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# Agenda for a meeting of the Environment and Waste Management Overview & Scrutiny Committee to be held on Tuesday, 2 May 2017 at 5.30 pm in the Ernest Saville Room - City Hall, Bradford

Members of the Committee - Councillors

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CONSERVATIV	E LABOUR	LIBERAL DEMOCRAT	GREEN		
Gibbons Riaz	A Ahmed Berry Thornton Watson	Stubbs	Love Warnes		

### Alternates:

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CONSERVATIVE	LABOUR	LIBERAL DEMOCRAT	GREEN
Ellis Rickard	Duffy Iqbal H Khan Nazir	R Sunderland	H Hussain

# NON VOTING CO-OPTED MEMBERS

Nicola Hoggart Environment Agency

Julia Pearson Bradford Environmental Forum

# Notes:

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From: To:

Parveen Akhtar City Solicitor

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# A. PROCEDURAL ITEMS

# 1. ALTERNATE MEMBERS (Standing Order 34)

The City Solicitor will report the names of alternate Members who are attending the meeting in place of appointed Members.

### 2. DISCLOSURES OF INTEREST

(Members Code of Conduct - Part 4A of the Constitution)

To receive disclosures of interests from members and co-opted members on matters to be considered at the meeting. The disclosure must include the nature of the interest.

An interest must also be disclosed in the meeting when it becomes apparent to the member during the meeting.

### Notes:

- (1) Members may remain in the meeting and take part fully in discussion and voting unless the interest is a disclosable pecuniary interest or an interest which the Member feels would call into question their compliance with the wider principles set out in the Code of Conduct. Disclosable pecuniary interests relate to the Member concerned or their spouse/partner.
- (2) Members in arrears of Council Tax by more than two months must not vote in decisions on, or which might affect, budget calculations, and must disclose at the meeting that this restriction applies to them. A failure to comply with these requirements is a criminal offence under section 106 of the Local Government Finance Act 1992.
- (3) Members are also welcome to disclose interests which are not disclosable pecuniary interests but which they consider should be made in the interest of clarity.
- (4) Officers must disclose interests in accordance with Council Standing Order 44.

# 3. INSPECTION OF REPORTS AND BACKGROUND PAPERS

(Access to Information Procedure Rules – Part 3B of the Constitution)

Reports and background papers for agenda items may be inspected by contacting the person shown after each agenda item. Certain reports and background papers may be restricted.





Any request to remove the restriction on a report or background paper should be made to the relevant Strategic Director or Assistant Director whose name is shown on the front page of the report.

If that request is refused, there is a right of appeal to this meeting.

Please contact the officer shown below in advance of the meeting if you wish to appeal.

(Jane Lythgow/Tracey Sugden – 01274 432270/434287)

# 4. REFERRALS TO THE OVERVIEW AND SCRUTINY COMMITTEE

None

### **B. OVERVIEW AND SCRUTINY ACTIVITIES**

# 5. RENEWABLE FUTURE FOR BRADFORD COUNCIL

1 - 8

The report of the Strategic Director, Corporate Services, (**Document** "**AL**") provides an update on progress towards installing renewable energy generation capacity across the Council's estate.

# Recommended -

That the contents of Document "AL" be noted and a further update be requested at the end of the 2017/18 financial year.

(Neill Morrison – 01274 434003)

# 6. WATER MANAGEMENT SCRUTINY REVIEW

9 - 52

The report of the Chair of the Environment and Waste Management Overview and Scrutiny Committee (**Document "AM**") presents the findings of the Water Management Scrutiny Review.

# Recommended -

- 1. That the findings and recommendations contained within the draft Water Management Scrutiny Review Report appended to Document "AM" be adopted.
- 2. That the Water Management Scrutiny Review Report be submitted to the Corporate Overview and Scrutiny Committee for consideration.

(Mustansir Butt – 01274 432574)

THIS AGENDA AND ACCOMPANYING DOCUMENTS HAVE BEEN PRODUCED, WHEREVER POSSIBLE, ON RECYCLED PAPER









# Report of the Director of Corporate Services to the meeting of Environment and Waste Overview and Scrutiny Committee to be held on 02 May 2017.

AL

Subject:

Renewable Future for Bradford Council

# **Summary statement:**

This report provides an update on progress towards installing renewable energy generation capacity across the Councils estate.

Stuart Mckinnon-Evans Strategic Director – Corporate Services

Report Contact: Neill Morrison – Energy and Low Carbon Project

Manager

Phone: (01274) 434003

E-mail: neill.morrison@bradford.gov.uk

Portfolio:

**Cllr Sarah Ferriby** 

**Overview & Scrutiny Area:** 

**Environment and Waste** 





# 1. SUMMARY

Bradford Council has agreed a target of 20% for energy for delivery of its own functions to come from renewable sources and for a 40% reduction in council CO<sub>2</sub> emissions by 2020 (Council March 2010). This report sets out progress to date on a number of renewable energy generation projects delivered during 2014-2017, explains the current constraints to future ambition and explores potential options to achieve the future target.

# 2. BACKGROUND

The broad national, regional and local context for renewable energy generation has been presented to this Committee previously. The UK Government announced during 2013/14 a number of measures that had negative impacts on the UK land based renewables sector. Energy market reforms and a shift from Renewable Obligation Certificates to Contracts for Difference has altered the business case modelling for on-shore wind, large scale solar Photovoltaic (PV) and hydro power projects. In addition the Government continues to apply digression rates to current Feed in Tariffs (FiTs) impacting on the business models for renewable projects.

A further blow has been the increase in rateable value for PV systems, this will impact on all systems including those owned by public bodies. The change will see a six to eight fold increase in the rateable value of the system. There is little CBMDC can do about currently installed systems but there will be an impact on the future business cases of any planned PV system.

Changes to planning regulations have made it harder to achieve planning consent for some renewable energy projects particularly wind and large scale PV.

Government has made encouraging noises about the role of, and opportunities for, Local Authorities as a player in the "energy business" particularly around the community energy and community/social energy tariffs. Department for Environment & Climate Change (DECC), now Department of Business, Energy and Industrial Strategy (BEIS), published the Governments Community Energy Strategy in January 2014.

Association of Public Sector Excellence (APSE) supports energy as a policy work stream and is continuing to inform and shape the role which Local Authorities (LA) might play.

There continues to be uncertainty and disruption in the renewables sector, particularly in the carbon emissions that result from the use of Biomass and the likely cost of electricity distribution charges. This uncertainty makes even medium term projects difficult to assess properly.

# 3. OTHER CONSIDERATIONS

The 2015/16 financial year, corporate estate,  $CO_2$  emissions for the Authority were 18,541.5 Tonnes. The billing cycle means that officers do not have a figure for the 16/17 financial year yet, this information will be available at the end of May.





# 3.1 Renewable installations currently within council estate

### **Biomass**

Biomass Boilers have been installed at Ilkley Town Hall, Eccleshill Industrial Museum, Wedgewood Respite Centre and Margaret Macmillan Tower. These boilers are anticipated to produce around 1,913,000 kWh of renewable heat on an annual basis. This figure will of course depend on the length and severity of any winter amongst other factors. The amount of heat has been calculated on a typical peak load run time of 1,315 hours which is the figure BEIS use for the primary stage of Renewable Heat Incentive payments.

CO<sub>2</sub> emissions factor Biomass 0.0158 kg/kWh CO<sub>2</sub> emissions factor Natural gas 0.185 kg/kWh

Expected annual energy transferred to Biomass boilers Circa 1,913,000 kWh

0.185 - 0.0158 = 0.1692

 $0.1692 \times 1,913,000 = 323,679 \text{ Kg CO}_2$  or 323.7 Tonnes

Solar Thermal

Solar thermal hot water heating systems have been installed at Shipley Swimming Pool (small and large swimming pool both have systems), Britannia House, Jacobs Well (currently being moved to Eccleshill Pool) and Valley View.

Total estimated heat generation = 147,058kWh

 $CO_2$  per kWh gas = 0.182Kg

147058 \* 0.182 = 26,764 kg or 26.7 Tonnes

Solar Photovoltaic

Solar PV systems have been installed at Mitre Court, Britannia House, Jacobs Well, Harris St, Oastler Market, Keighley Market, St James Wholesale Market, Keighley Leisure Centre, Shipley Pool, The ISG building, The Industrial Museum and Birkslands.

Total estimated electricity generation = 259,629kWh

CO<sub>2</sub> per kWh Electricity = 0.5331Kg

259,629 \* 0.5331 = 138,408Kg or 138.4 Tonnes

# 3.2 Development of a District Energy System

Using funding from BEIS, initial energy mapping and identification of potential outline networks has been carried out as a collaboration with Leeds City Region LEP. Bradford was identified as having a potential city centre scheme.







A report on the feasibility of a scheme that would connect its city centre buildings (Civic Quarter District Heat Network) has been completed

Final system design work is underway and is highlighting that the city centre estate could be connected in a DH scheme that would pay back in around 15 years and provide an income beyond this as well as creating a commercial opportunity to connect city centre businesses and provide the first stage of a city wide heat network. Increasing the scope of the network will improve its overall viability and profitability. This project was identified as the best opportunity for CBMDC to reduce its CO<sub>2</sub> emissions from its corporate estate. The impact of the network will be slightly reduced by the change in plans around the pool project however there is still a very large opportunity for carbon reduction.

A capital bid has been made for 50% of the funds required to deliver this scheme. European Strategic and Investment Funds made a call for applications in December 2016 and a bid of £6.8M was submitted. This is the last opportunity for funding from European sources. This Committee has been briefed on the scheme separately.

# 3.3 Energy Storage

There have recently been new opportunities opening up in the field of energy storage. This would involve taking energy from a solar farm or CHP engine and using batteries to store on a short term basis. This allows access to a complex market of available tariffs meaning that the income from the generating facility can be greatly increased.

Officers are investigating the synergies between storage and the district energy network to maximise returns to the council whilst maximising usage of low carbon and renewable energy.

# 3.4 Carbon reduction through energy efficiency

Officers in the Energy and Resources team continue to deliver a rolling programme of investment projects to improve energy efficiency. These include upgrading building energy management systems, lighting, draft proofing, insulation and a variety of other small and medium size projects. In addition officers continue to add value to larger scale refurbishment projects upgrading heating and ventilation systems and other plant where practical.

These projects continue to show real benefits and savings across the council estate.

Between the end of the 2010/2011 financial year and the end of the 2015/2016 financial year there has been a 27 % reduction in gross reportable  $CO_2$  emissions from the corporate estate.

This metric does not allow for shrinkage (and growth) in the estate so we have not been using it as a measure of success. Instead officers have created a representative sample of 100 sites that has not changed over the measuring period. This allows tracking and understanding of the correct trends within the overall picture and to more accurately understand the impact of the changes implemented by the team.







Between the end of 2010/2011 and the end of 2015/2016 officers have achieved an 18% reduction in CO<sub>2</sub> emissions on this core segment of sites.

# 3.5 Grid Carbon Intensity

Over the last few years the amount of CO<sub>2</sub> that is attributed to each unit of electricity from the grid has been reasonable steady. This "grid intensity" is forecast to drop over the coming years. There are opportunities to reduce the councils CO<sub>2</sub> Emissions through this process however there are potential issues around the carbon accounting and any future assessment process must allow for these.

# **Conclusions**

The target to reduce CBMDC CO<sub>2</sub> emissions by 40% by 2020 is on track to be exceeded and is a real demonstration of success.

The target of having half of this reduction come from the installation of renewables is more difficult. Due to the changes in both support and regulatory framework it may not be possible to achieve whilst adhering to the fiscal standards that are necessary for a financially responsible authority.

Officers continue to monitor the sector and are ready to take advantage of changes that may make renewable energy generation more appealing as an investment opportunity. It seems likely that in the future this will involve exploiting energy storage to bolster the returns from a generating facility.

# 4. FINANCIAL & RESOURCE APPRAISAL

This report is an update only and has no financial issues arising.

# 5. RISK MANAGEMENT AND GOVERNANCE ISSUES

This report is an update only and there are no significant risks arising out of the implementation of the proposed recommendations.

# 6. LEGAL APPRAISAL

This report is an update only and there are no legal issues arising.

# 7. OTHER IMPLICATIONS

# 7.1 EQUALITY & DIVERSITY

This report is an update on an existing strategy and there are no equality and diversity implications.







# 7.2 SUSTAINABILITY IMPLICATIONS

This report is an update on an existing strategy and there are no sustainability implications.

# 7.3 GREENHOUSE GAS EMISSIONS IMPACTS

This report is an update on an existing strategy and there are no Greenhouse Gas Emission implications.

# 7.4 COMMUNITY SAFETY IMPLICATIONS

This report is an update on an existing strategy and there are no Community Safety implications.

# 7.5 HUMAN RIGHTS ACT

This report is an update on an existing strategy and there are no Human Rights implications.

# 7.6 TRADE UNION

This report is an update on an existing strategy and there are no Trade Union implications.

# 7.7 WARD IMPLICATIONS

This report is an update on an existing strategy and there are no Ward Implications.

# 7.8 AREA COMMITTEE ACTION PLAN IMPLICATIONS (for reports to Area Committees only)

This report is an update on an existing strategy and there are no Area Committee Plan Implications.

# 8. NOT FOR PUBLICATION DOCUMENTS

None.

### 9. OPTIONS

N/A





# 10. RECOMMENDATIONS

Recommended -

That the contents of Document "AL" be noted and that a further update be requested at the end of the 2017/18 financial year.

# 11. APPENDICES

None

# 12. BACKGROUND DOCUMENTS

None









# Report of the Environment and Waste Management Overview and Scrutiny Committee to the meeting to be held on Tuesday 2 May 2017

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Water Management Scrutiny Review.

# **Summary statement:**

The attached draft report contains the findings from the Water Management Scrutiny Review.

Cllr Kevin Warnes
Chair – Environment & Waste Management
Overview & Scrutiny Committee.

Portfolio:

Environment. Transport.

Report Contact: Mustansir Butt Overview & Scrutiny Lead Phone: (01274) 432574

E-mail: mustansir.butt@bradford.gov.uk





### 1. SUMMARY

1.1 The attached draft report contains the findings from the Water Management Scrutiny Review.

# 2. BACKGROUND

- 2.1 At its meeting on Tuesday 19 January 2016, Council agreed that the Corporate Overview and Scrutiny Committee undertake an in-depth Scrutiny Review into the effectiveness of Bradford Council and its Partners in dealing with the floods across the District in December 2015.
- 2.2 As part of this Scrutiny Review, members looked to explore how we can learn from the approaches taken during the winter 2015 floods, to assist the Council and its Partners to better deal with future floods.
- 2.3 It was also agreed that the Corporate Overview and Scrutiny Committee would receive the final review report, prior to its submission to full Council.
- 2.4 The Environment and Waste Management Overview Scrutiny Committee undertook a wider scrutiny review into Water Management across the District.
- 2.5 The DRAFT Scrutiny Review report is attached as Appendix 1.

# 3. OTHER CONSIDERATIONS

3.1 This review, undertaken by the Environment and Waste Management Overview and Scrutiny Committee, offers a wider perspective on water management across Bradford District. There is much valuable work currently underway, and this review aims to bring those different work streams together in order to improve the effectiveness of Bradford Council's approach (and those of our partner agencies) to water management across the District.

# 4. FINANCIAL AND RESOURCE APPRAISAL

Recommendations 6 and 7 of the Draft Water Management Scrutiny Review relate to the potential for using funds from the Community Infrastructure Levy for flood alleviation measures, and for Bradford Council to liaise with other West Yorkshire local authorities to secure funding from the Department of Transport's National Productivity Investment Fund. Recommendation 13 asks for an urgent review of capital and revenue funding streams for maintaining council-owned drainage systems and watercourses/rivers in order to respond effectively to the rise in river flows and levels associated with climate change.

# 5. RISK MANAGEMENT AND GOVERNANCE ISSUES

There were none arising from this Scrutiny Review.

# 6. LEGAL APPRAISAL

There were none arising from this Scrutiny Review.

# 7. OTHER IMPLICATIONS

# 7.1 EQUALITY & DIVERSITY

There were none arising from this Scrutiny Review.

# 7.2 SUSTAINABILITY IMPLICATIONS

There were none arising from this Scrutiny Review.

# 7.3 GREENHOUSE GAS EMISSIONS IMPACTS

There were none arising from this Scrutiny Review.

# 7.4 COMMUNITY SAFETY IMPLICATIONS

There were none arising from this Scrutiny Review.

# 7.5 HUMAN RIGHTS ACT

There were none arising from this Scrutiny Review.

# 7.6 TRADE UNION

There were none arising from this Scrutiny Review.

# 7.7 WARD IMPLICATIONS

The winter 2015 floods affected several areas and communities across the District, which include:

- Bingley;
- Bingley Rural;
- Craven;
- Ilkley;
- Wharfedale;
- Shipley;
- Baildon;
- Idle and Thackley;
- · Keighley East.
- Worth Valley.

# 8. NOT FOR PUBLICATION DOCUMENTS

None.

# 9. OPTIONS

In considering how to progress this issue the Committee may wish to:

- adopt or amend the findings and recommendations contained within the draft report;
- Forward their recommendations to the Executive, Council and / or other appropriate bodies.

# 10. RECOMMENDATIONS

- 10.1 That the findings and recommendations contained within the draft Water Management Scrutiny Review Report be adopted.
- 10.2 That the Water Management Scrutiny Review Report is submitted to the Corporate Overview and Scrutiny Committee for consideration.

# 11. APPENDICES

Appendix 1 – Water Management Scrutiny Review Draft Report.

# City of Bradford Metropolitan District Council

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**DRAFT - Report of the Environment and Waste Management Overview and Scrutiny Committee** 

Tuesday 2 May 2017

# Membership of the Environment and Waste Management Overview and Scrutiny Committee (EWMOSC)

# **Members**

Cllr Aneela Ahmed

Cllr Ralph Berry

Cllr Mike Gibbons

Cllr Martin Love, (Deputy Chair)

**Cllr Naveed Riaz** 

Cllr Brendan Stubbs

Cllr Kevin Warnes, (Chair)

**Cllr Rosemary Watson** 

# **Co-Opted Members**

Nicola Hoggart – Environment Agency Julia Pearson – Bradford Environment Forum

# **Alternate Members**

Cllr Sue Duffy

Cllr Michael Éllis

Cllr Hawarun Hussain

Cllr Zafar Iqbal

Cllr Hassan Khan

Cllr Sarfraz Nazir

Cllr Jack Rickard

Cllr Rachel Sunderland

# **Contact for Enquiries**

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- Appendix 2: Executive Summary of Bradford Council's 'Review to Consider the Future of Water Management and the Associated Problems of Flooding in Bradford District', published in 2005.
- Appendix 3: Officer powerpoint presentation summarising progress to date in implementing the recommendations of the 2005 review, EWMOSC meeting, 26 July 2016.
- Appendix 4: Extract from the printed minutes of the EWMOSC meeting on 26 July 2016 during which the committee reviewed progress to date in implementing the recommendations of the 2005 review.
- Appendix 5: EWMOSC evidence-gathering sessions and witnesses.
- Appendix 6: List of briefing reports provided to this committee.
- Appendix 7: List of background documents.

# 1) Chair's Foreword

The floods of December 2015 inundated over 1,000 homes and businesses across a wide swathe of Bradford District and turned the lives of many hundreds of local people upside down. The cost of the damage to residential and commercial property is estimated to have been around £34 million. The broader social, environmental and economic impacts were even greater in scope as residents struggled to cope with the upheaval to their everyday lives through the months that followed. For some, sixteen months after they were originally flooded out of their homes or premises, the long recovery process continues.

The Environment and Waste Management Overview and Scrutiny Committee has undertaken this scrutiny review in order to ensure that Bradford Council and its partner agencies are better able to cope with future flooding, in ways that we hope will help mitigate the impact of these inevitable extreme weather events on the lives of the people and communities we serve in the years ahead. Our review confirms that significant progress is being made by the Council and its partners in managing flood risk and the multiple impacts of flooding; and that developing and sustaining these achievements into the 2020s and beyond will be extremely challenging for all concerned.

The councillors on this committee are very grateful for the support of representatives from our external partners who contributed with their particular insights and experiences. These organisations include (in alphabetical order): the Aire Rivers Trust; Calderdale Council; the Environment Agency; Friends of Bradford's Becks; JBA Consulting; and Yorkshire Water. Not only did those involved furnish us with detailed written briefing papers (see Appendix 3 of this report), but they gave freely of their valuable time to participate in two lengthy evening evidence-gathering sessions. We could not have completed this review without their generous assistance and we trust that this report will help their own future water management projects in turn.

We are also very grateful to our hard-working and dedicated Council officers with whom we are fortunate to work and who also gave up their time to provide us with briefing documents and to join us for the information-gathering sessions. Finally, we also very much appreciate the support of our fellow councillors in completing this review.

On a personal note, I would like to thank my colleague (and prior chair of this committee) Cllr Martin Love for opening this review and for his experienced support and active participation as our work has proceeded. I am also very grateful to Mustansir Butt for his seasoned advice throughout the past six months; and finally to Maria Dara in Member Support for her invaluable contribution in transcribing the five hours of testimony that helped shape our report and its numerous recommendations.

**CIIr Kevin Warnes** 

Chair, Environment and Waste Management Overview and Scrutiny Committee

# 2) Introduction

# **Background**

At its meeting on Tuesday 19 January 2016, Bradford Council agreed that the Corporate Overview and Scrutiny Committee undertake an in-depth scrutiny review of the effectiveness of the Council and its Partners in dealing with the District-wide flooding of December 2015.

Following discussions with Councillors and Officers, it was also agreed that water management across the District should be looked at and that the Environment and Waste Management Overview and Scrutiny Committee should undertake that scrutiny review.

The Environment and Waste Management Overview and Scrutiny Committee agreed its terms of reference for this scrutiny review in April 2016. Specifically, the committee resolved to:

- 1) examine the policies that impact on either the mitigation of flood risk or contribute to that risk;
- 2) identify potential sources of funding and other resources that could assist in reducing the risk and impact of flooding;
- 3) develop an action plan to reduce the risk and impact of flooding and use in response to any future incidents;
- 4) consider future climate change assumptions and their impact on the frequency and severity of flooding incidents;
- 5) consider measures which could be taken to reduce the rate of water runoff into the river system;
- 6) consider the effect of increased flooding risk on proposed development and the effect of proposed and possible future development on run off and flooding risk. <sup>1</sup>

This review therefore offers a wider perspective on water management across Bradford District. It aims to bring a range of valuable ongoing work streams together in order to improve the effectiveness of Bradford Council's approach (and those of our partner agencies) to water management across the District and beyond.

# **The Scrutiny Review Process**

EWMOSC colleagues began their deliberations on 26 July 2016 with a brief review of progress made since 2005 in relation to water management and the associated problems of flooding in Bradford District. This meeting included a comprehensive presentation by Council officers on implementation to date of the recommendations of Bradford Council's 2005 'Review to Consider the Future of Water Management and the Associated Problems of Flooding in Bradford District' (see Appendices 2-4 of this report for full details of the 2005 recommendations, the officer presentation on 26 July and the associated committee deliberations).

<sup>&</sup>lt;sup>1</sup> For the full Terms of Reference, see Appendix 1.

Two information-gathering sessions were subsequently undertaken as part of this scrutiny review focused on the six areas for improvement mentioned above. These took place at City Hall on 24 January and 7 February 2017 and involved both Bradford Council officers and representatives from a range of partner organisations.<sup>2</sup> EWMOSC members have considered a range of information including the briefing documents provided for these evidence-gathering session, the oral testimony of the participants and a range of background documents.3

# The Scrutiny Review Recommendations

As a result of the review, this Committee has made a total of 26 recommendations for consideration by colleagues. Some of these recommendations are closely linked with each other. All are contained (a) within the body of the report and (b) summarised at the end of the main body of this report for ease of reference.

<sup>&</sup>lt;sup>2</sup> The full list of participants can be found in Appendix 5.

<sup>&</sup>lt;sup>3</sup> For the full list of documents provided, see Appendices 6 and 7.

# 3) Findings

This section presents the findings of the Environment and Waste Management Overview and Scrutiny Committee into Water Management across the Bradford District.

# **Key Line of Enquiry 1**

# Examine the policies that impact on either the mitigation of flood risk or contribute to that risk.

# Legislative overview

Flood risk management is informed by (and subject to) a range of pieces of legislation. These include the 2009 Flood Risk Regulations, the 2010 Flood and Water Management Act (FWMA) and the National Planning Policy Framework (NPPF).

Bradford Council, as a Lead Local Flood Authority, is required by the FWMA to maintain a Local Flood Risk Management Strategy (LFRMS). This has been developed and adopted by the Council. This needs to be consistent with the National Strategy for Flood and Coastal Erosion Risk Management (FCERM) that is the responsibility of the Environment Agency (under the provisions of the FWMA).

It is clear, however, from the summary report tabled by officers on 24 January and feedback from participants during this first evidence-gathering session that national flooding policy remains in a state of flux. This has complicated the challenges facing the Council as we seek to manage flood risk across the District and has been problematic in terms of developing the emerging Core Strategy.

# Non-implementation of Schedule 3 of the FWMA

Crucially, some parts of the FWMA were not brought into effect in 2010, notably Schedule 3 (Sustainable Drainage). This has been "subject to continual delays" in the view of Council officers (although this did not necessarily preclude Bradford from developing its own sustainable drainage policy in the meantime). The full implementation of the FWMA would have given Bradford Council greater control over the design of new drainage systems and enabled us to ensure that developers incorporate Sustainable Urban Drainage Systems (SUDS) into their proposals.

Instead, because Schedule 3 is not yet in force and, indeed, is not likely to come into effect in the near future, the committee was told on 24 January that "we do not have the appropriate [national] policy framework that we expected we would have in terms of how developers implement drainage schemes". Officers commented that relying on the existing planning process for SUDS is therefore "less than ideal". In a separate note, one participant observed that the government's "failure to enact Schedule 3...effectively weakens where we were rather than strengthening it. Whilst we can use planning legislation to provide a basis for maintenance as well as design, without the resources

which the SuDS Approval Body would have given us to inspect and adopt, the reality is we can't ensure the process is robust."

# Pre-application guidance

Bradford Council currently refers developers to a two-page non-statutory technical guidance document relating to SUDS (comprising just 14 brief points). According to the briefing paper provided by Council officers on 24 January, this has "reduced the effectiveness of the original proposal [Schedule 3]".<sup>5</sup>

This problem was noted in the Leeds City Region Flood Review Report, published in December 2016, which stated that "developing a strategic approach to sustainable urban drainage systems...is currently hampered by a lack of robust national guidance". [WYCA, page 7] Indeed, the report went on to recommend "consistent planning policies and approaches across the City Region...to mitigate flooding and improve resilience, including preparing City Region supplementary planning guidance to provide a stronger steer for the adoption of SUDS". (WYCA, page 52).

Several participants highlighted the role the Council can play in providing pre-application guidance for developers. One witness highlighted the need for "a consistent approach" across West Yorkshire. In the opinion of officers, Bradford Council has been "proactive" in seeking the implementation of Schedule 3. It appears that DEFRA would also like to see this part of the FWMA brought into effect. In the meantime, officers informed the committee that they are currently developing supplementary planning guidance relating to sustainable drainage.

# Register of structures/features affecting flood risk

Bradford Council, under the provisions of the FWMA, has a duty to maintain a register of structures or features that have a significant effect on flood risk. Officers confirmed that this register has been "under development for a couple of years" and is "ongoing" in nature. In a separate note, officers indicated that "the asset register is in place and due to its nature is a live process that requires continuous monitoring". The Environment Agency confirmed that they regularly share asset information in their monthly meetings with the Council, Network Rail and Yorkshire Water under the aegis of the Flood Programme Board established by the Council to support its LFRMS.

# Six year cycle of planning

The Committee learned on 24 January that "to manage flood risk, both the Agency and local authorities must follow a six year cycle of planning". Officers indicated that the six year cycle renews in 2017 and the Council's Preliminary Flood Risk Assessment "will be reviewed in accordance with DEFRA guidelines (issued 25 January 2017) by mid-June this year".

<sup>&</sup>lt;sup>4</sup> Email to the chair from Tony Poole, Principal Engineer Drainage, Bradford Council, 16 February 2017. <sup>5</sup> In addition, it is worth noting that the non-statutory nature of the technical guidance document has been accompanied by a central government claim that 'no new burdens' are being imposed on Bradford. This, in turn, has triggered an almost complete elimination of the funding available to Bradford as a Lead Local Flood Authority (a revenue cut of over £50k per annum).

# **Lead role of the National House Building Council Inspectors**

Aside from strict planning considerations, officers also flagged up the fact that Bradford Council has limited involvement in overseeing the incorporation of sustainable drainage into new developments. According to officers, "the majority of house-building does not go through the local authority...but goes via the National House Building Council's Inspectors...who serve notice on the local authority". This clearly remains an ongoing issue and one which Bradford Council may need to review.

# Flood risk inspection of completed developments

The first evidence session also revealed that, although the Council goes through flood risk assessments "quite rigorously" at the planning stage in the view of officers, the Council does not ordinarily inspect completed developments to ensure that sustainable drainage and flood risk management measures have been properly implemented.

# Involvement of communities in SUDS creation and maintenance

Participants highlighted the role that local communities can play (perhaps via volunteering) in creating and maintaining SUDS in terms of creating habitats and sustainable drainage systems in parks (as well as other projects) and that this can have health and well-being benefits as well. This is not easy and takes time and resources, but can be worthwhile. One participant highlighted the need for "creative ways of working with communities" to manage natural drainage systems in particular.

# Need for a 'whole-catchment' approach to flood risk management.

One councillor stressed the importance of dealing with the Wharfe as well as the Aire, and for all parts of the Wharfe valley to be considered. The Environment Agency emphasised in response that they are focused on the whole of the Wharfe valley as well as the Aire valley and that they approach the challenge of water management on a 'whole-catchment' basis. This was mirrored in a separate note from officers which states that the Council's Local Flood Risk Management Strategy "encompasses a district-wide approach to flood and water management and the catchment-based approach is being undertaken by all relevant authorities".

# **Recommendation 1 (mirrors Recommendation 16)**

That the Council liaises closely with partner city region authorities to finalise supplementary planning guidance as soon as possible, and that officers quickly finalise a date by when these documents will be published.

# **Recommendation 2**

That the Council continues to review the development of its 'register of structures or features that affect flood risk'.

<sup>&</sup>lt;sup>6</sup> This 'whole-catchment' approach is exemplified in the *Upper Aire Catchment Network* briefing paper published by the Environment Agency in March 2017 and included in Appendix 3 of this report.

# Recommendation 3

That the Council urgently reviews its default policy of non-inspection of the sustainable urban drainage features and flood risk aspects of completed developments, particularly in relation to larger projects and including SUDS already installed to date, in order to ensure that these developments are consistent with our LFRMS; and that the cost of doing so is borne as far as is practicable by the developer.

### Recommendation 4

That the Council reviews its engagement with communities with a view to ensuring that they are actively involved in the creation and maintenance of SUDS and other flood risk management projects.

# **Recommendation 5**

That the Council ensures that its flood risk management strategy continues to balance the needs of the Aire and Wharfe valley catchments.

# **Key Line of Enquiry 2**

# <u>Identify potential sources of funding and other resources that could assist in reducing the risk and impact of flooding</u>

# Availability of multiple funding streams

From Bradford Council's perspective, investing in flood risk management (including mitigation) measures is both essential and difficult. To quote from the Council's briefing note for the second information-gathering session, "the enormous economic, personal, health, and wellbeing costs associated with flooding make the argument for investment in flood defences and other measures to reduce risk a persuasive one. Despite this, raising finances to fund improvements is a huge challenge".

There are a range funding streams available, the main proportion of which is derived from central government. Council colleagues identified several examples of funding that has recently been obtained or applied for. These include: approval for the BEGIN and SCORE projects (see appendices for details) utilising European Regional Development Fund investment; the securing of Local Levy funding worth £850,000 for the Bradford Flood Programme; and the securing of £20 million in Local Enterprise Partnership funding for investment in flood defences in Leeds, Calderdale, Bradford, Skipton and Kirklees.

It is noteworthy that Bradford Council officers are working closely with the Environment Agency to ensure that funding for green infrastructure is incorporated into key economic development projects such as the Canal Road corridor scheme.

Environment Agency colleagues were very clear about the significance of the Community Infrastructure Levy as a source of investment in flood risk management measures. As their briefing paper for this session stated, they "urge all Local Authorities to consider using funds from the Community Infrastructure Levy towards flood alleviation measures".

The Agency also highlighted the opportunities for seeking partnership funding from the Department of Transport's National Productivity Investment Fund.

# **Recommendation 6**

That the Council reviews the potential for using funds from the Community Infrastructure Levy for flood alleviation measures.

# Recommendation 7

That the Council liaises with other West Yorkshire local authorities to secure funding from the Department of Transport's National Productivity Investment Fund.

# **Key Line of Enquiry 3**

# <u>Develop an action plan to reduce the risk and impact of flooding and</u> use in response to any future incidents

# Multi-agency, partnership-oriented action-planning

Bradford is committed to joint action-planning via its participation in the Bradford Flood Programme Board, through which the Council has coordinated its actions since July 2016 with the Environment Agency, Yorkshire Water and Network Rail. The Council's briefing note for this information-gathering session provided a very detailed summary of the extensive range of action-planning associated with our Local Flood Risk Management Strategy (see appendices).

One participant emphasised the need for Bradford Council to work closely with Yorkshire Water to ensure that action-planning is undertaken to "identify the hotspots for surface water drainage in Bradford and then look to see which ones could be tackled".

The Environment Agency emphasised the need for a "well-integrated approach" to all aspects of action-planning. The Agency also cited the importance of reference to the National Planning Policy Framework; of avoiding development in areas at risk of flooding; of ensuring that the Agency's new climate change allowances released in February 2016 are properly applied throughout the planning process; and of identifying land required for current and future flood management that therefore needs to be protected from development in order to mitigate the impacts of climate change.

The Agency's briefing note for our information-gathering session provided a very detailed summary of the extensive range of actions undertaken since early 2016, in many cases in conjunction with partners (see appendices).

# People-centred action-planning

The Environment Agency noted the importance of building resilient community networks capable of managing their proximity to nearby rivers, for example, rather than focusing on developing flood warden roles with a more narrow focus on flooding events that will, after

all, only occur on an irregular (though more frequent) basis in the future. In the words of one participant, it is vital to ensure that "actions are people-centred".

Participants emphasised that action-planning is not just about preventing or minimising the impact of flooding events, but also about enabling individuals and communities to recover from those inevitable disasters. One participant stressed the importance of saying that "the picture is going to be ever-evolving, the flood risks are going to increase, the frequency is going to increase, and the severity is going to increase. We are not going to get rid of flooding. People will still be flooded. It is about how we manage that. It is about how we make sure that we minimise the number of people who have been flooded, we minimise the impact of that flooding and that they recover quicker...it is about how we use all the tools...make sure that we are as responsible as we can be and...that we future proof [our actions]".

One Agency colleague noted how quickly the flood warden network and other community schemes had faded away as the experience of the 2000 floods receded into the background (another participant noted that many flood wardens had been retired and were therefore relatively elderly). This colleague emphasised instead the need for a "different approach...looking at existing community groups, existing networks, established organisations like town councils and parish councils...rather than setting up something that is specifically flood focused". A Council participant widened this approach to highlight the need to plan for "general resilience to meet whatever happens" and that the "challenge is to develop a much broader community resilience to whatever might happen".

Another participant from the Environment Agency noted the "multiple benefits of green infrastructure" action-planning which, in turn, contribute to community resilience: specifically, "they will make us more drought resilient, they will make us more resilient to the urban island effect and a whole range of weather conditions, air pollution, air quality issues as well. There are a broad number of benefits to green infrastructure that are mapped, that can be valued. The public health benefits are also massively underestimated".

On a particularly positive note, one participant indicated that "we are in a really good place at the moment given the climate that we are in and if we keep the momentum, the pace, the political commitment, not just within Bradford but across West Yorkshire as a unit, I think we will see some real tangible differences". Many participants certainly shared this perspective, despite an awareness to the challenges of coordinating a complex array of actions between so many agencies and community groups and across multiple municipal boundaries over such long stretches of time.

# **Recommendation 8**

That the Council takes steps to ensure that the Environment Agency's new climate change allowances are applied in the preparation of the site allocations development plan to ensure that proper consideration is given to increased flood vulnerability linked to climate change and that identified sites are avoided where appropriate.

### **Recommendation 9**

That the Council reviews the actions necessary for it to ensure that land required for current and future flood management is protected from development in order to mitigate the impacts of climate change.

# **Recommendation 10**

That the Council reviews its record to date in enabling community engagement around the challenges of water management and flooding and explores the options for developing more resilient local networks in future years.

# **Recommendation 11**

That the Council works closely with Yorkshire Water to identify key places where surface water drainage problems exist in order to ensure that its action-planning delivers early, tangible results for our community.

# **Recommendation 12**

That Yorkshire Water and the Environment Agency undertake a full investigation of possible sewage-related pollution sources in the Bradford Beck catchment in the next investment cycle (AMP7, which starts with PR19).

# **Key Line of Enquiry 4**

# Consider future climate change assumptions and their impact on the frequency and severity of flooding incidents

Disparity between (a) the growing impacts of the climate change and (b) the resources available to mitigate these impacts

The briefing paper provided by Council officers on 24 January and contributions during the evidence-gathering session highlighted the growing flooding risks associated with climate change. In particular, officers drew attention to the increased rainfall intensity and peak river flow allowances that now have to be factored into design and planning considerations for new developments. The Environment Agency confirmed that its latest climate change allowances are "significantly different" from previous models. In that context of accelerating climate change risks, the Council's briefing paper stressed that "current budget constraints only allow a reactive approach rather than a proactive approach". It stated that "regular maintenance regimes to council owned drainage systems and watercourses/rivers will need to increase to combat the rise in water flows and levels".

The paper went on to state that, although Local Levy funding worth £880k has been secured to "advance" a number of studies of flooding risk at particular locations on the Aire/Worth catchments and the River Wharfe, "it will not address maintenance and other issues that we see as a priority. Regular maintenance regimes to council-owned drainage systems and watercourses/rivers will need to increase to combat the rise in water flows

and levels and internal funding arrangements for capital and revenue budgets and staffing levels need to be assessed".

During the evidence-gathering session, officers indicated that there "has been no capital budget" for flood risk management, although "there have been budgets for individual schemes for a number of years". They stated that "the maintenance budget that we used to have has not been increased since the 1990s...and has been transferred into the salary budget". They added that "there are vacancies on the books". They went on to state that the Council is essentially carrying out "minor bits of repairs" and confirmed that they would prefer to be more "proactive" in this area. Most of the work currently carried out is reactive, in response to about 300-400 complaints annually.

# Disproportionate impact of flooding events on socially vulnerable groups.

The briefing paper provided by officers on 24 January highlighted that flooding events present challenges for older residents, for residents prone to mental health problems, and for residents in poor health and/or on low incomes. Officers noted during this session that "the social care agenda and self-care agenda and keeping elderly people in particular in their homes longer", as well as the ageing population, will need to be considered as we manage flood risk. This is especially important in the "recovery phase" following flooding events as the Council seeks to look after those who are "reliant on social care and experiencing mental health issues" in order to "understand what their needs are and how we can best address those".

# Need for, and difficulty of, greater community engagement.

Several participants stressed the need for more 'bottom-up' activity to respond to the growing flooding risks of climate change – particularly as a means of mitigating the Council's own resource limitations in this area. Officers emphasised the cumulative importance of the many "small individual" actions that local people and communities can take to help mitigate flood risk and support more sustainable urban drainage. This point was also a prominent feature of the 'Ten Point Plan' provided by Friends of Bradford's Becks. The Environment Agency similarly highlighted the positive role that can be played by local action plans in this respect.

# **Recommendation 13**

That the Council urgently reviews both capital and revenue funding streams for maintaining council-owned drainage systems and watercourses/rivers in order to ensure that we deal with the rise in water flows and levels associated with climate change.

# **Recommendation 14**

That the Council continues to update its LFRMS to take account of the disproportionate impacts that arise from the growing risk of flooding events related to climate change.

# **Recommendation 15**

That the Council updates its LFRMS to incorporate the development of 'bottomup' actions to support sustainable drainage, mitigate the risk of flooding and enable communities to recover from flooding events.

# **Key Line of Enquiry 5**

# Consider measures which could be taken to reduce the rate of water runoff into the river system

# The importance of comprehensive information gathering and multi-agency working

Bradford Council has undertaken a wide range of measures (as part of our Local Flood Risk Management Strategy) to reduce the rate of water runoff into the river system. These include: improving understanding of flood risk, reducing the impact of flooding on a priority basis; communicating flood risk to partners and stakeholders; carrying out targeted maintenance on a priority basis; and ensuring that appropriate development takes place.

The Environment Agency similarly engages in data assessment, information-gathering and risk assessment. Their understanding of current and future risks of flooding is supplemented by the information gathered by Bradford Council. The Agency works closely with councils and other organisations, notably Yorkshire Water, to use this information to develop strategic plans such as catchment flood management plans that, in turn, "assist lead local flood authorities in developing local flood risk management strategies". Key features of this work include mapping flood risk and maintaining a "register of assets and other features that help to manage risks".

According to the Agency, the specific measures being undertaken in Bradford to reduce the rate of river run-off include: updating the "flood extents mapping" for the District; helping to produce a "resident and business Flood Resilience and Community Engagement Information Pack"; identifying fifteen priority locations where further investigations will be carried out to understand the reasons for flooding and tackle those sources accordingly; piloting an Asset Sharing Database in collaboration with Network Rail, Yorkshire Water and Bradford Council (via the Bradford Investment Board); liaising with all Lead Local Flood Authorities, including Bradford Council, to ensure that flooding considerations are taken on board by developers during the planning application process.

All participants emphasised how keen they are to work collaboratively on gathering information to aid their understanding of water runoff and the measures that can be adopted to mitigate this challenge. There was a repeated emphasis on the need for catchment-wide approaches stretching across local authority boundaries. As one participant from Calderdale Council succinctly put it, "...water does not respect local authority boundaries, so what happens here has an impact further down and what happens further up has an impact here as well. What happens in Calderdale goes down through Wakefield, so it is about us all working together, and that is happening across West Yorkshire". Another participant commented that "one of the things that is coming through loud and clear already is that any solution to this huge challenge [of water runoff] is going to have to be multi-agency, multi-solution. We are going to have to work across

natural local authority boundaries. We are going to have to find ways of co-ordinating what we do. Effectively we do so already, but we have got to improve that. It has got to be top down and bottom up".

# **Natural Flood Management**

All participants stressed the importance of Natural Flood Management (NFM), defined as working with natural features and processes – particularly in upland areas - to mitigate flood risk. This can of course be undertaken in addition to the 'harder' defences against flooding that have received greater attention to date in both urban and rural areas. As one participant put it, "NFM should be considered as an integral part of the comprehensive flood risk management toolkit, where it can be effectively used to complement more traditional flood risk management schemes and increase their resilience". An added bonus are the broader environmental and social benefits that NFM measures can deliver (including biodiversity enhancement, water quality improvement, carbon sequestration and amenity value). These wider benefits can, of course, also assist in identifying additional sources of funding.

NFM measures that mitigate water runoff ('Slowing the Flow') can include creating additional woodland; appropriate land/soil management practices; improved management of moorland to "enhance its ability to act as a natural sponge"; land drainage modifications and runoff attenuation features (such as 'leaky dams', small retention ponds and 'notched weir plates' to hold back flows). Crucially, a range of these are required "across the catchment rather than focusing on just a single measure". Unsurprisingly, the successful design and implementation of NFM measures requires "considerable effort by a stakeholder partnership group working closely with landowners and [the] farming community".

An outstanding *potential* example of this multi-agency approach to NFM that is worth highlighting can be found in the Ilkley area, where Backstone Beck runs from the moor into the River Wharfe just east of Ashlands School and flooding has historically occurred. Bradford Council has submitted a project brief to the Environment Agency, who have secured approximately £250k funding from DEFRA for NFM works. According to the Council's Countryside and Rights of Way service, this will:

"involve 'slowing the flow' on Ilkley Moor by diverting/blocking drainage channels which form the source of Backstone Beck and by allowing tree regeneration in the lower slopes to further increase the moor's flood mitigation potential. Coupled with community engagement for monitoring flows, the project could be an excellent pilot scheme that has replicability in other areas in the District on both the Wharfe and Aire catchments.

It is an opportunity for the Council to lead by example as a landowner in reducing flood risk locally via NFM and ultimately longer term through multiple smaller schemes on a more catchment wide basis. Schemes such as this also capture [a range of] wider environmental, social and wellbeing benefits...such as increased biodiversity (improvements to blanket bogs through re-wetting, wider species diversity through increase tree cover, resilience to wildfire, enhanced carbon sequestration and lower silting levels in run-off and thus better water quality)." <sup>7</sup>

<sup>&</sup>lt;sup>7</sup> Extract from an email to the Chair from Danny Jackson, Countryside and Rights of Way Manager, Bradford Council, 10 March 2017.

In addition, one participant highlighted the potential for reducing water runoff offered by the 'Green Streets' approach (adopted by the Leeds City Region Local Economic Partnership). This involves "high quality, well designed greening projects" such as street trees, rain gardens, green roofs and walls, urban orchards, natural habitats and 'Green Ways'.

Clearly, 'Green Streets' measures are relevant to both new developments and to adapting our existing urban spaces to mitigate water runoff and the resulting flood risk. As one participant said, "we have massive urban areas that make a substantial contribution to flooding".

Participants agreed that managing water runoff requires a mix of 'macro-interventions' and 'micro-contributions', and that the latter area is where "community engagement" is so vital. According to one witness, "all those tiny bits help and the more we can engage with the communities the more we can get those little bits done...action and engagement is absolutely key at all levels ranging from multi-million pound hard engineering schemes to encouraging small groups and even individuals to do what they can".

# **Recommendation 16 (mirrors Recommendation 1)**

That the Council publishes minimum design standards (in the form of supplementary planning guidance) so that developers and their consultants are clear on the standards required for acceptable planning applications in relation to water runoff and sustainable urban drainage systems, and seeks to ensure that this process is completed by the end of April 2018.

# **Recommendation 17**

That the Council engages proactively with partner organisations to identify opportunities for additional Natural Flood Management projects across the District (such as in the Clayton Beck catchment).

# **Recommendation 18**

That the Council works jointly with Friends of Bradford's Becks on water management projects in the Canal Road area.

# **Recommendation 19**

That the Council works with partner organisations to gather together existing knowledge and practice of Natural Flood Management in the form of a 'best practice manual' in order to engage the community and guide implementation of these kind of measures.

# Recommendation 20

That the Council adopts a 'whole catchment' approach to reducing water runoff, in conjunction with neighbouring local authorities (particularly Leeds, but also those 'upstream' of our District) and partner agencies.

### **Recommendation 21**

That the Council incorporates the 'Green Streets' approach in its planning process and infrastructure development schemes.

# **Recommendation 22**

That the Council identifies future opportunities where it can show leadership in reducing and slowing water flow by its own actions, such as in the road and cycle path engineering schemes that it designs and through its ongoing refurbishment of the Council estate (possible measures may include controlling roof drainage by disconnecting building drains from the sewer system and installing planters, soakaways and green roofs).

# **Recommendation 23**

That the Council considers either (a) signing up to the 'Blue and Green Infrastructure' declaration issued by Newcastle City Council and five partner agencies in February 2016 or (b) issuing its own declaration in order to aid the prioritisation of Blue-Green infrastructure in managing flood risk across Bradford District.

# **Recommendation 24**

That the Council investigates what more it can do to promote community and individual awareness of what can be done locally to reduce water runoff and flooding risk.

# **Key Line of Enquiry 6**

Consider the effect of increased flooding risk on proposed development and the effect of proposed and possible future development on run off and flooding risk

# Importance of the planning process for mitigating flood risk

It was clear that participants regarded the planning process – and the Council's role therein - as an important element in managing flood risk. As the Environment Agency put it during the session, "the role of the planning system in climate change mitigation is very fundamental". Several participants stressed the very professional approach taken by the Council during the planning application process to ensure that "the impact of flood risk" is "fully taken into account" when proposed developments are assessed. Officers also cited several examples where the Council has successfully taken enforcement action to ensure that developers and/or owner occupiers rectify problems with drainage systems.

# Bradford Council involvement in checking that developments do not have an adverse impact on run-off and flooding risk.

Several contributions from officers during this part of our first evidence-gathering session indicated (as was discussed earlier) that the Council does not currently routinely inspect developments once they are completed. Instead, the Council responds "in a reactive way" to complaints from the public and takes enforcement action where necessary to rectify problems. This has happened in a number of cases and responsibility for taking remedial action rests with the developer or the occupants of the land. In sum, therefore, SUDS are seen as a responsibility for developers and occupants to manage proactively rather than for the Council to do so via its role as the local planning authority.

One Council officer noted that this is a very different regime from the approach to highways, which are subsequently adopted by the Council and are therefore "inspected to death". This difference in approach is partly a question of resources – in the words of one participant, "we do not have the resource or means...at the moment"; and partly due to a perception that this kind of work "is not part of our remit".

Several participants in this session highlighted the adverse drainage impacts of small-scale changes in property use such as paving over driveways or building conservatories. Some of these activities fall under the scope of 'permitted development', others require consent.

# **Recommendation 25**

That the Council incorporates sustainable urban drainage messages and policies into its broader community engagement, such as the benefits of permeable driveways, along the lines of the Ten Point Plan produced by Friends of Bradford's Becks.

# 4) Concluding Remarks

The process of providing support and guidance to those affected by floods across the District, by Bradford Council and its partners, is complex and requires a multi-faceted approach. It is therefore imperative that an effective approach to water management across the District is adopted by Bradford Council and its partners.

This Committee has sought to take a balanced approach in its deliberations relating to this Scrutiny review and aimed to ensure that this report encompasses the views and concerns of all interested parties.

The Scrutiny review report identifies a number of recommendations. If implemented, these will further improve the approach to water management across the District.

Bradford Council's Environment and Waste Management Overview and Scrutiny Committee, will monitor future progress against these scrutiny review recommendations.

# **Recommendation 26**

That Bradford Council's Environment and Waste Management Overview and Scrutiny Committee receives a report back before the end of April 2018 which monitors progress against all the recommendations contained within this scrutiny review.

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## 5) Summary of Scrutiny Review Recommendations

#### **Recommendation 1 (mirrors Recommendation 16)**

That the Council liaises closely with partner city region authorities to finalise supplementary planning guidance as soon as possible, and that officers quickly finalise a date by when these documents will be published.

#### **Recommendation 2**

That the Council continues to review the development of its 'register of structures or features that affect flood risk'.

#### **Recommendation 3**

That the Council urgently reviews its default policy of non-inspection of the sustainable urban drainage features and flood risk aspects of completed developments, particularly in relation to larger projects and including SUDS already installed to date, in order to ensure that these developments are consistent with our LFRMS; and that the cost of doing so is borne as far as is practicable by the developer.

#### **Recommendation 4**

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#### **Recommendation 5**

That the Council ensures that its flood risk management strategy continues to balance the needs of the Aire and Wharfe valley catchments.

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#### **Recommendation 8**

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#### **Recommendation 9**

That the Council reviews the actions necessary for it to ensure that land required for current and future flood management is protected from development in order to mitigate the impacts of climate change.

#### Recommendation 10

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#### **Recommendation 11**

That the Council works closely with Yorkshire Water to identify key places where surface water drainage problems exist in order to ensure that its action-planning delivers early, tangible results for our community.

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#### **Recommendation 15**

That the Council updates its LFRMS to incorporate the development of 'bottom-up' actions to support sustainable drainage, mitigate the risk of flooding and enable communities to recover from flooding events.

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#### **Recommendation 24**

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#### **Recommendation 25**

That the Council incorporates sustainable urban drainage messages and policies into its broader community engagement, such as the benefits of permeable driveways, along the lines of the Ten Point Plan produced by Friends of Bradford's Becks.

#### **Recommendation 26**

That Bradford Council's Environment and Waste Management Overview and Scrutiny Committee receives a report back before the end of April 2018 which monitors progress against all the recommendations contained within this scrutiny review.

## City of Bradford Metropolitan District Council Environment and Waste Management Overview and Scrutiny Committee

#### **Water Management Scrutiny Review**

#### **Terms of Reference**

See Part 3E paragraphs 2.1 to 2.11 of the Constitution of the Council.

#### Background

At its meeting on Tuesday 19 January 2016, Council agreed that the Corporate Overview and Scrutiny Committee undertake an in-depth scrutiny review, into the effectiveness of Bradford Council and its Partners in dealing with the floods across the District in December 2015.

It was also agreed that the Corporate Overview and Scrutiny Committee would receive the final review report, prior to its submission to full Council.

Following discussions with Councillors and Officers, it was also agreed that water management across the District should be looked at and it was agreed that the Environment and Waste Management Overview and Scrutiny Committee should undertake this scrutiny review.

The winter 2015 floods affected several areas and communities across the District.

A review to consider the future of water management and associated problems of flooding in the Bradford District was undertaken in 2004-2005 and this review will also consider the progress made against the recommendations in that review.

#### **Key Lines of Enquiry**

The key lines of enquiry for this scrutiny review are to:

- Examine the policies that impact on either the mitigation of flood risk or contribute to that risk;
- Identify potential sources of funding and other resources that could assist in reducing the risk and impact of flooding;
- Develop an action plan to reduce the risk and impact of flooding and use in response to any future incidents;
- Consider future climate change assumptions and their impact on the frequency and severity of flooding incidents;
- Consider measures which could be taken to reduce the rate of water runoff into the river system:
- Consider the effect of increased flooding risk on proposed development and the effect of proposed and possible future development on run off and flooding risk.

#### Methodology

The committee will receive and consider a variety of evidence/information provided by a range of interested parties. The Committee may adopt one or more of the following methods to collect evidence/information:

- review relevant documents;
- review relevant data;
- review written submissions from, or meetings with, interested parties;
- undertake relevant visits.

#### Indicative list of interested parties

An indicative list of interested parties is provided below. This is not definitive or exclusive and can be developed as the scrutiny progresses.

| Organisation / Department                      | Contact                                                                                                     |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Bradford Council Executive Portfolio<br>Holder | Cllr Alex Ross-Shaw                                                                                         |
| Bradford Council Officers                      | Emergency Management, Drainage,<br>Highways, Highways Asset Management and<br>Countryside and Rights of Way |
| Aire Rivers Trust                              | Geoff Roberts                                                                                               |
| The Environment Agency                         | Nicola Hoggart                                                                                              |
| Other Local Authorities                        | Craven, Leeds, Calderdale, Pickering                                                                        |
| Airedale Inland Drainage Board                 | •                                                                                                           |
| Yorkshire Water                                |                                                                                                             |
| West Yorkshire Combined Authority              |                                                                                                             |

#### **Indicative Timetable**

| Date                       | Milestone                                                                                                                                       |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Tuesday 5 April 2016       | DRAFT Terms of Reference to be presented to the Environment and Waste Management Overview and Scrutiny Committee – for discussion and approval. |
| Tuesday 24 January 2017    | Information gathering session.                                                                                                                  |
| Tuesday 7 February<br>2017 | Information gathering session.                                                                                                                  |
| TBC                        | Final review findings and recommendations.                                                                                                      |

#### **EWMOSC Water Management Scrutiny Review.**

Executive summary from the 'Review to Consider the Future of Water Management and the Associated Problems of Flooding in Bradford District', Ashley et al, published in 2005.

## **Executive summary**

An Inquiry into Water Management and Flooding in the Bradford District was commissioned by Bradford Council in 2003.

The review process and its final report examined issues in relation to the development and implementation of future water management policy to reduce risk of floods, mitigate their effects and provide a coordinated emergency response within the context of an integrated approach to water management as a whole.

Key areas covered in the report include:

Flood risk – nature and scale
Development and Regeneration
Mechanisms for reducing and managing flood risk
Mitigating flooding
Critical appraisal of current approaches and perform

Critical appraisal of current approaches and performance Effective water management and control of flooding

#### Key recommendations

The report makes a series of recommendations that affect a range of key organisations and communities across the Bradford District. The primary recommendations are:

- CBMDC should develop a clear future vision and assume an appropriate leadership role in management of the whole water cycle in the district in conjunction with the other major stakeholders, as part of the district's community strategy.
- 2. A more integrated and coordinated approach is required both within the Council and across the water and flood management stakeholder groups; this includes the way priorities are set across the region.
- 3. There is a need to work with individuals and communities to help them understand the issues; individual as well as collective and agency responsibilities, and thereby engender an awareness of ownership of responsibilities for dealing with risks and mitigation.
- 4. There should be better planned maintenance of existing drainage systems by all responsible stakeholders, with targeted Key Performance Indicators for statutory functions.
- 5. Better coordinated, inter-linked, emergency plans should be devised in anticipation of the whole range of possible problems that may occur due to flood risk across the district, linked to the implementation of the new civil contingencies responsibilities at a local level.

- 6. Investment is required in increasing knowledge about the likely future changes in flood risk, such as due to climate change, that may increase future flood risk in the district.
- 7. On-going dialogue is required with financial and insurance industries to ensure that appropriate and flexible investment and support services are maintained within the district.
- 8. Investors, promoters and developers should be encouraged to maximise the opportunities afforded throughout the whole water cycle.
- Regional agencies should develop a more holistic approach to whole water cycle management, to both better manage problems and to maximise the positive opportunities.
- 10. A greater understanding of the need, and commitment to, adequate resourcing across the range of water related services is required in the district

The Report also sets out a series of proposed actions for the Council, key service providers and other stakeholders. It recommends that a Water Management Liaison and Advisory Group, including representatives from all the key stakeholders is set up to implement the findings of this inquiry. The group should have an appropriate district wide ownership, remit and 'buy-in' by Bradford Council and the community.

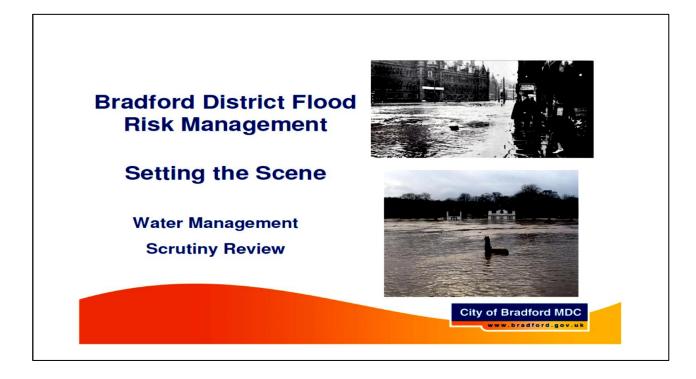
The Report will be forwarded to the key organisations involved for their active consideration during 2005.

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#### **EWMOSC Water Management Scrutiny Review.**

## Officer presentation summarising progress to date in implementing the recommendations of the 2005 review.

EWMOSC meeting held at City Hall, Bradford, 26 July 2016.



### History

- The flooding of 2015 was the first major flood event in terms of property flooding in Bradford District since 2000.
- In 2000 Bradford was the second most affected area in the UK.
- Impact principally from River Aire catchment and affected over 400 properties District wide; 200+ in Stockbridge, Keighley.
- Historically River Wharfe catchment results in most out of bank events and affects Ilkley and Addingham.



## **History continued**

- Localised flooding in 2003-2005 predominantly affected Keighley (Stocksbridge) and Haworth (Bridgehouse Beck/Mill Hey) areas.
- Major UK floods of 2007 and 2012 did not impact heavily on Bradford District.
- Due to the time frame of major events, impacts of flooding with both elected members and the public had reduced in their significance.



#### **Executive summary**

An Inquiry into Water Management and Flooding in the Bradford District was commit Council in 2002

The review process and its final report examined issues in relation to the development and implementation of future water management policy to reduce risk of floods, mitigate their effects and provide a coordinated emergency response within the context of an integrated approach to water management as a whole.

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Regional agencies should develop a more holistic approach to whole water cycle management, to both better manage problems and to maximise the positive opportunities.

#### Work since 2000

- Review to Consider the **Future of Water** Management and the Associated Problems of Flooding in the Bradford District commissioned 2003 (published 2005).
- Set out ten primary recommendations.
- Response to these numbered points follows.

City of Bradford MDC www.bradford.gov.uk

#### Work since 2000

- Bradford Water Management Advisory Group established to inform Local Authorities and other key stakeholders.
  - European projects Urban Water Cycle (UWC) and No Rainwater In Sewers (NoRIS) arose from this.
- 2. Bradford and University of Sheffield establish the Yorkshire & Humber Learning and Action Alliance.
  - Knowledge sharing & regulatory issues.
- 3. Work undertaken by Bingley Voluntary Action group through Glen Miller.
- 4. Partially implemented in respect of some Highway grills, CBMDC Reservoirs, Odsal tip and Bradford Beck inlet works.
  - Due to budget constraints the focus is on reactionary activity to maintenance.
- 5. The Emergency Planning section has plans in place for all conceivable emergencies.



#### Work since 2000 continued

- A number of UK and European Projects have been undertaken to increase knowledge and develop best practice.
  - Defra incorporated urban Drainage Pilot River Aire Studies, Flood Risk Research Consortium 1 & 2 and Adaptable urban drainage addressing change in intensity, occurrence and uncertainty of stormwater (AUDACIOUS).
  - UWC, NORIS, Flood Resilience City (FRC), Skills Integration and New Technologies (SKINT).
- Ongoing dialogue at national level FloodRe launched in April 2016.
- 8. Normal work practice encourages implementation of Sustainable Urban Drainage systems. Recommendation undertaken as far as possible given no statutory support at that time.
- Recommendation on historic approach undertaken as far as possible given no statutory support at this time.
- Adequate resource needs identified and implemented as far as budget constraints permit.



#### Where are we now?

- · Lead Local Flood Authorities (LLFA).
  - Came out of 2009 Flood Risk Regulations (FRR) which brought into UK law the EU Floods Directive (2007).
  - Shift in Water Management and responsibilities. Environment Agency (EA) kept control of main rivers but have less of an operational role and more of a strategic overview of Flood and Coastal Erosion Risk Management.
  - LA's have more responsibilities.
  - Flood & Water Management Act 2010 (FWMA).
  - Not all sections of the FWMA have yet been implemented.



#### Where are we now?

- Asset database developed.
- System for managing ongoing land drainage investigations (3-400 per annum).
- Draft Local Flood Risk Management Strategy.
- Ongoing liaison with other Risk Management Authorities (RMA's) in Leeds City Region.
- Involved with DEFRA in guiding legislation. SUDs Approval Body.
- Two EU applications being considered for approval.
  - BEGIN Blue Green Infrastructure through Social Innovation and SCORE – Smart Cities and Open Data Re-use.
- Fifteen locations across Bradford District being assessed as a desk top study as part of the EA's Medium Term Plan (MTP).



#### Where are we now?

- Actively engaging with developers regarding SUDs schemes at a pre-application stage.
- Manage Land Drainage Consents for works to Ordinary Watercourses.
- Maintenance of highway grills driven primarily by advance weather forecasts.
- Part of the West Yorkshire Flood Risk Partnership.
- Flood Risk Modelling of Bradford Beck.
- Mapping of flood risk from all sources in Bradford District. Data sharing between CBMDC, EA and Yorkshire Water (YW).



#### **EWMOSC Water Management Scrutiny Review.**

Extract from the printed minutes of the EWMOSC meeting held at City Hall,
Bradford, 26 July 2016 (pages 12-14), at which the committee reviewed progress to
date in implementing the recommendations of the 2005 review.

## 15. SCRUTINY REVIEW INTO WATER MANAGEMENT ACROSS THE BRADFORD DISTRICT

Previous reference: Minute 73 (2015/16)

Members were reminded that since the severe widespread property flooding from the River Aire in 2000 and more localised events in 2003, 2004 and 2005 there had been negligible property flooding until Boxing Day 2015.

Following a referral from the Corporate Overview and Scrutiny on 8 March 2016 it had been agreed that a review into water management across the Bradford district would be incorporated into this committee's work programme. The Strategic Director, Regeneration, presented a report, (**Document** "**F**") which revealed how water management had progressed and to set the scene for the scrutiny review.

A detailed PowerPoint presentation was provided. It was explained that the presentation was not designed to address the events on Boxing Day 2015 but was to provide an overall view of water management.

The presentation included details of:-

- Flooding in the district since 2000.
- A Review to Consider the Future of Water Management and the Associated Problems of Flooding in the Bradford District commissioned in 2003 (published in 2005).
- The ten primary recommendations arising from that review and the response and issues faced.
- A number of UK and European projects which had been undertaken to increase knowledge and develop best practice.
- An account of the current situation including the creation of the Lead Local Flood Authorities (LLFA).
- A shift in water management responsibilities with local authorities being given more responsibilities following the Flood and Water Management Act 2010.
- On going dialogue at national level Flood Re launched in April 2016.
- The development of an asset database.
- The Draft Local Flood Risk Management Strategy currently being consulted upon and proposed to be finalised in September 2016.

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- Active engagement with building developers regarding sustainable drainage schemes (SUDs) at pre-application state.
- Flood Risk Modelling of Bradford Beck.
- Mapping of flood risk from all sources in the Bradford district and data sharing with the Environment Agency and Yorkshire Water.

Members questioned if there were any implications on European legislation affecting water management following the Brexit vote and were advised that the latest information was that the North Sea Secretariat were carrying out their programme as before. Academic sources had confirmed that 30/40% of projects submitted did not want UK partners.

The role of the West Yorkshire Combined Authority in flood and water management was raised and assurances provided that a number of combined issues were conducted across the district and would also guide future management. The Leeds City Region Review Group had met regularly since Boxing Day 2015.

The geography of the area and the practice of concreting gardens, resulting in them retaining, was discussed and the ability to prevent that risk was questioned. In response it was reported that legislation was in place regarding front gardens only. In respect of Sustainable Development Members were informed that Section 3 of the Flood and Water Management Act (risk management) had not been implemented and the proposed National Standards had been withdrawn, being replaced by a reduced number of Non Statutory Guidance Notes thereby reducing the powers of the Local Planning Authority and leaving developers with uncertainty.

The extent to which voluntary/community activity could be deployed in times of flood and the lessons learnt following the events on 26 December were raised. Members were advised that engagement had been made with a number of community groups. Activities were being undertaken to consider the development of Emergency Plans to be held by community groups and supported by the Local Authority. It was felt that community groups would be in the best position to understand the risks and required response in their own areas.

The potential reformation of the Bradford Water Management Advisory Group, established to inform Local Authorities and other key stakeholders, which had been disbanded due to cuts in resources, was questioned. It was explained that the original composition had included Council officers and external bodies. Careful consideration would be given to ensure sufficient external bodies were included. It was suggested that the Environment Agency be included.

The uncertainty around the European Union (EU) was discussed, however, despite that uncertainty it was felt that there was the potential for grant aid for locations affected by water management issues.

The construction of an overflow tunnel in the 1980's which diverted water away from the city centre and prevented major flooding during the 2007 was discussed. In response to questions it was explained that the tunnel cost £14.5million with the Council receiving contributions from the EU, Yorkshire Water and the Environment Agency. The tunnel had taken two to three years to construct.

The ability for Emergency Plans to cover all eventualities was questioned. In response it was explained that the plans had been written in 2003 and responsibilities had changed since that time. More clarity was now needed on the involvement of different departments and organisations.

A Member raised concern about the reliance on 'local' Emergency Plans and whilst

acknowledging that residents were well meaning he was concerned that population changes could result in those plans being abandoned. In response he was assured that the plans would be held by Town or Parish Councils. The plans would be reviewed annually and contacts updated. In areas without the benefit of local councils other groups would be involved and reviewed annually.

A Member's experience of the emergency response in December 2015 was that Council officers were in place but not easily identified because of a lack of uniform or high visibility clothing. Incidents of road closures and traffic chaos were raised and it was acknowledged that those issues would be the subject of the review being undertaken by the Corporate Overview and Scrutiny Committee.

In response to discussions about future developments in the area it was explained that a key document in the Local Plan was the Core Strategy. The Strategy set out growth and distribution of future housing and individual flood risk areas would be identified in that document.

Members requested assurances that the outcomes of the review they were commencing would be implemented and it was agreed that it would be for the committee to ensure the outcomes were monitored. It was suggested that the outcomes include the consequences which would result if no action was taken.

The reduction in resources and the impact on those reductions was recognised. The work of local groups was acknowledged and officers were thanked for the production of an informative and helpful presentation.

No resolution was passed in respect of this item.

#### **EWMOSC Water Management Scrutiny Review - Participants.**

#### First evidence-gathering session, City Hall, Bradford, 24 January 2017

- James Brass (Bradford Council)
- Kirsty Breaks (Bradford Council)
- Mustansir Butt (Bradford Council)
- Chris Eaton (Bradford Council)
- Rosa Foster (Environment Agency)
- Nicola Hoggart (Member, EWMOSC, Environment Agency)
- Julian Jackson (Bradford Council)
- Barney Lerner (Friends of Bradford's Becks)
- Graham Lindsey (Environment Agency)
- Cllr Martin Love (Deputy Chair, EWMOSC)
- Edward Norfolk (Bradford Council)
- Tony Poole (Bradford Council)
- Cllr Naveed Riaz (Member, EWMOSC)
- Geoff Roberts (Aire Rivers Trust)
- Cllr Martin Smith (Ilkley ward councillor)
- Cllr Brendan Stubbs (Member, EWMOSC)
- Cllr Kevin Warnes (Chair, EWMOSC)
- Cllr Rosie Watson (Member, EWMOSC)

#### Second evidence-gathering session, City Hall, Bradford, 7 February 2017

- Cllr Aneela Ahmed (Member, EWMOSC)
- Steve Barnbrook (Calderdale Council)
- Kirsty Breaks (Bradford Council)
- Mustansir Butt (Bradford Council)
- Gary Collins (Yorkshire Water)
- Rosa Foster (Environment Agency)
- Cllr Mike Gibbons (Member, EWMOSC)
- Nicola Hoggart (Cop-opted Member, EWMOSC, and Environment Agency)
- Cllr Hawarun Hussain (Shipley ward councillor)
- Julian Jackson (Bradford Council)
- Barney Lerner (Friends of Bradford's Becks)
- Graham Lindsey (Environment Agency)
- Cllr Martin Love (Deputy Chair, EWMOSC)
- Edward Norfolk (Bradford Council)
- Tony Poole (Bradford Council)
- Geoff Roberts (Aire Rivers Trust)
- Steve Rose (JBA Consulting)
- Cllr Brendan Stubbs (Member, EWMOSC)
- Cllr Kevin Warnes (Chair, EWMOSC)
- Jon Whitmore (JBA Consulting)

Also: Maria Dara, Danny Jackson (Bradford Council)

# List of briefing reports provided for the EWMOSC in connection with the water management evidence-gathering sessions held on 24 January 2017 and 7 February 2017

- Briefing paper, Bradford Council, 24 January session.
- Briefing paper, Aire Rivers Trust, 7 February session.
- Briefing paper, Bradford Council, 7 February session.
- Briefing paper, Environment Agency, 7 February session.
- *Ten Point Plan*, Friends of Bradford's Becks, 7 February session.
- Briefing paper, Natural Flood Management, JBA Consulting, 7 February session.
- The Upper Aire Catchment Network, briefing paper, Environment Agency, March 2017.

## List of background documents

- Newcastle Declaration on Blue and Green Infrastructure, issued in February 2016 and signed by Newcastle City Council and five partner organisations.
- Report from the Director of Regeneration, *Water Management Scrutiny Review Scene Setting*, Environment and Waste Management Overview and Scrutiny Committee, Bradford Council, 26 July 2016.
- Minutes of the meeting of the Environment and Waste Management Overview and Scrutiny Committee, Bradford Council, 26 July 2016.
- Flooding Scrutiny Review, Corporate Overview and Scrutiny Committee, Bradford Council, September 2016.
- Local Flood Risk Management Strategy, Bradford Council, November 2016.
- Leeds City Region Flood Review Report, December 2016.
- UK Climate Change Risk Assessment 2017, Committee on Climate Change.

