:

    a. Hold its meetings in public, subject to the usual provisions around exempt items.
    b. Be held to account by a separate ad hoc Scrutiny Committee which will meet as required but at least twice a year, and which will operate under the powers provided by The Flood Risk Management Overview and Scrutiny Committee (England) Regulations 2011 (2011 No. 697).

Subject to agreement by full Council, this Scrutiny Committee may appoint non-voting co-opted members to provide greater expertise.

c. Hold public meetings in communities in the upper and lower Calder Valley at least twice a year using Open Space principles to ensure all views are heard
d. An external review should be undertaken in October 2017 to review progress and make further recommendations
e. Calderdale Energy Futures should have the work of the Flood Risk Management and Resilience Board as a standing agenda item in order to monitor progress and provide additional transparency and accountability

Proposed Governance Structure: