



Executive Board

Thursday, 20 July 2017 2.00 p.m.
The Boardroom, Municipal Building

A handwritten signature in blue ink, appearing to read 'David W R'.

Chief Executive

ITEMS TO BE DEALT WITH IN THE PRESENCE OF THE PRESS AND PUBLIC

PART 1

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| 1. MINUTES | |
| 2. DECLARATION OF INTEREST | |
| Members are reminded of their responsibility to declare any Disclosable Pecuniary Interest or Other Disclosable Interest which they have in any item of business on the agenda, no later than when that item is reached or as soon as the interest becomes apparent and, with Disclosable Pecuniary interests, to leave the meeting during any discussion or voting on the item. | |
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| In this case the Board has a discretion to exclude the press and public and, in view of the nature of the business to be transacted, it is RECOMMENDED that under Section 100A(4) of the Local Government Act 1972, having been satisfied that in all the circumstances of the case the public interest in maintaining the exemption outweighs the public interest in disclosing the information, the press and public be excluded from the meeting for the following item of business on the grounds that it involves the likely disclosure of exempt information as defined in paragraph 3 of Part 1 of Schedule 12A to the Act. | |
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In accordance with the Health and Safety at Work Act the Council is required to notify those attending meetings of the fire evacuation procedures. A copy has previously been circulated to Members and instructions are located in all rooms within the Civic block.

REPORT TO: Executive Board

DATE: 20 July 2017

REPORTING OFFICER: Strategic Director – People

PORTFOLIO: Children, Young People and Families

SUBJECT: Conversion of The Grange School to Wade Deacon Trust

WARD(S): Borough-wide

1.0 PURPOSE OF THE REPORT

- 1.1 This report provides a summary of the arrangements for the conversion of The Grange School to Wade Deacon Trust and seeks authority to undertake any actions necessary to affect this transfer.

2.0 RECOMMENDATION: That

- 1) the appointment of the law firm Freeths to act for the Authority in the conversion of The Grange PFI School is noted;**
- 2) authority is delegated to the Operational Director Education, Inclusion and Provision, in consultation with the portfolio lead for Children, Young People and Families, to agree the following:-**
 - i. Schools Agreement**
 - ii. Principal Agreement**
 - iii. Deed of variation**
 - iv. Lease**
 - v. Service Level Agreement for Resource Base provision**
 - vi. Shared use agreement**
 - vii. Commercial Transfer Agreement**
- 3) Authority is delegated to the Operational Director Education, Inclusion and Provision , in conjunction with the portfolio lead for Children, Young People and Families, to undertake any actions necessary to affect the conversion.**

3.0 SUPPORTING INFORMATION

- 3.1 The Authority received an Academy Order from the Secretary of State for Schools in October 2016 approving the conversion of The Grange School to Academy status as part of Wade Deacon Trust. On receipt of an Academy Order the Local Authority must work with the school and its sponsor, Wade Deacon to support the conversion.

- 3.2 The Grange is an All through school which caters for pupils from 3 to 16 years old. The school has a nursery which caters for up to 104 full time equivalent children aged 3 and 4 spread over 2 sessions with up to 52 full time equivalent children. It has a two form entry primary school with a Published Admission (PAN) number of 60 per year group and a total of 420. For secondary there is a PAN of 180 per year group, a total of 900. The school also has four Resource Bases; three for pupils with Autistic Spectrum Conditions (ASC). There are bases in Key Stage 1, Key Stage 2 and Key Stage 3 and 4. There is also a fourth Resource Base for pupils with Speech and Language needs.
- 3.3 The Grange is a Private Finance Initiative (PFI) School. Construction commenced in 2011 and the building work was completed with service commencement in April 2013. The PFI arrangements commenced in April 2013 and will cease in 25 years from service commencement 2038.
- 3.4 Due to the complexity of the conversion a request was made to the Department for Education to provide financial assistance to the Local Authority to secure specialist legal support. Initial requests were refused, however, in February 2017 the opportunity was provided to apply for grant and the application from Halton was approved in March 2017.
- 3.5 The Transfer of Undertaking (Protection of Employment) Regulations 2006 (TUPE) consultation was undertaken with staff and trade unions in February and March 2017.
- 3.6 In May 2017 the law firm Freeths were commissioned to work alongside HBC Legal Services to represent the Council's interest during the academy conversion. Each of the other parties has also appointed specialist legal support. Hill Dickinson will represent Wade Deacon Trust and The Grange School and Addleshaw Goddard will represent both The Grange Special Purpose Vehicle (SPV) and the Lenders.
- 3.7 The original proposed conversion date was 1st September 2017. However, given the delay in commencing negotiations and the complexity of the conversion it has been acknowledged that this date is no longer achievable.
- 3.8 An initial set up meeting took place on 19th June 2017 to agree the key documents and issues which would need addressing and the DFE have now assigned a member of the Academies Regional Delivery Group to support the conversion process.
- 3.9 A number of key documents will need to be amended and agreed including:
- **Schools Agreement** – this replaces the previous Governing Body Agreement, sets out the relationship between the Academy and the Council, outlines the respective responsibilities and secures the continuing financial contribution of the Academy
 - **Principal Agreement** – sets out the relationship between the Department for Education, the Academy and the Council. It seeks to ensure there are “no adverse consequences arising out of the

Academy's status as an Academy rather than a school maintained by the Authority"

- **Long Term Lease** - lease for 125 years for The Grange site
- **Service Level Agreements** – sets out the arrangements for the continuation of the four Local Authority Resource Bases operating from The Grange School
- **Joint use agreements** – sets out the arrangements for any jointly used facilities
- **Commercial Transfer Agreements** – addresses the transfer of assets, staff and contracts from the Council to the Academy Trust
- **Deed of Variation to the PFI contract** – sets out the arrangements to make the Academy an insured party under the PFI contract and adds the Academy as a Council Related Party whose actions are the responsibility of the Council.

3.9 In addition, to Legal support in order to conclude the academy conversion support will be required from HR, Finance, Property Services, Estates and Procurement. Once the appropriate advice has been provided it is proposed that authority is delegated to the Operational Director Education, Inclusion and Provision to determine the terms of the transfer agreements.

4.0 POLICY IMPLICATIONS

4.1 On receipt of an Academy Order the Council must work with the relevant partners to facilitate the conversion.

5.0 FINANCIAL IMPLICATIONS

5.1 Wade Deacon Trust and The Grange School have been advised that they will need to meet any of the financial costs incurred by the Council in effecting the conversion.

5.2 Any deficit associated with The Grange School on conversion will remain with the local authority after the school has become an academy and any surplus will be passed to the academy.

6.0 OTHER IMPLICATIONS

6.1 The current contractual arrangements require the PFI contractor to meet any excess energy costs above an agreed benchmark. Energy costs have exceeded the set benchmark each year since service commencement. The school have yet to receive full compensation for the costs incurred.

7.0 IMPLICATIONS FOR THE COUNCIL'S PRIORITIES

7.1 Children and Young People in Halton.

The Council will continue to work in partnership with The Grange to improve outcomes for children and young people.

7.2 Employment, Learning & Skills in Halton

N/A

7.3 A Healthy Halton

N/A

7.4 A Safer Halton

N/A

7.5 Halton's Urban Renewal

N/A

8.0 RISK ANALYSIS

8.1 Specialist Legal Support has been commissioned to represent the Council's interest and ensure appropriate due diligence during prior to conversion.

8.2 To ensure that other schools and Council services are not adversely affected by the costs incurred to the Council through the conversion, grant funding has been secured and The Grange and The Trust have been notified that the Council will seek to recover any other additional costs.

9.0 EQUALITY AND DIVERSITY ISSUES

9.1 No equality and diversity issues have been identified.

10.0 REASON(S) FOR DECISION

10.1 To seek delegated approval to facilitate the conversion of The Grange to Wade Deacon Trust

11.0 ALTERNATIVE OPTIONS CONSIDERED AND REJECTED

11.1 All key documents considered and agreed by Executive Board. This option was rejected due to the number of changes required, the number of partners involved and the impact this would have on the timescale for the conversion.

12.0 IMPLEMENTATION DATE

12.1 Delegated powers to take effect from July 2017.

13.0 LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF THE LOCAL GOVERNMENT ACT 1972

| Document | Place of Inspection | Contact Officer |
|----------------------------------|---------------------|--|
| DFE Academy Order – October 2017 | People Directorate | Ann McIntyre – ann.mcintyre@halton.gov.uk |

REPORT TO: Executive Board

DATE: 20 July 2017

REPORTING OFFICER: Strategic Director, People

PORTFOLIO: Children, Young People and Families

SUBJECT: Request for Halton Borough Council to lead the procurement of an IAG service for Halton, Liverpool, Wirral and Knowsley Authorities

WARDS: Borough wide

1.0 PURPOSE OF THE REPORT

- 1.1 To obtain Executive Board approval for Halton Borough Council to lead the procurement of services to encourage, enable and assist young people to participation in education and training.

2.0 RECOMMENDED: That

- 1) the report be noted; and
- 2) the Board approves Halton Borough Council acting as lead in a joint procurement process with Liverpool, Wirral and Knowsley local authorities.

3.0 SUPPORTING INFORMATION

- 3.1 Local authorities have a duty to make available to all young people aged 13-19 and to those between 20 and 25 with special educational needs and disabilities, support that will encourage, enable and assist them to participate in education or training. This is a duty under Section 68 of the Education and Skills Act 2008.
- 3.2 In addition, the Education and Skills Act 2008 placed two 'Raising the Participation Age' related duties on local authorities with regard to 16 and 17 year olds:
- 3.2a. Local authorities must promote the effective participation in education and training of 16 and 17 year olds in their area with a view to ensuring that those persons fulfil the duty to participate in education or training. A key element of this is identifying the young people in their area who are covered by the duty to participate and encouraging them to find a suitable education or training place.
 - 3.2b. Local authorities must make arrangements – i.e. maintain a tracking system - to identify 16 and 17 year olds who are not

participating in education or training. Putting in place robust arrangements to identify young people who are not engaged in education or training or who have left provision enables local authorities to offer support as soon as possible.

- 3.3 On the 17th October 2013 the Executive Board approved a report outlining a revised approach within Halton to delivering services to meet these duties. The revised approach, known as the Halton Participation Strategy, brought a large element of the work in house and achieved financial and resource efficiencies in doing so and began in April 2014.
- 3.4 Since the implementation of the Halton Participation Strategy the percentage of young people who are not in education, employment or training or whose activity is not known to the council has dropped from 12% in 2013/14 to 8.8% in 2015/16.
- 3.5 An element within the Halton Participation Strategy is the commissioning of a service to encourage, enable and assist young people to participation in education and training through the provision of information, advice and guidance.
- 3.6 The commissioning of a service to encourage, enable and assist young people was carried out in collaboration with other Liverpool City Region Authorities. As approved by Executive Board on the 17th October 2013 Halton Borough Council led the procurement process and created a Framework Agreement for the service incorporating Liverpool City Region Authorities.
- 3.7 The contract was awarded to Greater Merseyside Connexions Partnership and came into effect from 1st April 2014 for a period of two years with an option to extend for a further two years. The option to extend has been taken and the current contract will end on 31st March 2018.
- 3.8 Halton and the Liverpool City Region Authorities of Knowsley, Liverpool and Wirral seek to procure a service to encourage, enable and assist young people from 1st April 2018. The service will maintain similar features to current as all local authorities have found the current service specification to meet their requirements.
- 3.9 The joint procurement process would seek to procure a service from April 2018 for a period of four x 12 month periods. This will allow for consistency of service from 2018 to 2022 but with the option to reduce or terminate the service annually should the Council's statutory duties change or further budget savings require a reduction.
- 3.10 The maximum total contract value annually would be:
Halton = £130,000
Combined Knowsley, Liverpool, Wirral= £1,460,000

Maximum total annual value = £1,590,000

- 3.11 The joint procurement process would once again lead to a Framework Agreement for the service, with each local authority responsible for their own element of service delivery and managing their own payment schedules direct to the service provider.
- 3.12 There is a significant advantage to Halton to be involved in a joint procurement process because of the size of the contract across the four local authorities; there are economies of scale Halton will benefit from, and given the size of Halton's budget it's likely the Council will benefit the most from being part of a much larger contract.
- 3.13 As the lead for the current service to encourage, enable and assist young people across Liverpool City Region authorities, Liverpool, Wirral and Knowsley authorities have asked Halton to act as the lead once again to procure a joint service from April 2018.
- 3.14 As Halton has the most experience of procuring this service, with procurement documentation that only needs minor amendments, there is an advantage to the procurement teams of all the local authorities involved for Halton to lead. Given the scale of Halton's budget compared to the investment in this procurement from other local authorities Halton's procurement team will negotiate with the other local authorities teams either:
 - 3.14a a charge for the work representative of the scale of the contract value for each local authority
 - 3.14b a reciprocal arrangement whereby another authority leads another joint procurement exercise
- 3.15 Given the benefits outlined above, and in order to make the procurement process as efficient as possible for all local authorities involved the Strategic Director, People, seeks Executive Board approval to lead the procurement across Halton, Liverpool, Wirral and Knowsley Local Authorities.

4.0 POLICY IMPLICATIONS

- 4.1 Securing a service to encourage, enable and assist young people to participate in education is an essential element of the Council's work to meet its statutory duties.

5.0 FINANCIAL IMPLICATIONS

- 5.1 A joint procurement process offers the best option for all local authorities to achieve value for money through economies of scale. As the smallest budget holder Halton has the potential to benefit most from this joint procurement.

- 5.2 The staffing resource from all local authorities involved can be best utilised by allowing Halton to lead this particular joint procurement process, given the vast experience and documentation already available in Halton.

6.0 IMPLICATIONS FOR THE COUNCIL'S PRIORITIES

6.1 Children and Young People in Halton

The service to encourage, enable and support young people to participate in education and training is an important element of the Halton Participation Strategy, which is proving successful in providing young people who are not in education, employment or training with the support they need to progress.

6.2 Employment, Learning and Skills in Halton

The Halton Participation Strategy supports key priorities in encouraging young people to access learning or training that will lead to longer term, more sustainable employment options.

6.3 A Healthy Halton

None

6.4 A Safer Halton

None

6.5 Halton's Urban Renewal

None

7.0 RISK ANALYSIS

There is a financial risk in not being part of a joint procurement process and therefore incurring a higher level of service charge from any supplier delivering to Halton only.

Both Liverpool and Wirral local authorities have recently procured a service for their European Social Fund project. Despite procuring the same service both local authorities chose not to procure jointly. If Halton did not lead this procurement process there is a risk no other local authority would agree to lead a joint procurement process, with individual local authorities then having to procure separately.

8.0 EQUALITY AND DIVERSITY ISSUES

None

9.0 LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF THE LOCAL GOVERNMENT ACT 1972

None under the meaning of the Act.

REPORT TO: Executive Board

DATE: 20 July 2017

REPORTING OFFICER: Strategic Director – People

PORTFOLIO: Children, Young People and Families

SUBJECT: Development of Vocational Alternative Provision

WARD(S): Borough-wide

1.0 PURPOSE OF THE REPORT

- 1.1 This report seeks permission to extend the range of vocational education on offered by The Bridge School through the development of a skills base in a unit at Astmoor.

2.0 RECOMMENDATION: That

- 1) Approval is given to the capital project to develop a skills base at Astmoor;**
- 2) This approval is subject to the agreement of the terms of the lease and support from Halton secondary schools; and**
- 3) The Operational Director Economy, Enterprise and Property and the Operational Director Legal and Democratic Services be given the authority to agree the terms of the lease.**

3.0 SUPPORTING INFORMATION

- 3.1 The demand for good quality skills based vocational alternative provision has been increasing in recent years, however, there is insufficient provision in Halton and neighbouring Local Authorities to meet this need. The Bridge School currently offer alternative provision, however, the limitations of the current site mean it is not possible to increase this provision nor to expand the curriculum offer.
- 3.2 A unit used in previous years by Riverside College has now become available. A feasibility report has been undertaken to ascertain the suitability of the site and the costs of any works required to provide a vocational teaching and learning skills base managed by The Bridge school. The report confirmed that subject to the appropriate works the site could be appropriately adapted. The estimated level of capital investment needed is £360,000. This sum includes both the costs of refurbishment and the costs of additional specialist teaching resources.
- 3.3 The skills base would form part of the provision offered by The Bridge. The aim of the skills base would be to support students who are either Permanently Excluded, on roll at The Bridge School through the In Year Fair Access Protocol, or have gained placements through Referral from Halton high schools. Referral will be based on how the provision could meet the needs of the student and will be prioritised based on prior school intervention and evaluation of SEN.

- 3.4 The provision will be under the management of The Bridge School and will fall under the Ofsted framework of evaluation. It will aim to provide a range of curriculum options which could include Construction, Vehicle Maintenance, Hair & Beauty, and a second phase development of Catering, other skills based curriculum options will be explored.
- 3.5 Classes will initially be for 8 students for each curriculum area. It is projected that provision will be available in half day sessions; 2 sessions per day. This would allow a maximum (initially) of 32 students per session, and therefore 64 per day, if placements were maximised. The curriculum pathways will be accredited and be able to contribute to Progress 8. Placements will be for the duration of the accredited pathway and will be routinely reviewed in collaboration with the referring school, parents and students.
- 3.6 The shortage of provision means that the LA and schools are unable to meet the needs and provide an appropriate quality assured curriculum for some of our most vulnerable learners. Secondary schools in the borough have indicated their support for the proposed provision. The revenue costs of this provision will therefore be met from schools through buy back. As there is a shortage of provision in neighbouring authorities should there be any spare capacity to maximise occupancy and ensure sustainability the offer will be made to schools, with pupils with the appropriate profile, in other neighbouring authorities
- 3.7 Although initial estimates anticipate the daily rate will be an increase to that currently paid by schools for access to an Engagement Placement through The Bridge School, this provision offers students access to a broader skills based curriculum which will better meet student need. To support schools the offer will be flexible enough allow the purchase half day placements.

4.0 POLICY IMPLICATIONS

- 4.1 The Local Authority is required to hold a list of all students accessing Alternative Provision. Schools are also asked to indicate the quality of this provision. Feedback from the schools and The Bridge is that a number of providers can no longer provide quality sustainable provision.
- 4.2 In many cases vulnerable learners are asked to travel either out of the borough to access provision or travel to other providers within the borough. The establishment of a local skills based provision should reduce the need for this increased travel and provide a more stable and consistent offer for students.

5.0 FINANCIAL IMPLICATIONS

- 5.1 The capital project will be funded from a combination of £160,000 Basic Need and £200,000 schools capital reserve.
- 5.2 The running costs of provision will form part of The Bridge School budget and will be need to be met from buy back from Halton schools and schools in other neighbouring authorities.

6.0 OTHER IMPLICATIONS

- 6.1 Through the establishment of the skills based centre there will be less pupils educated at home, the number of exclusions will reduce and pupil outcomes will improve. In 2015/2016 the total number of exclusions for the academic year was 25. Up to the end of June 2017 this figure has increased to 48. By increasing alternative provision along with the work that is being undertaken to review support for schools with children and young people with challenging behaviour and the revision to the In Year Fair Access Protocol, it is anticipated that there will be a reduction in the number of children and young people excluded in Halton.

7.0 IMPLICATIONS FOR THE COUNCIL'S PRIORITIES

7.1 Children and Young People in Halton

Improved outcomes for vulnerable learners and those at risk of exclusion.

7.2 Employment, Learning & Skills in Halton

Skills based training will improve the employment prospects for students and reduce the risk of them becoming NEET.

7.3 A Healthy Halton

N/A

7.4 A Safer Halton

N/A

7.5 Halton's Urban Renewal

N/A

8.0 RISK ANALYSIS

- 8.1 There very limited vocational provision in the borough with an increasingly academic curriculum more students could be at risk of becoming disengaged which could lead to further increases both fixed term and permanent exclusions.
- 8.2 There is insufficient buy back to meet the costs of the skills base. Schools have indicated that this is a gap in provision and that they would wish to purchase places. Interest has also been shown in accessing provision in other neighbouring authorities.

9.0 EQUALITY AND DIVERSITY ISSUES

- 9.1 The skills base will allow Halton to more appropriately meet the needs of our some of most vulnerable learners.

10.0 REASON(S) FOR DECISION

- 10.1 To agree capital funding for the development of a vocational skills base at Astmoor.

11.0 ALTERNATIVE OPTIONS CONSIDERED AND REJECTED

11.1 Expand the Bridge School on its current site. This is not possible due to the limitation of the current site.

12.0 IMPLEMENTATION DATE

12.1 July 2017

13.0 LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF THE LOCAL GOVERNMENT ACT 1972

13.1 None under the meaning of the Act.

REPORT TO: Executive Board

DATE: 20 July 2017

REPORTING OFFICER: Strategic Director, People

SUBJECT: Halton Women's Centre

PORTFOLIO: Health & Wellbeing

WARDS: All

1.0 PURPOSE OF REPORT

- 1.1 This Report seeks retrospective approval from the Executive Board for proposals to bring the management of the Halton Women's Centre into the structure of Halton Borough Council, until such time as a suitable alternative can be arranged.

2.0 RECOMMENDATION: That

- 1) Executive Board note the contents of this report; and**
- 2) Give retrospective approval to the proposal to draw the management of Halton Women's Centre into the structures of the Borough Council, as described in paragraphs 3.3.2 and 3.3.3 of this Report.**

3.0 SUPPORTING INFORMATION

3.1 Context:

- 3.1.1 It has long been recognised that the experiences of men and women in the mental health system differ considerably. This recognition was formally acknowledged in 2005, with the national publication by the Department of Health of the "Implementation Guidance: Mainstreaming Gender and Women's Mental Health", as part of a range of national guidance documents issued to support the delivery at the time of the Mental Health National Service Framework.

- 3.1.2 This Policy Implementation Guide made the following key points about the differing experiences of men and women:

- Childhood and adult life experiences: women are more likely to experience violence and abuse
- Day to day social, family and economic realities: women are more likely to live in poverty and be lone parents; men are more likely to be in employment and not be full-time carers

- Expression and experience of mental ill-health: women are more likely to self-harm and suffer from depression and anxiety; they are more likely to attempt suicide, although men are more likely to succeed.
- Treatment needs and responses: women are more likely than men to actively seek “talking therapies” and self-help groups

3.1.3 This was a very timely report for Halton, which until then had no history of providing gender-related services, and which had been recognised as a service gap within local mental health services. The Council had recently received two capital grants, amounting to a total of £173,000, from central government to develop the infrastructure around mental health services, and the decision was made to invest this in adapting a former children’s home in Castlefields into a new Women’s Centre. This was approved at an Executive Board Sub-committee in April 2006.

3.1.4 This project was delivered jointly across Halton Borough Council and the then Halton Primary Care Trust (now NHS Halton Clinical Commissioning Group). The Council agreed to pay for the running costs of the building in Castlefields, whilst the PCT paid for the staffing costs of the new service. The contract to deliver the service was given by the PCT to the Relationship Centre, a Warrington-based charity which has retained the contract until now. It should be noted that it is the only Centre of its kind in the North West of England, and is therefore a showcase for Halton.

3.2 **Delivery of the service at the Women’s Centre:**

3.2.1 Until very recently, the Relationship Centre has delivered what is seen as a very successful service. Given the relatively low level of financial investment (see section 6 below), the service has been run by a 21-hour co-ordinator, supported by a 12-hour administrative post (currently vacant), with additional support from volunteers. In the most recent performance report (Quarter 4, 2016 – 17), the Relationship Centre states:

“Tailored services are available to support the physical, social and emotional wellbeing of women... the number one issue facing most of the women, young or old, coming through our doors is a feeling of social isolation, often depression, anxiety and panic attacks, coupled with low confidence and self-esteem... these women gain strength from each other and develop social networks and friendships through attending the Centre.”

3.2.2 Some of the figures produced in the Quarter 4 quarterly performance report give a good idea of the level of contact and some of the outcomes (bearing in mind that the service is only open for three days a week):

- 298 clients seen during the period
- 40 new referrals (the referral criteria have recently been extended to include GP referrals, which immediately resulted in an increase of 10)
- 107 events: confidence building, chair yoga etc)
- 250 volunteer hours donated
- Counselling services delivered by volunteers every day the service is open
- Three people entering further education
- 57 people accessing basic life skills coaching

3.3 Recent events:

- 3.3.1 Very recently, the Relationship Centre has had to give notice of its intention to withdraw from running the Halton Women's Centre, as from the end of June 2017. This is because of events which have affected their Warrington services, relating to activities by their former Chief Executive (who has now left the organisation) which are the subject of police and safeguarding investigations in Warrington. Clear assurances have been given that none of these safeguarding concerns relate to the Halton service, whether for adults or children, as the former Chief Executive had little or no contact with the Women's Centre. A new acting Chief Executive is in place, who is working proactively with the Council and the CCG to see whether suitable alternative arrangements can be made to deliver this local service.
- 3.3.2 Given the extent to which the Women's Centre is well regarded in Halton, its uniqueness and the outcomes it is achieving, the Council and the CCG are working closely together to determine how and whether this service should be maintained. It is proposed that the management of the Women's Centre should be drawn into the remit of the Borough Council for a period of six months. This will allow time for a detailed review of the service itself, both in terms of its delivery and the "fit" with local commissioning intentions, and, if it is seen as appropriate to continue, time to tender out for a new service provider. The management support would come from the team manager of the joint Council and CCG Mental Health Outreach Team.
- 3.3.3 Clearly, the timescales on this have been very tight, and the decision to take this forward has had to be taken on an interim basis by the Director of Adult Social Services, Sue Wallace-Bonner, and the Executive Member for Adult Social Care, Councillor Marie Wright, ahead of formal approval by the Executive Board. The Executive Board is therefore asked to consider and approve this course of action.
- 3.3.4 The implications of this are that the existing part-time Centre co-ordinator post should become a Halton Borough Council employee under TUPE arrangements, for the period of time that the

arrangement continues. Another post, that of the part-time administrator, will also be included in the overall process, but this post is currently vacant.

4.0 POLICY IMPLICATIONS

4.1 Mental health services continue to receive welcome scrutiny and attention from Central Government. In 2015, the Five Year Forward View for Mental Health was published, setting out for the NHS in particular the expected direction of travel for commissioning and service delivery. The Mental Health Crisis Care Concordat was published at around the same time, with the intention of ensuring that services for people in, or reaching, mental health crisis were adequate throughout the country. The Government has already announced its intention to have a full review of Mental Health legislation in this parliament. The thrust of the policy directives is to ensure that interventions are targeted at an earlier stage in the development of a person's mental health condition, so that fewer people end up requiring long-term, complex interventions from secondary mental health care services.

4.2 Locally, much work has been going on to redesign the way that services are delivered, to achieve this national agenda. The intention is to continue to support and develop community services which can help in managing and reducing the demand for mental health services as a whole, whether provided by primary or secondary care. The Halton Women's Centre currently meets this agenda.

4.3 It should also be noted that the Centre provides considerable volunteering opportunities for local people, who help to support the running of the service, and also provide direct inputs into the support and counselling sessions. As a direct consequence of this, two of their holistic therapists have gained full-time employment in the last Quarter.

5.0 SAFEGUARDING IMPLICATIONS

5.1 The Centre works with a number of individuals and families who are vulnerable and in need of support. It is closely linked to both the adult and children's safeguarding processes and has appropriate contact. In any long-term change of provider, this will be specifically built into the contracting arrangements.

6.0 FINANCIAL/RESOURCE IMPLICATIONS

6.1 This service is jointly financed by Halton Borough Council and NHS Halton CCG. The breakdown of the funding is as follows:

Halton Borough Council funds the running and maintenance costs of the building; for the 2017/ 18 financial year, the allocation is as

follows:

Total Direct costs (repairs and maintenance, telephone calls): £6480
Recharges: £7560.

The point has been made by our finance team that the recharges, which are an apportionment of existing time for finance and property services, would not be a saving to the council if the service were ultimately to close. The only saving would therefore relate to the direct running costs.

NHS Halton CCG: contributes as total of £28,750 towards the cost of the co-ordinator (21 hours a week) and administrative support (12 hours a week).

7.0 OTHER IMPLICATIONS

7.1 There are no other implications arising from this Report.

8.0 RISK ANALYSIS

8.1 There are a number of risks associated with this current situation. Perhaps the key risk is the loss of a highly regarded service which helps women in distress to be maintained safely in the community. As mentioned above, this is the only resource of its type in the North West, and the loss of this service would also be a blow to the prestige of the Council.

8.2 The other risks relate to the TUPE process – if the service were ultimately to close, then the staff member concerned would be liable to redundancy from the council. This is a possible scenario, but it is unlikely; without pre-empting any results of a service review, it is very likely that the Council and CCG will wish to continue with the service, possibly in an enhanced form. However, should it happen that the service cannot continue, then this risk applies.

8.3 There is one further risk that should be identified. This is a service which provides what is termed “low-level” support for people with mental health needs. It is designed to support people living in their own communities, to reduce their use of primary care services and medication, to enhance self-confidence and social functioning, to promote social engagement and to provide volunteering opportunities for local people. Without the service, it is very likely that some people who use the service would need additional support from primary care and secondary care mental health services, at a personal cost to the individuals concerned, and at a real financial cost to these already-stretched services.

9.0 EQUALITY AND DIVERSITY ISSUES

9.1 This service was specifically established to address the known disadvantages experienced by women and families involved in the mental health system. If a new provider is to be commissioned, it is likely that an Equalities Impact Assessment will be required, because it excludes some people (that is, men) from its service.

10.0 LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF THE LOCAL GOVERNMENT ACT 1972

| Document | Place of Inspection | Contact Officer |
|---|---------------------|-----------------|
| Mental Health Five Year Forward View | Runcorn Town Hall | Lindsay Smith |
| Mental Health Crisis Care Concordat | Runcorn Town Hall | Lindsay Smith |
| Implementation Guidance: Mainstreaming Gender and Women's Mental Health | Runcorn Town Hall | Lindsay Smith |

REPORT TO: Executive Board

DATE: 20 July 2017

REPORTING OFFICER: Strategic Director, People

SUBJECT: Madeline McKenna Residential Home

PORTFOLIO: Health and Wellbeing

WARDS: All

1.0 PURPOSE OF REPORT

- 1.1 To update the Executive Board Members in respect of the purchase of Madeline McKenna Court and to seek approval for proposal to incorporate the management of and staffing into Halton Borough Council structures.

2.0 RECOMMENDATION: That

- 1) Executive Board note the contents of the report; and**
- 2) Approval be given for the transfer of Madeline McKenna staff to Halton Borough Council on their existing terms and conditions.**

3.0 SUPPORTING INFORMATION

- 3.1 Further to the report presented to the Executive Board in June 2016 regarding the purchase of Madeline McKenna Court a number of factors have delayed the purchase and the design of the service delivery model.
- 3.2 Initially it was proposed that HBC would purchase the Madeline McKenna property outright and enter into partnership with an alternative provider to manage and deliver the service.
- 3.3 The preferred provider has since stated that they are no longer in a position to enter into a partnership with HBC in order to deliver the service.
- 3.4 Timescales are very tight and the implications of this decision are that if the staff are not absorbed into our current structures the viability of the project will be compromised.
- 3.5 The previous Executive Board report described the financial risks to the Council which are highlighted in section 5.0. This proposal will

add to the potential financial risk due to the additional staffing costs.

- 3.6 Approval from the Board is sought for HBC to absorb the 23 Madeline McKenna staff into our existing establishment structure. Line management responsibility would be delivered by HBC Principal Manager based within Independent Living Services. This will ensure that services will be delivered that represent value for money and maintain quality provision and deliver any remodelling that would be required.

If this is agreed transfer of Madeline McKenna building and staffing will be completed by September 1st 2017.

4.0 **POLICY IMPLICATIONS**

- 4.1 There are no policy implications.

5.0 **OTHER/ FINANCIAL IMPLICATIONS**

- 5.1 It has been previously identified that the business will continue to run at a financial loss of between £60,000 - £80,000 per annum. The ongoing staffing costs would need to be considered and there is a risk that Madeline McKenna Court will be running at a loss for at least 12 – 24 months.

This option does hold potential risks in the short-term, however it would secure the bed base within the care home sector in the borough in the long term.

- 5.2 Property Services are drawing up a plan of all of the associated requirements and contract lists that will need to be replicated.

HR will be required to develop a staff consultation plan and also to consider the TUPE implications as TUPE will apply. This will be carried out as soon as the proposal is agreed.

6.0 **IMPLICATIONS FOR THE COUNCIL'S PRIORITIES**

6.1 **Children & Young People in Halton**

None identified.

6.2 **Employment, Learning & Skills in Halton**

None identified.

6.3 **A Healthy Halton**

None identified.

6.4 **A Safer Halton**

None identified.

6.5 **Halton's Urban Renewal**

None identified.

7.0 **RISK ANALYSIS**

7.1 Immediate risks are around:

- Availability of Finance;
- Potential losses in the first twelve – eighteen months

8.0 **EQUALITY & DIVERSITY ISSUES**

8.1 There are no Equality & Diversity issues.

9.0 **LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF
THE LOCAL GOVERNMENT ACT 1972**

None.

REPORT TO: Executive Board

DATE: 20 July 2016

REPORTING OFFICER: Strategic Director, People

SUBJECT: Bredon Short Stay Residential Respite Service

PORTFOLIO: Health & Wellbeing

WARDS: All

1.0 PURPOSE OF REPORT

- 1.1 To give an update on the wider Bredon service provision and the current contractual position for the Bredon Short Stay Residential Respite Service.

2.0 RECOMMENDATION: That

- 1) Members of the Executive Board note the contents of the report; and**
- 2) Retrospective approval be given to agree a waiver to extend the contract for up to 12 months whilst a tendering exercise is undertaken.**

3.0 SUPPORTING INFORMATION

- 3.1 Bredon houses a number of services, including the Respite service, day service provision, office accommodation and three flats for crisis or shorter stay placements.

- 3.2 Services are currently being delivered as separate services, by different providers.

Day services are provided by Halton Borough Council, and HBC staff use the office accommodation and the Respite service is currently being delivered by Community Integrated Care (CIC).

- 3.3 Bredon has recently been refurbished to provide three flats for crisis or shorter stay placements.

The refurbishment work was due for completion by March 2017 but was delayed and only completed at the end of June 2017. The

properties are now in the process of being furnished ready for occupation.

- 3.4 A waiver was previously agreed to extend from 1st April 2017 to 30th June 2017. Now that the refurbishment work has been completed a further waiver is required in order to retender the service.

4.0 **POLICY IMPLICATIONS**

- 4.1 The Bredon Respite service contributes to the Council's responsibilities for carers and wellbeing under the Care Act.

5.0 **OTHER/ FINANCIAL IMPLICATIONS**

- 5.1 The contract extension will be funded within existing budgets.

6.0 **IMPLICATIONS FOR THE COUNCIL'S PRIORITIES**

6.1 **Children & Young People in Halton**

None identified.

6.2 **Employment, Learning & Skills in Halton**

None identified.

6.3 **A Healthy Halton**

None identified.

6.4 **A Safer Halton**

None identified.

6.5 **Halton's Urban Renewal**

None identified.

7.0 **RISK ANALYSIS**

- 7.1 The risks associated with a further extension are minimal. The Bredon respite service has recently been assessed as a good service following a contract monitoring visit.
- 7.2 CIC are an established local provider with experience of delivering good quality services for people with learning disabilities. CIC were awarded 3 zones as part of the vulnerable adults supported accommodation tender completed in 2015/16.

8.1 Should a further contract extension not be awarded, there will be an impact on vulnerable adults who will not have access to a local respite service.

9.0 **LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF THE LOCAL GOVERNMENT ACT 1972**

None under the meaning of the Act.

REPORT TO: Executive Board
DATE: 20 July 2017
REPORTING OFFICER: Director of Public Health
PORTFOLIO: Health and Wellbeing
SUBJECT: Halton 0-19 Public Health Service Contract 2017/18

1.0 PURPOSE OF REPORT

- 1.1 The purpose of this report is to seek Executive Board approval for the granting of a direct contract for the delivery of Health Visiting and Family Nurse Partnership services between September 2017 and March 2018.

2.0 RECOMMENDATION: That Executive Board

- 1) Notes the content of the report; and**
- 2) Support the recommendation to grant a Direct Award for 7 months to Bridgewater Community Health NHS Foundation Trust for the delivery of Health Visiting and Family Nurse Partnership services from 1st September 2017 to 31st March 2018.**

3.0 BACKGROUND

- 3.1 In March 2017, the Executive Board granted approval for the procurement of a new 0 – 19 Public Health Service for Children, Young People and Families. Giving every child the best start in life is crucial to reducing health inequalities across the life course. The foundations for virtually every aspect of human development – physical, intellectual and emotional – are set in place during pregnancy and in early childhood. What happens during these early years has lifelong effects on many aspects of health and wellbeing, educational achievement and economic status. Universal and specialist public health services for children are important in promoting the health and wellbeing of all children and reducing inequalities including:
- Delivery of the Healthy Child Programme (HCP);
 - Assessment and intervention when a need is identified; and
 - On-going work with children and families with multiple, complex or

safeguarding needs in partnership with other key services including early years, children's social care and primary care.

- 3.2 The Health Visiting Service and the Family Nurse Partnership work across a number of stakeholders, settings and organisations to lead delivery of the Healthy Child Programme 0-5 (HCP), a prevention and early intervention public health programme that lies at the heart of the universal service for children and families and aims to support parents at this crucial stage of life, promote child development, improve child health outcomes and ensure that families at risk are identified at the earliest opportunity.
- 3.3 The School Nurse Team promotes the holistic health of the school aged population (5 – 19), thereby enabling them to realise their potential. They encourage children and young people to think about their health and support them to become responsible for their own health and wellbeing as they progress through childhood and adolescence.
- 3.4 In order to maximise the impact of the two teams (the 0-5 service and the 5-19 service as described above), Halton is seeking to create an integrated 0-19 service (or up to 24 for young people with a disability or complex health care need) that will deliver the Healthy Child Programme and provide both universal and targeted support services to help improve the health and wellbeing of children, young people and families in Halton.

4.0 CURRENT POSITION

- 4.1 Halton Council has developed a specification that has outlined how it will expect delivery of public health services to children, young people and families. With mandated elements of the Healthy Child Programme at the heart of a service, the Council will incorporate the current Health Visiting, Family Nurse Partnership and School Nursing Contracts into one integrated function that includes enabling readiness for school, Children's Services' early help, iCART and the health improvement service and provide the best possible support to local families to be as healthy as they can be.
- 4.2 Bridgewater Community Health NHS Foundation Trust currently holds separate contracts with Halton Borough Council for the delivery of the

different elements of what will become the 0 – 19 (24) service. The current annual contract value is c. £2,600,000 per year for the delivery of the Health Visiting Service / Family Nurse Partnership Programme and c. £900,000 for the School Nursing Service.

4.4 The Executive Board authorised the commencement of a procurement programme for the wider 0-19 (24) service at its meeting in March 2017. It was originally anticipated that this new service would be in place by September 2017 in order to minimise disruption to local people, services and to local schools.

4.5 The development of the specification was delayed in order to enable a greater range of stakeholders to influence its development. This has had an impact on the provision of the list of staff that would be affected by TUPE regulations and as such the procurement has not happened within the original proposed timescale.

5.0 PROPOSAL

5.1 It is proposed that the current provider of the Health Visitor and Family Nurse Partnership Service be given a direct award of a contract for the period of seven months from 1st September 2017 to the 31st March 2018.

Such an award will:

- Bring the contract in line with the School Nursing contract to enable a full, open and transparent procurement of a 0-19 service to take place.
- Minimise the impact on local families, staff and the wider health and social care economy.
- Enable operational efficiencies commenced in October 2016 to be fully realised.
- Prevent disruption to the delivery of the NHS England commissioned seasonal flu programme for children.

- 5.2 We are seeking Executive Board approval to publish the Direct Award of a contract to 31st March 2018 to the current provider, using the '*Voluntary Ex-Ante Transparency Notice*' (VEAT) notice through which the contracting authorities must give sufficient information as to the justification for direct award of a contract without OJEU advertising and observe a minimum 10 day standstill period before the contract is awarded.
- 5.3 If the proposal to provide a direct award is not agreed, or if there is a significant challenge as part of the VEAT process, Executive Board approval is sought to commence a full, open and transparent procurement exercise for a six month contract for the delivery of the Health Visiting and Family Nurse Partnership Service.

6.0 POLICY IMPLICATIONS

- 6.1 The method of procurement complies with the Council's Procurement Standing Orders and Public Contract Regulations 2015, and will publish a VEAT Direct Award as described in section 5.3.

7.0 FINANCIAL/RESOURCES IMPLICATIONS

- 7.1 As outlined in the report the provision of 0-5 Health Visiting and Family Nurse Partnership services in Halton currently costs £2.6million per year and therefore represents a significant proportion of the total Public Health grant. A seven month contract would therefore have a value of c. £1,520,000.

8.0 IMPLICATIONS FOR THE COUNCIL'S PRIORITIES

8.1 Children and Young People in Halton

Local Authorities are well placed to identify health needs and commission services for local people to improve health. The Government's aim is to enable local services to meet local needs. The Healthy Child programme is a critical component in giving every child in Halton 'the best start in life', and improving child development, which is a Halton priority. Improving the Health and Wellbeing of Children and Young People is a key priority in

Halton and will continue to be addressed through the delivery of an effective and efficient Health Visitor Service that supports the delivery of both national and local strategies and action plans whilst at the same time meeting the needs of children and their families.

8.2 Employment, Learning and Skills in Halton

Employment, Learning and Skills is a key determinant of health and wellbeing and is therefore a key consideration when developing strategies to address health inequalities. An effective service will support children and their families in reducing the impact of ill health on their life chances and also encourage and support “school readiness”.

8.3 A Healthy Halton

All issues outlined in this report focus directly on this priority.

8.4 A Safer Halton

Reducing the incidence of crime, improving Community Safety and reducing the fear of crime have an impact on health outcomes particularly on mental health. There are also close links between the service and on areas such as mental health, alcohol and domestic violence.

8.5 Halton’s Urban Renewal

N/A

9.0 RISK ANALYSIS

9.1 A full risk analysis will be completed as part of the procurement exercise.

10.0 EQUALITY AND DIVERSITY ISSUES

10.1 An Equality Impact Assessment (EIA) is not required for this report.

11.0 LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF THE LOCAL GOVERNMENT ACT 1972

11.1 None.

REPORT TO: Executive Board

DATE: 20 July 2017

REPORTING OFFICER: Strategic Director, People

PORTFOLIO: Health and Well-Being

SUBJECT: Domiciliary Care Contract Tender

WARD(S) Borough-wide

1.0 PURPOSE OF THE REPORT

- 1.1 To inform Executive Board of the outcome of the tender for the re-procurement of the Domiciliary Care Contracts in Widnes and Runcorn

2.0 RECOMMENDATION: That the award of a Domiciliary Care Contract for a period of five (5) year with an option to extend for a further two (2) years (i.e. up to 7 years in total) to Provider A be approved.

3.0 SUPPORTING INFORMATION

- 3.1 A report was presented to the Executive Board on 17th November 2016 to seek approval to commission Domiciliary Care through an appropriate mechanism to ensure continued provision when the contracts ceased on the 30th June 2017.
- 3.2 Following the decision of the Board in relation to the award of the Domiciliary Care Contract Tender, (see Minute EXB108 of 16 March 2017), the intention to award to single provider A was advertised on the Chest Portal, as was required by the Public Contract Regulation 2015. A legal challenge to that course of action had been received and the Executive Board agreed to halt the process and a further re-tendering exercise was undertaken.
- 3.3 The existing contract was extended until 31st October 2017 to allow the re-tendering process to be undertaken, and to ensure continuity for individuals in receipt of Care.
Five organisations submitted tenders for the Domiciliary Care contract.
- 3.4 The evaluation process and outcome were as follows:
-

- The first stage of the evaluation dealt with technical, legal, business, financial and registration aspects of delivering domiciliary care. All 5 providers passed this evaluation.
- The second stage required providers to submit information in respect of delivering high quality care and support. The 5 areas covered: delivering high quality falls management; working across health and social care to promote health and well-being of Halton residents; achieving person centred outcomes for service users; safeguarding vulnerable people and the wider community; realising social value through the contract.
- All 5 providers' submissions were evaluated by a designated evaluation panel who independently assessed the submissions and then attended a moderation meeting chaired by a procurement team member.
- The Award & Evaluation criteria was based on 100% Quality, with a fixed price at £13.00 per hour, included in the tender
- Provider A scored the most in the quality questions.

4.0 POLICY IMPLICATIONS

- 4.1 The method of procurement has complied with the Public contract Regulations, 2015 and the Council's own Procurement Standing Orders.

5.0 FINANCIAL IMPLICATIONS

- 5.1 The contract awarded is in accordance with the projected budget for domiciliary care provision in 2017/18

6.0 IMPLICATIONS FOR THE COUNCIL'S PRIORITIES

6.1 Children & Young People in Halton

No implications identified

6.2 Employment, Learning & Skills in Halton

No implications identified

6.3 A Healthy Halton

Individuals with additional needs or vulnerability can have disproportionate health related issues or life-long conditions. The current and future modelling will continue to promote health equalities

6.4 A Safer Halton

All providers will comply with Halton's Safeguarding Practice and Procedures and will ensure that individuals are aware how to stay safe, how to report incidents and to promote safe community inclusion.

6.5 Halton's Urban Renewal

None.

7.0 RISK ANALYSIS

7.1 There is potential for a challenge by unsuccessful organisations, however this risk has been mitigated by the robust procurement process and rewarding of contracts in line with ranking following tender evaluation.

8.0 EQUALITY AND DIVERSITY ISSUES

8.1 All successful providers will be required to demonstrate that they embrace and comply with the Equality Act, and services will be monitored to ensure this is the case.

9.0 LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF THE LOCAL GOVERNMENT ACT 1972

| Document | Place of Inspection | Contact Officer |
|---------------------------------|------------------------------|---|
| Executive Board Report 20/11/16 | Municipal Building Widnes | Sue Wallace Bonner Director of Adult Social Services |

REPORT TO: Executive Board

DATE: 20 July 2017

REPORTING OFFICER: Strategic Director - Enterprise, Community and Resources

PORTFOLIO: Transportation

SUBJECT: Authorisation to proceed with carriageway reconfiguration works on the Silver Jubilee Bridge using the SCAPE framework

WARDS: Borough-wide

1.0 PURPOSE OF THE REPORT

- 1.1 The purpose of the report is to seek approval to proceed to Project Order stage using the SCAPE framework for the scheme to change the carriageway configuration on the Silver Jubilee Bridge (SJB) to meet future requirements in connection with the Mersey Gateway.

2.0 RECOMMENDATION: That Executive Board approve the use of the SCAPE framework for development of the carriageway reconfiguration scheme for SJB to Project Order stage.

3.0 SUPPORTING INFORMATION

- 3.1 SCAPE is a public sector-owned built environment specialist which has a suite of OJEU compliant frameworks for multiple areas of works. Each of these frameworks has been competitively tendered and awarded to a single winning tenderer respectively. One of the frameworks is entitled 'Civil Engineering & Infrastructure' and was awarded in January 2015 to Balfour Beatty, which is the parent company of Balvac.
- 3.2 The Council has an Access Agreement to the SCAPE framework and this has been utilised successfully for the procurement of Bridge and Structures Maintenance works. In June 2016, the Executive Board noted the Chief Executive's authorisation for the entering into of a contract with Balvac, through the SCAPE Civil Engineering & Infrastructure framework, for the procurement of the LCR SJB Complex Major Maintenance programme.
- 3.3 The SJB spans the River Mersey between Widnes and Runcorn. It was given Grade 2 listed status in 1988 and is the largest Local Authority maintained structure in the country. Due to its age the SJB complex

requires a continual programme of works to maintain it in a steady state condition, and hence be fully available for use.

- 3.4 Major works for re-painting the SJB's steel arch superstructure and for re-configuring the carriageway to integrate SJB into the new highway layout for the Mersey Gateway scheme have been planned for implementation during a closure of SJB that will come into effect once 'Permission to Use' (PTU) has been granted for the new Mersey Gateway infrastructure. Effectively when the new bridge opens the SJB will temporarily close.
- 3.5 The period for the closure of SJB to accommodate both its reconfiguration and the major works for the re-painting of its superstructure is likely to be 12 months.
- 3.6 The carriageway reconfiguration scheme will see the formation of two lanes for motorised vehicles and a dedicated cycleway within the width of the existing carriageway. New splitter islands will separate the new cycleway and vehicular traffic lanes, and the carriageway surfacing will be renewed over the bridge deck.
- 3.7 The deck reconfiguration works will be co-ordinated with the arch re-painting and other works on SJB planned for the closure period, and are expected to take place in Summer 2018.
- 3.8 Executive Board approval is now required to formalise the contract development process with Balvac.

4.0 POLICY IMPLICATIONS

- 4.1 None

5.0 FINANCIAL IMPLICATIONS

- 5.1 Procuring the specialist works that make up the proposed schemes through the SCAPE framework will ensure operational efficiency and cost effectiveness.
- 5.2 Funding to the value of £600k is being provided for the SJB carriageway reconfiguration scheme by the Mersey Gateway Crossings Board.

6.0 IMPLICATIONS FOR THE COUNCIL'S PRIORITIES

6.1 Children and Young People in Halton

The highway network is utilised and relied upon by Children and Young People in similar ways to any other demographic of the population.

6.2 Employment, Learning and Skills in Halton

It is recognised that a good transport network is essential for a successful economy and for the efficient and effective movement of people and goods through Halton.

6.3 A Healthy Halton

Provision of safe, reliable and accessible routes to all destinations by walking and cycling is vital to the future of Halton's residents and the quality of its environment.

6.4 A Safer Halton

Our highways provide safe and reliable access to jobs, services, businesses and schools.

6.5 Halton's Urban Renewal

Not applicable.

7.0 RISK ANALYSIS

- 7.1 The SCAPE Framework is a public sector owned and competitively tendered process. Pursuing alternative procurement options would prolong scheme development and implementation and involve additional cost.

8.0 EQUALITY AND DIVERSITY ISSUES

- 8.1 Not applicable.

9.0 LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF THE LOCAL GOVERNMENT ACT 1972.

| Document Officer | Place of Inspection | Contact |
|---|----------------------------|----------------|
| Executive Board Report 16/06/16 8. NEC Short Form Contract Authoriasation for Balvac works. | HBC website | Ian Jones |

REPORT TO: Executive Board

DATE: 20 July 2017

REPORTING OFFICER: Strategic Director, Enterprise, Community & Resources

SUBJECT: Warrington Western Link

WARD(S) Boroughwide (Adjoining Authority Consultation)

1. PURPOSE OF THE REPORT

- 1.1. Warrington Borough Council (WBC) recently made Halton Borough Council (the Council) aware of its intentions to consult on a scheme to address a number of major traffic congestion 'pinch points' affecting Warrington Town Centre and crossings of the River Mersey and the Manchester Ship Canal.
- 1.2. This report gives a summary of the information received from WBC to date, and makes recommendations to enable a timely response to the scheme consultation to be made by the Council.

2. RECOMMENDATION: That the Board notes the correspondence from WBC, and delegated authority is granted to the Strategic Director - Enterprise, Community and Resources, in consultation with the Leader of the Council and Portfolio Holder for Transportation, to respond to the WBC scheme consultation on behalf of the Council.

3. SUPPORTING INFORMATION

- 3.1. WBC has informed the Council that it has recently been awarded funding by the Department for Transport (DfT) to develop an outline business case for the Warrington Western Link proposal which will be presented to the DfT at the end of December 2017.
- 3.2. The business case considers several options, including a new link road to the west of Warrington town centre and a public consultation is being held from 30 June to 28 July, with 18 events being held at various locations around Warrington.
- 3.3. Following this initial consultation, a preferred route option will be included in the business case and submitted to the DfT for consideration. Subject to securing funding and necessary planning consent, construction of the road could commence in the early 2020s.

- 3.4. The event newsletter (see web link in section 3.5) summarises the possible approximate alignments of the link, and briefly sets out its purpose: that due to economic and population growth there has been a steady rise in local traffic congestion, but there are limited opportunities for improvement of the existing highway network. Therefore a case is being developed for a potential new link road around the south-west of the town. The proposed road could link the A56/A5060 Chester Road with the A57/A562 in Great Sankey, providing relief to the town centre and unlocking development.
- 3.5. It is expected that, during the consultation period, further details will become available regarding the different route options and consultees will be invited to give views on these options. Information is available at <https://www.warrington.gov.uk/westernlink>.
- 3.6. It is also understood that Warrington are developing a traffic model which will give a better indication of the implications for Halton's highways including the Mersey Gateway. In addition, the scheme may facilitate alternative access arrangements (from the north) to Port Warrington at Acton Grange (Moore). Once this further information is available, the Council will be better able to give a thorough response to the consultation.
- 3.7. It is therefore recommended that the Board notes the correspondence from WBC, and delegated authority is granted to the Strategic Director - Enterprise, Community and Resources, in consultation with the Leader of the Council and Portfolio Holder for Transportation, to respond to the WBC scheme consultation on behalf of the Council.

4. POLICY IMPLICATIONS

- 4.1. There are no specific transport policy implications in relation to this consultation, although there are potential implications for traffic flow and transport routing on Halton's highway network, including the Mersey Gateway. There are potential implications for planning policy and land use allocations as the routes have potential to increase development pressures in south western Warrington, in close proximity to potential development sites in East Runcorn.

5. OTHER IMPLICATIONS

- 5.1 Legal Implications – there are no specific legal implications resulting from the consultation.

6.0 IMPLICATIONS FOR THE COUNCIL'S PRIORITIES

- 6.1 Children and Young People in Halton - There are no direct implications associated with this report.
- 6.2 Employment, Learning and Skills in Halton - There are no direct implications associated with this report.
- 6.3 A Healthy Halton -There are no direct implications associated with this report.
- 6.4 A Safer Halton -There are no direct implications associated with this report.
- 6.5 Halton's Urban Renewal – The proposed link may be relevant to Halton's spatial planning and development process, and its urban renewal/economic growth.

7.0 RISK ANALYSIS

- 7.1 The Council does not have a statutory duty to respond to this consultation, but it is considered that a dialogue between the two authorities on this scheme could result in benefits for both parties, and minimise any potential impacts.

8.0 EQUALITY AND DIVERSITY ISSUES

- 8.1 There are no Equality and Diversity issues in relation to this report.

9.0 LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF THE LOCAL GOVERNMENT ACT 1972

- Correspondence between WBC and the Council 16 June 2017
- Place of Inspection - Highways Division, Municipal Building, Widnes
- Contact Officer – Jonathan Farmer
- <https://www.warrington.gov.uk/westernlink>

REPORT TO: Executive Board

DATE: 20 July 2017

REPORTING OFFICER: Strategic Director, Enterprise, Community & Resources

PORTFOLIO: Transportation

SUBJECT: Preliminary Flood Risk Assessment Update

WARD(S) Boroughwide

1.0 PURPOSE OF THE REPORT

- 1.1 As part of its duties as a Lead Local Flood Authority (LLFA) Halton Council must undertake a Preliminary Flood Risk Assessment (PFRA). This is a high level screening exercise to determine whether there is a local flood risk within the LLFA boundary based on historic and potential future flood risk data.
- 1.2 The PFRA must be reviewed on a six yearly basis. Halton's first PFRA report was submitted to the Environment Agency (EA) on 22 June 2011, following Executive Board Approval, and the EA has requested a review be submitted by 22 June 2017. The Council has produced an updated Preliminary Assessment Report (PAR), along with a Review Self-Assessment Form and submitted these as a draft to the EA. This report outlines the findings of the draft PAR, which was endorsed by the Environment and Urban Renewal Policy and Performance Board on 28 June 2017. Executive Board approval is now sought. The PAR and Self-Assessment will then be subject to a 6 month review period with the EA, prior to final publication by 22 December 2017.

2.0 RECOMMENDATION: That the Board notes and approves the findings of the Preliminary Flood Risk Assessment Review.

3.0 SUPPORTING INFORMATION

- 3.1 An updated draft PFRA has been prepared by Halton Borough Council as Lead Local Flood Authority (LLFA) in order to meet the duties to manage local flood risk and deliver the requirements of the Flood Risk Regulations (2009) and the Flood and Water Management Act (2010). The production of the Preliminary Flood Risk Assessment (PFRA) is imposed by Sections 10-12 of the Flood Risk Regulations (2009) and it is the first step in the management of local flood risk. The PFRA process is aimed at providing a high level overview of flood risk from local flood sources through a review of historic flooding incidents and the predicted future extents of flooding, based

on the outputs of computer models from both Halton Borough Council and the Environment Agency.

- 3.2 In January 2017 the Department for Environment, Food and Rural Affairs (DEFRA) and the Environment Agency (EA) replaced its guidance on significant risk for the identification of flood risk areas for Lead Local Flood Authorities (LLFAs) about the criteria for assessing and reviewing whether a risk of flooding is significant. The Regulations require LLFAs to determine whether any part or parts of their area face significant risk of flooding and to identify any such areas as Flood Risk Areas (FRAs). This was produced under regulation 14(3) of the Flood Risk Regulations 2009 (FRR), and replaced the previous guidance published in 2010. LLFAs are only required to do this in relation to local flood risks which include flooding from surface water, ground water and ordinary watercourses. LLFAs do not need to consider risks of flooding from the sea, main rivers or reservoirs, except where these may affect flooding from another source. Flood hazard and risk maps and flood risk management plans must subsequently be prepared for the FRAs identified. The PFRA will provide a baseline for a full update of the Council's Local Flood Risk Management Strategy, the first edition of which was published in 2015.
- 3.3 The EA have already produced indicative Flood Risk Area maps for England and Wales, and identified a number of FRAs including Liverpool. These Indicative Flood Risk Areas occur where clusters of population of greater than 30000 people are located within an area of flood risk that is above prescribed national thresholds.
- 3.4 The PFRA uses a consistent prescribed approach to review the national Indicative Flood Risk Areas, using the most up to date locally available evidence. The data gathered and considered in the assessment is summarised and cross referenced in a self-assessment review form which forms part of the submission to the EA. Where relevant and necessary the updated PFRA must set out the need for any amendment to the indicative areas, providing a rationale behind the proposal.
- 3.5 The updated PAR, which is attached to this report as Appendix 1, sets out how the assessment has been undertaken and provides a robust evidence base to help support the full update of the Flood Risk Management Strategy. The PAR is based on data held by a wide variety of sources, but primarily the Environment Agency, United Utilities and Council data.

Key findings of the PFRA are as follows:

- In relation to historic flooding the previous PFRA flagged up some issues with missing or incomplete data, and the new duties now placed on Halton as LLFA have meant that Council records have improved. United Utilities and Cheshire Fire logged flood event data has also been analysed, with appropriate events relating to surface water flood risk being filtered out for review and presented in the report. However, there are still some limitations with the detail and

consistency of data.

- As with the previous PFRA, based upon the data and evidence collected, in relation to local flooding, no past flood events were considered to have had significant harmful consequences (as defined in the national guidance criteria). Annex 1 of the Preliminary Assessment Spreadsheet therefore does not contain any records of past flooding (local flooding) within Halton. Of course, there have been instances of past flooding at several locations in Halton, although the most significant of these have been related to main river or sewer flooding, for example at Halebank, Peel House Lane and Halton Brow.
- In relation to future flooding, there does remain a risk of flooding from local sources, particularly from surface water at various locations across the Borough. Based upon the Environment Agency (EA) 'Risk of Surface Water Flooding' modelling it is estimated that approx. 809 residential properties and 127 non-residential properties across the whole of Halton are at risk from flooding to a depth of 0.3m during a rainfall event with a 1 in 100 annual chance of occurring. This does not, however meet the EA's threshold of 30000 people within a 'cluster' of significant areas that is required to identify a Flood Risk Area (FRA). Consequently Halton does not propose to declare any new FRAs within Halton (and none were identified within the previous PFRA).
- The indicative FRA for Liverpool encroaches slightly onto Halton's administrative area and this has been reviewed as part of Halton's PFRA. The area concerned is part of a cluster on the periphery of the Liverpool conurbation. Within Halton, however, the land is predominantly rural, to the west of Hale Village and does not coincide with any areas of flood risk identified in Halton's PFRA review. It is proposed that the EA be requested to amend the boundary of the Liverpool FRA, to coincide with the administrative boundary between Halton and Liverpool City.

The outcome of the first two stages of flood risk assessment review required by the Regulations (described in 3.1/3.2) is that no Flood Risk Area is proposed for Halton. This means that the next two stages, the production of Flood Risk Maps and preparation of a Flood Risk Management plan for FRAs are not triggered.

However there is still a requirement for Halton to keep its Local Flood Risk Management Strategy under ongoing review with a complete update every six years (due 2021).

Whilst the draft updated PAR and Self-Assessment is due to have been submitted to EA for review by 22 June 2017, it is proposed that the Board endorse the report and its presentation to the Executive Board for approval prior to publication by the EA by 22 December 2017.

4.0 POLICY IMPLICATIONS

There are no specific policy implications in relation to this report or within the PAR. The PFRA will inform a review of the Local Flood Risk Management Strategy for Halton, which must be consistent with the National Strategy for Flood and Coastal Erosion Risk Management. The Board will continue to be further appraised of progress in relation to flood risk management activities and the implementation of the Council's duties and functions as these develop.

5.0 OTHER IMPLICATIONS

- 5.1 Legal Implications - Halton as a LLFA has a statutory duty under the Flood Risk Regulations 2009 to produce a PFRA update and submit a Review and Annexes to the Environment Agency by 22nd June 2017.

6.0 IMPLICATIONS FOR THE COUNCIL'S PRIORITIES

- 6.1 Children and Young People in Halton - There are no implications associated with this report.
- 6.2 Employment, Learning and Skills in Halton - There are no implications associated with this report.
- 6.3 A Healthy Halton -There are no implications associated with this report.
- 6.4 A Safer Halton -There are no implications associated with this report.
- 6.5 Halton's Urban Renewal - The PFRA will be of considerable value to the spatial planning and development process. The analyses undertaken and outputs from the assessment will help to promote sustainable development and support a more strategic approach to implementing sustainable surface water drainage solutions.

7.0 RISK ANALYSIS

- 7.1 If Halton defaulted in its duty to undertake a PFRA and submit a Preliminary Assessment Report within the timescales set by Defra, under the Flood and Water Management Act 2010, the Government may direct another risk management authority to exercise those functions and recover the costs of compliance from Halton.

8.0 EQUALITY AND DIVERSITY ISSUES

- 8.1 There are no Equality and Diversity issues in relation to this report.

9.0 LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF THE LOCAL GOVERNMENT ACT 1972

- Halton Borough Council - Preliminary Flood Risk Assessment Review Document and Self-Assessment Form
- Preliminary Flood Risk Assessment (PFRA) Final Guidance (Environment Agency)

- Place of Inspection - Highways Division, Municipal Building, Widnes
- Contact Officer – Jonathan Farmer

Appendix 1 PFRA Review Preliminary Assessment Report (Note: 46 page report including PFRA Analysis plus figures/maps)



**Halton Borough Council
Preliminary Flood Risk Assessment Review
June 2017**

**Draft for Submission to Environment Agency
22 June 2017**

**Subject to Halton Borough Council Board
Approvals:**

- **Environment and Urban Renewal Policy
and Performance Board - 28 June 2017**
- **Executive Board - 20 July 2017**

Executive Summary

This Preliminary Flood Risk Assessment has been prepared by Halton Borough Council as Lead Local Flood Authority (LLFA) in order to meet the duties to manage local flood risk and deliver the requirements of the Flood Risk Regulations (2009) and the Flood and Water Management Act (2010).

The production of the Preliminary Flood Risk Assessment (PFRA) is imposed by Sections 10-12 of the Flood Risk Regulations (2009) and it is the first step in the management of local flood risk. The PFRA process is aimed at providing a high level overview of flood risk from local flood sources through a review of historic flooding incidents and the predicted future extents of flooding, based on the outputs of computer models from both Halton Borough Council and the Environment Agency. Section 17 of the Flood Risk Regulations (2009) states subsequent reviews must be carried out at intervals of no more than 6 years. This document is the first review of the original PFRA published in June 2011.

In January 2017 the Department for Environment, Food and Rural Affairs (DEFRA) and the Environment Agency (EA) replaced its guidance on significant risk for the identification of flood risk areas for Lead Local Flood Authorities (LLFAs) about the criteria for assessing and reviewing whether a risk of flooding is significant. The Regulations require LLFAs to determine whether any part or parts of their area face significant risk of flooding and to identify any such areas as Flood Risk Areas (FRAs). This was produced under regulation 14(3) of the Flood Risk Regulations 2009 (FRR), and replaced the previous guidance published in 2010. LLFAs are only required to do this in relation to local flood risks which include flooding from surface water, ground water and ordinary watercourses.

LLFAs do not need to consider risks of flooding from the sea, main rivers or reservoirs, except where these may affect flooding from another source. Flood hazard and risk maps and flood risk management plans must subsequently be prepared for the FRAs identified.

The purpose in reviewing the results lies with the determination of whether the level of flood risk is severe enough to be reported at both a European and National scale. DEFRA has identified that a FRA containing a cluster of over 30,000 people would be considered for significant European importance. Of the indicative FRAs that have been identified nationally, none are located within Halton Borough Council administrative area. Depending on the approach taken to EU exit, there may be potential to make changes to the FRR in the coming years. EU exit does not, however, alter the requirement for LLFAs to review preliminary assessment reports and FRAs by 22nd June 2017 as the UK will still be a full member of the EU at that point. Any proposals to refine the approach to mapping flood hazard and risk or preparing FRMPs will be consulted on later in the cycle.

It is the responsibility of the LLFA to decide what it considers as a historical flood with “significant harmful consequences” at a local level. Initially there was no specific guidance determining the national flooding importance level. Halton Borough Council have liaised with several neighbouring LLFAs in shaping and finalising this significance level. This has led to the formation of the Cheshire Mid-Mersey Partnership with the aim to identify and resolve flooding issues at both the Tactical and Strategic levels whilst adhering to best industrial practices.

Halton Borough Council has decided that a flood of “significant harmful consequences” would have one or more of the characteristics listed in table 1.

Table 1: Flood Event of Significant Harmful Consequences

| Impact of flooding on: | Category | Consequence |
|------------------------|--------------------------------------|---|
| Human Health | Number of individuals | ≥ 200 |
| Economic Activity | Number of critical services | ≥ 2 |
| | Number of residential properties | ≥ 83 |
| | Number of non-residential properties | ≥ 20 |
| | Principal Highway Network | Transport links impassable for more than 12+ hours. |

A review of information on past flood incidents have been received from various stakeholders, both locally and nationally, which include water and sewerage companies, utility companies, the Canal & River Trust, the Emergency Services, and other Risk Management Authorities. There were several limitations associated with the stakeholder data. The main issues related to inconsistent and incomplete records, resulting in limited knowledge of flooding sources and the consequences of events. There have been no flooding events identified from local sources that have been deemed to have “significant consequences”.

An analysis of data available on future flood risk has found that there could be flooding with adverse consequences as a result of surface water flooding. Modelling outputs provided by the Environment Agency indicate that up to 936 properties, 809 residential and 127 business, could be at risk from surface water flooding in a 1% (1 in 100) annual probability rainfall event. Therefore the scale of risk is not sufficient enough to be considered a FRA, reportable at a European Level. There is more detailed mapping that has been conducted as part of Halton Borough Council’s Surface Water Management Plan, however it does not cover the whole of the administrative area.

During the investigation process into historic and future flood risk there have not been any flooding instances which need to be reported at either a National or European level. Furthermore, the surface water modelling undertaken by the Environment Agency indicates that there is potential to be a significant number of properties at risk in the future.

The information on flood risk gathered for this PFRA will be used for future steps to guide flood risk management in Halton Borough Council. The methodology for producing this PFRA has been based on the Environment Agency’s Final PFRA Guidance and DEFRA’s Guidance on selecting Flood Risk Areas, both published in January 2017. Section 17 of the Flood Risk Regulations (2009) states subsequent reviews must be carried out at intervals of no more than 6 years. This document is the first review of the original PFRA published in June 2011.

To progress Halton Borough Council’s approach to flood risk management, including ongoing work post-PFRA submission, it will be designed to meet its objectives under the Flood Risk Regulations (2009) and the Flood and Water Management Act (2010) to:

- Continue to develop links with adjacent LLFAs and other bodies responsible for flood risk management;
- Utilise data collected to maintain a manageable GIS database, controlled centrally, for use on future development control queries, investigation, planning etc.;
- Provide assessments to identify the flood risk management prioritisations over the entire administrative area;
- Update the current Local Flood Risk Management Strategy;
- Continually update the Asset Register;
- Record, document and (where appropriate) investigate future floods.
- Require developers to give priority attention to the use Sustainable Urban Drainage Systems (SuDS), unless demonstrated to be inappropriate.

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Abbreviations

AOD: Above Ordinance Datum;

AStSWF: Areas Susceptible to Surface Water Flooding;

AStGwF: Areas Susceptible to Groundwater Flooding;

BGS: British Geological Survey;

BUA: Built-up Areas;

BUASD: Built-up Areas Sub-divisions;

CFMP: Catchment Flood Management Plan;

COW: Critical Ordinary Watercourse

DEFRA: Department for Environment, Food and Rural Affairs;

EA: Environment Agency;

EC: European Community;

EU: European Union;

FWMA: Flood and Water Management Act;

FRA: Flood Risk Area;

GIS: Geographical Information Systems;

IPCC: Intergovernmental Panel on Climate Change;

LGF: Local Government Forum;

LLFA: Lead Local Flood Authority;

NRD: National Receptor Dataset;

OEFRPG: Operational Emergency Flood Response Plan Groups;

OFWAT: Water Services Regulation Authority;

OS: Ordinance Survey;

PFRA: Preliminary Flood Risk Assessment;

RFCC: Regional Flood and Coastal Committee

RoFSW: Risk of Flooding from Surface Water

SFRA: Strategic Flood Risk Assessment;

SuDS: Sustainable Urban Drainage System;

SWMP: Surface Water Management Plan;

UKCP09: United Kingdom Climate Projections 2009;

uFMfSW: Updated Flood Map for Surface Water;

WAG: Welsh Assembly Government;

HBC: Halton Borough Council.

Environment Agency (Self-Assessment Form – January 2017)

The Environment Agency have produced and written a Self-Assessment Form (January 2017) and associated guidance for the LLFA with options for its delivery for the 2nd Edition Review. Halton Borough Council has rewritten the PFRA and is not adding an amendment to the existing PFRA (2011). To adhere to the requirements the following table is produced as a checklist.

| PFRA report section | | Activity for PFRA/FRA review | | Response |
|---------------------|--|------------------------------|--|--|
| 1 | Governance and partnership | 1.1 | Since publication of the PFRA in 2011, have there been any changes to, or creation of new, risk management authorities (RMAs) with responsibilities in the LLFA area? | New FWMA Schedule Enactment |
| | | 1.2 | Are all roles and responsibilities for collecting and recording flood risk data and information clearly defined, including the respective roles and responsibilities of upper and lower tier authorities and other RMAs where relevant? | |
| 2 | Data systems and management | 2.1 | Do you have an up to date record of relevant sources of flood risk data and information for the LLFA area, including those held by other organisations? | EA modelling data has been revised and utilised since June 2011. Asset Register in place since June 2011. Modelling undertaken 2012. |
| | | 2.2 | Have sources of 'locally agreed surface water information' been established and maintained for the LLFA area and agreed with relevant partners? | |
| | | 2.3 | Are systems in place to collect, record and share data and information for the purpose of assessing flood risk in the LLFA area? | |
| | | 2.4 | Are systems in place to assure the quality and security of data and information recorded for the purpose of assessing flood risk in the LLFA area? | |
| | | 2.5 | Do you understand the condition and performance of the public, third party and private assets in your register in terms of flood risk? | |
| 3 | Past floods since Dec 2011 only) required for reporting to the European Commission | 3.1 | Have any flood events occurred since publication of the original PFRA report in December 2011 that have added to or changed your understanding of significant flood risk in the LLFA area? See the guidance document on which floods to report. | Updated records from flood events since the June 2011 Release. |
| | | 3.2 | Has your current understanding of significant flood risk in the LLFA area changed as a result of the consequences of floods that have occurred since 2011? How? | |
| 4 | Future flood information Information on future floods is required for reporting to the European Commission | 4.1 | Have you created or received new information on potential future floods that has added to or changed your understanding of significant flood risk in the LLFA area since publication of your original PFRA report in 2011? | EA modelling data has been revised and utilised since June 2011. Ongoing investigations and data gathering. |
| | | 4.2 | Have you created or received new information to improve the understanding of the future impact of climate change on flood risk in the LLFA area? | |
| | | 4.3 | Have you created or received new information on long term developments to improve your understanding of flood risk in the LLFA area? | |

| PFRA report section | | | Activity for PFRA/FRA review | Response |
|---------------------|---|-----|--|-------------------------------------|
| | | 4.4 | Has your understanding of flood risk in the LLFA area changed since 2011 as a result of new information on the potential consequences of future floods, the impact of climate change or long term developments? How? | |
| 5 | Identification of Flood Risk Areas for 2nd planning cycle | 5.1 | Are the indicative FRAs an appropriate representation of significant surface water flood risk in your LLFA area? | Information within the PFRA 2017-23 |
| | | 5.2 | Do the consequences of flooding from other local sources, i.e. groundwater or ordinary watercourses, or from combined multiple sources, indicate any other areas of significant risk? | |
| | Identified FRAs are required for reporting to the European Commission | 5.3 | Has your PFRA review identified any other information which indicates other areas of significant risk? | |
| | | 5.4 | On the basis of the national evidence provided and your review, do you agree with the indicative FRAs for your area? | |
| | | 5.5 | On the basis of local evidence and your review, are you amending or identifying any additional FRAs for your area? | |
| 6 | Updating the original preliminary assessment | 6.1 | Have you completed an addendum to update your preliminary assessment report? Updates are required for reporting to the European Commission | Information within the PFRA 2017-23 |

1. Introduction

1.1 Background

Following extensive flooding across the United Kingdom in 2007, Sir Michael Pitt on behalf of the UK Government undertook a comprehensive review of the lessons to be learned from the floods and made a series of recommendations. The Pitt Review (2008) was the catalyst for Local Authorities and partner agencies to become more responsible for flood risk with many of the recommendations incorporated into the Flood and Water Management Act 2010 (FWMA 2010).

The FWMA 2010 identified a number of responsibilities, powers and duties to be executed in phases to help manage flood risk in a more holistic way. The FWMA 2010 defines a lead role for local authorities and designated Halton Borough Council a Lead Local Flood Authority (LLFA) responsible for the management of local sources of flooding such as surface water. An overview of these duties is provided in Section 3. The Environment Agency retained its role in managing flood risk from main rivers and coastal sources.

Alongside the Act, the EC Floods Directive (Directive 2007/60/EC) on the assessment and management of flood risk was transposed into domestic law in England and Wales under the European Communities Act 1972 via the Flood Risk Regulations 2009 (FRR 2009). The purpose of the EC Floods Directive is to establish a framework for assessing and managing flood risk across the European Community.

Halton Borough Council as a “Lead Local Flood Authority” (LLFA) has a duty to prepare a Preliminary Flood Risk Assessment (PFRA) in accordance with Part 2 of the FRR 2009 which sets out the requirements. Halton Borough Council published its original PFRA in June 2011 and subsequent reviews must be carried out at intervals of no more than 6 years. This document is the first revision of the original PFRA.

The PFRA (and any subsequent maps and plans) form part of the local flood risk management strategy that Halton Borough Council is required to prepare under the FWMA 2010.

1.2 Preliminary Flood Risk Assessments (PFRA)

The PFRA is a high level screening exercise to identify areas in which the risk of local flooding is significant and warrants further examination through the production of maps and management plans.

The Flood Risk Regulations (2009) provide a framework for managing flood risk over a 6 year cycle, comprising:

- 1. Production of a Preliminary Flood Risk Assessment report;**
- 2. Identification of Flood Risk Areas;**
- 3. Production of appropriate Flood Hazard and Flood Risk Maps and,**
- 4. Preparing Flood Risk Management Plans.**

This report marks the first of a four stage process. This document is the first revision of the original PFRA published in June 2011. The outcome of the review is to provide evidence for the identification of FRAs (Stage 2). The PFRA makes use of existing and available data, and focuses on local flood risk sources.

The identification of FRAs will establish whether or not the final two stages of preparing hazard and risk maps and flood risk management plans are required for the administrative area.

The local sources of flooding for the purposes of the PFRA are:

- **Groundwater** - Water that flows out from the ground due to high water tables locally or regionally;
- **Ordinary Watercourses** - Out of channel flows from small watercourses such as streams, brooks and drainage ditches that are not regarded to be Main River by the Environment Agency;
- **Surface runoff** - Water that flows over land following a heavy rainfall event, before it enters a natural watercourse or an artificial drainage network.

Note for the purpose of the PFRA the LLFA does not have to report on flood risk from Main Rivers and the sea, reservoirs and canals, except where these may affect flooding from another source. With the exception of canals flood risk is the responsibility of the Environment Agency. For canals, the primary responsibility for land drainage and flood prevention rests with private parties. The Rivers and Canals Trust do not have any specific statutory responsibilities (under FWMA 2010) in relation to flooding and, therefore, its responsibilities are those of an owner and operator of its canals and other waterways.

Table 2 indicates the work required to meet the requirements of the FRR. This PFRA aims to meet the review/revision element of the first two requirements.

Table 2: Elements of Work required under the Flood Risk Regulations, 2009.

| Timescale for first edition | Assessment or Plan | Description | Timescale for first review / revision |
|------------------------------------|--|--|--|
| 22 nd June 2011 | Prepare Preliminary Flood Risk Assessment Report | The PFRA should focus on local flood risk arising from surface water, groundwater, Ordinary Watercourses, and canals. | 22 nd June 2017 |
| 22 nd June 2011 | On the basis of the PFRA, identify Indicative FRAs | Indicative Flood Risk Areas are a defined term, and are areas of nationally significant risk affecting 30,000 people or more. The PFRA is also required to record " locally significant risk areas " which are flood areas, above a locally determined threshold of affected people, and having significant harmful consequences. | 22 nd June 2017 |
| 22 nd June 2013 | Prepare Flood Hazard Maps and Flood Risk Maps for each FRA | The hazard and risk maps will show the likely extent, depth, direction, speed of flow and probability of possible floods and their consequences. | 22 nd June 2019 |
| 22 nd June 2015 | Prepare Flood Risk Management Plans for each FRA | The Flood Risk Management Plans will set out what the risk management objectives are, the measures proposed to achieve those objectives and how the measures are to be implemented. | 22 nd June 2021 |

The PFRA provides a useful source of reference for future local flood risk management strategies, informing the production of Flood Hazard and Flood Risk Maps (Stage 3), and contributing to the preparation of Future Flood Risk Management Plans (Stage 4).

1.3 UK Exit from the European Union

Depending on the approach taken to EU exit, there may be potential to make changes to the FRR in the coming years. EU exit does not, however, alter the requirement for LLFAs to review preliminary assessment reports and FRAs by 22nd June 2017 as the UK will still be a full member of the EU at that point. Any proposals to refine the approach to mapping flood hazard and risk or preparing FRMPs will be consulted on later in the cycle.

2. Aims and Objectives of the PFRA

2.1 Aims

The primary aim of this PFRA is to provide an assessment of potential local flood risk by applying a high level screening exercise across the administrative area of Halton Borough Council; hereby referred to as the study area.

The analysis uses existing and available information and is intended to reassess governance and partnership working, as well as information sharing within the adjacent LLFA areas, since the first publication of the report in June 2011 so that efficient flood risk management strategies are developed. This version of the PFRA will also provide assurance the Council's roles, responsibilities, and continual development under the FRR 2009 and FWMA 2010. The PRFA review is an opportunity to ensure those assessments are up to date and fit for purpose.

The risk of local flooding is defined as significant by European Standards for the PFRA if the flooding is affecting a cluster of more than 30,000 people. These local flooding risks are grouped in areas and are deemed Indicative FRAs. If these areas are found to exist within the Local Authority Boundary then they may warrant further examination at a later stage through the production of Flood Risk and Hazard maps and Flood Management plans.

2.2 Objectives

The objectives of this PFRA are to:

- Identify relevant partner organisations involved in future assessment of flood risk and summarise the means of future and ongoing stakeholder engagement.
- Describe arrangements for partnership and collaboration for ongoing collection, assessment and storage of flood risk data and information.
- Provide a summary of the systems used for data sharing and storing including provisions for quality assurance, security and data licensing arrangements.
- Summarise the methodology adopted for the PFRA with respect to data sources, availability and review procedures.
- Assess historic flood events within the study area from local sources of flooding (including flooding from surface water, groundwater and Ordinary Watercourses) and where possible, the consequences and impacts of these events.
- Establish an evidence base of historic flood risk information which will be built upon in the future and will to support and inform the preparation of Halton Borough Council Local Flood Risk Strategy.
- Assess the potential harmful consequences of future flood events within the study area.
- Review the provisional national assessment of indicative FRAs provided by the Environment Agency and provide an explanation and justification for any amendments required to the FRAs.

2.3 Halton Borough Council PFRA Study Area

The study area for Halton Borough Council PFRA is the administrative boundary of the Borough.

Halton covers some 90km² and is situated in the North West of England between Warrington and Liverpool. The latest population estimate, released by the Office for National Statistics (ONS) and based on the 2015 mid year population estimates, gives a population for the borough of 126,528. This is an increase of around 8,000 compared with the 2009 figure quoted in the previous PFRA 2011 report.

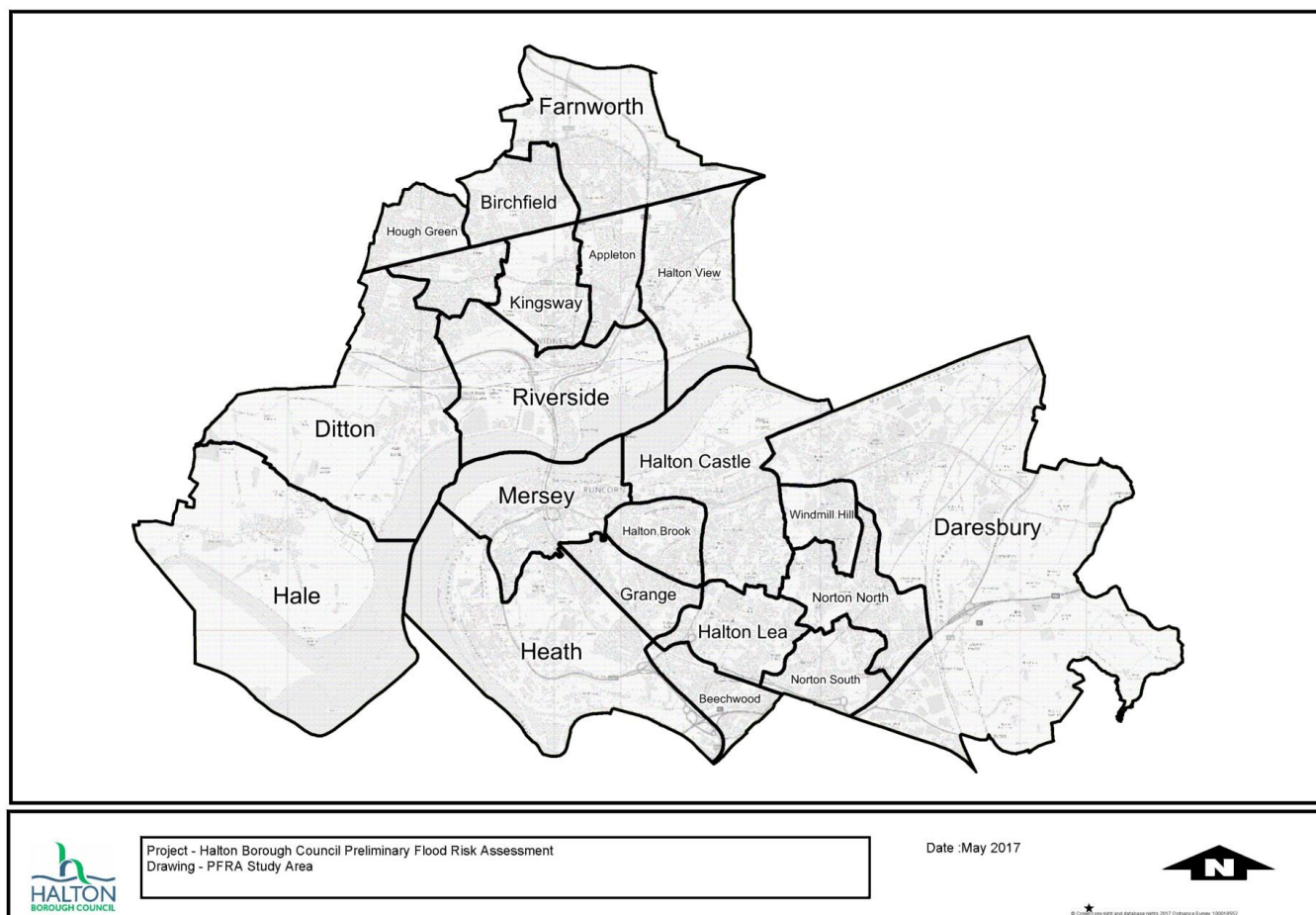
The study area of the PFRA covers the whole of Halton, from Barrow's Green in the north to Weston in the south, and the outskirts of Daresbury in the east to Hale in the west. It also includes a section of the Weaver Navigation. Two waterways, the tidal River Mersey and Manchester Ship Canal, divide the main urban area. In addition three large urban watercourses, Bowers, Ditton and Keckwick Brooks drain into the River Mersey. Responsibility for maintaining these Main Rivers rests with the Environment Agency.

There are two canals operated by subsidiary companies on behalf of Peel Ports Group within Halton, they are:

- Bridgewater Canal operated by the Bridgewater Canal Company Ltd,
- Manchester Ship Canal operated by Manchester Ship Canal Company Ltd.

Halton Borough Council owns and maintains parts of the Sankey Canal within the Halton Borough Council boundary.

Figure R1: PFRA Study Area



3. Lead Local Flood Authority (LLFA) Responsibilities

3.1 Introduction

The preparation of a PFRA is just one of several responsibilities of LLFAs under FRR 2009 and FWMA 2010. This section provides an overview of other responsibilities Halton Borough Council are obliged to fulfil under their role as a LLFA.

Table 3: Flood Risk Responsibilities

| Level of Flood Risk | Organisation | Responsibilities |
|---------------------|---------------------------------------|--|
| National Flood Risk | Environment Agency | Responsible for Main Rivers, the Sea and Reservoirs |
| Local Flood Risk | Lead Local Flood Authority | Responsible for Canals (where not in private ownership), Groundwater, Ordinary Watercourses, and Surface runoff The LLFA is the unitary authority for the area, or if there is no unitary authority, the county council. Note for Canals - Peel Ports Group and the Rivers and Canals Trust do not have any specific statutory responsibilities (under FWMA 2010) in relation to flooding and, therefore, its responsibilities are those of an owner and operator of its canals and other waterways. |
| Local Flood Risk | Water Company (i.e. United Utilities) | Responsible for sewers except where it is wholly or partly caused by rainwater not entering the system. Floods or raw sewage caused by blocking of a sewer for example are not covered by the regulations, neither is flooding from burst water mains. |

3.2 Co-ordination of Flood Risk Management

In his Review of the Summer 2007 flooding, Sir Michael Pitt stated that “the role of local authorities should be enhanced so that they take on responsibility for leading the coordination of flood risk management in their areas”. As the designated LLFA, Halton Borough Council is therefore responsible for leading local flood risk management across the area.

Local knowledge and technical expertise necessary for Halton Borough Council to fulfil their duties as a LLFA lies with the Council and other partner organisations. It is therefore crucial that the Council work alongside these partners as they undertake their responsibilities to ensure effective and consistent management of local flood risk. Since the first publication of the PFRA in June 2011 a number of partnerships and working groups have been established across different organisations.

3.2.1 Stakeholder Engagement

As part of the PFRA process, Halton Borough Council as LLFA will continue to engage with stakeholders representing the following organisations and authorities:

- United Utilities;
- Environment Agency;
- Peel Ports Group (including the Manchester Ship Canal Company Ltd);
- Local Fire and Rescue Service;
- Local Police Service.

Data has also been collated internally within Halton Borough Council.

The Environment Agency, United Utilities and Halton Borough Council are all classed as Risk Management Authorities (RMAs). It is crucial that the Council continues to forge successful partnership RMAs to ensure effective coordination and management of flood risk across the area.

3.2.2 Other Lead Local Flood Authority (LLFA) Engagement

Due to the position of the study area being situated within the River Mersey Catchment, Halton Borough Council are in consultation with neighbouring Local Authorities.

Halton Borough Council is part of a sub-regional LLFA working group formed in 2010; the Cheshire and Mid-Mersey Flood Working Group. The group (hereby known as the Partnership) operates at both Tactical and Strategic levels.

The Risk Management Authorities (RMAs) of the Partnership are:

- Warrington Borough Council – Partnership Lead;
- Halton Borough Council;
- Cheshire East Council;
- Cheshire West and Chester Council;
- St Helens Borough Council;
- Staffordshire County Council;
- Environment Agency;
- United Utilities.

The Partnership has a critical role to play in managing the risk of flooding from all sources and in working with communities to help them become more resilient. It provides a forum to enable RMAs, other partners and communities, to identify how they can work together to deliver an improved and more effective and efficient flood risk management service.

The Operational Group

Engineers from Halton Council, United Utilities and Environment Agency meet on a quarterly basis or as required if flood events occur to discuss issues and scheme delivery. The Operational Level is where day-to-day Flood Risk Management activities take place.

The Tactical Group

Technical and operational leads/managers meet on a monthly basis to coordinate delivery, share skills and implement decisions made at the Strategic level. The Tactical Group is chaired by Warrington Borough Council and reports directly to the Strategic Group who are responsible for setting the overall strategic direction of the partnership.

The Strategic Group

Set the strategic direction for joint working and the management of flood risk across the Partnership. Elected Members and senior representatives from the RMAs meet each quarter. The meetings are timed to coincide with financial the planning cycle of the Regional Flood & Coastal Committee (RFCC).

Regional Flood & Coastal Committee (RFCC)

The RFCC for the North West region provides a local democratic role in the identification and management of flood and coastal erosion risk in order to ensure the purposeful and efficient spending of public money and other resources.

The RFCC works across with LLFAs, the Environment Agency and other RMAs to develop a mutual understanding of risk across its locality, and use this understanding to help develop plans to manage risk reflecting DEFRA's aims for flood and coastal erosion risk management. RFCC meetings are held each quarter, although there may be additional meetings at a sub-group level where local authorities are working together.

The RFCC provides a platform for frequent knowledge transfer with all Partnerships situated in the North West region. These are;

- Cheshire Mid-Mersey
- The Association of Greater Manchester Authorities (AGMA);
- Cumbria;
- Lancashire;
- Merseyside.

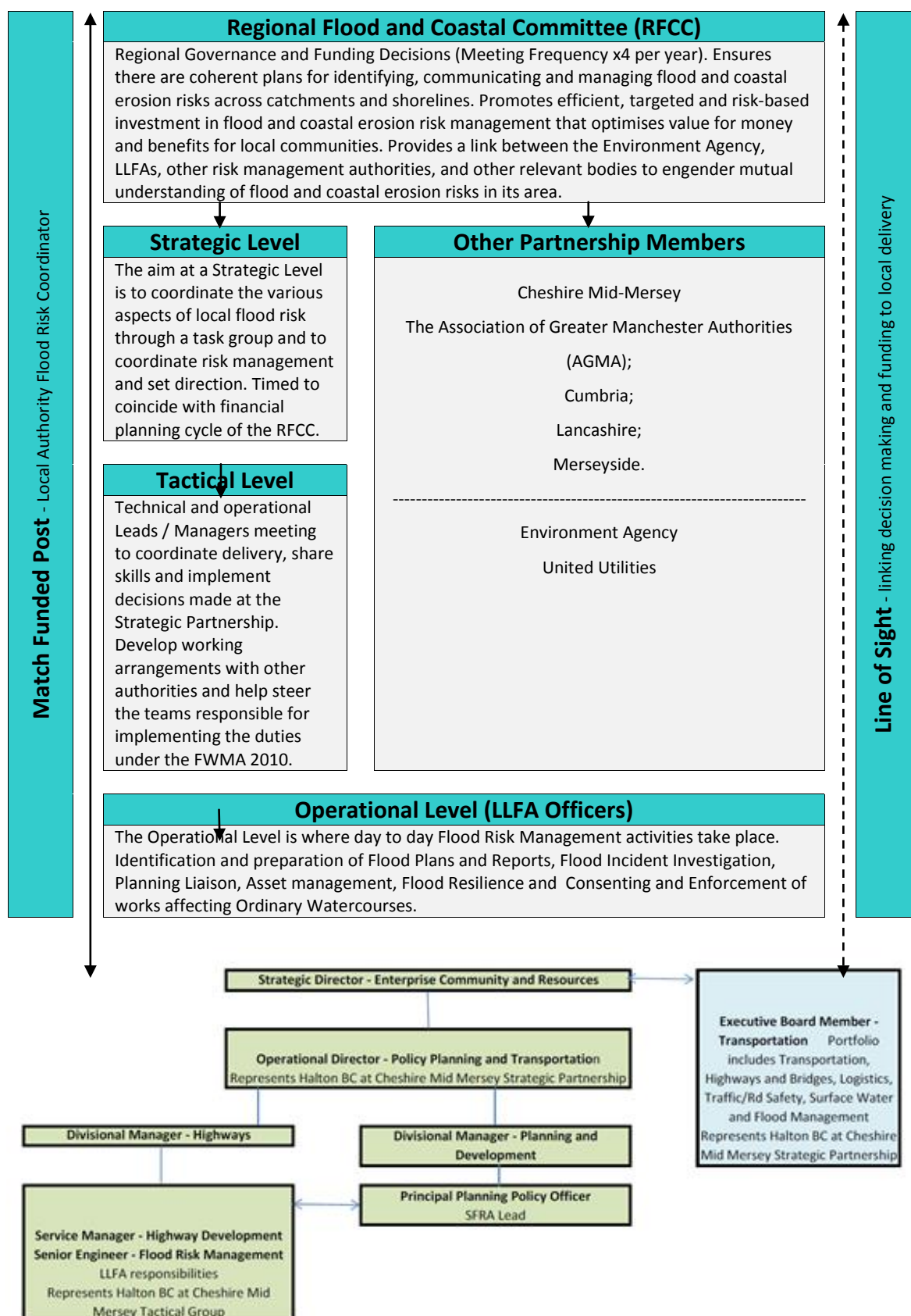


Figure R2: a) Cheshire Mid-Mersey Flood and Coastal Erosion Risk Management Partnership Structure & b) Governance & Structure within Halton Borough Council

3.2.3 Public Engagement

It is recognised that members of the public may also have valuable information to contribute to local flood risk management. The Environment Agency's 'Building Trust with Communities' (2005) document provided the basis for Halton Borough Council of how to communicate risk including the causes, probability and consequences to the general public and professional forums such as local resilience. The enforcement of FRR 2009 and FWMA 2010 into UK law accelerated the need for Council's to increase public engagement. This has brought significant benefits to local flood risk management including building trust, gaining access to additional local knowledge and increasing the chances of stakeholder acceptance of options and decisions proposed in future flood risk management plans.

3.3 Further Responsibilities

In addition to increasing partnership relations, coordinating, and leading on local flood management there are a number of other key responsibilities that have arisen for LLFAs since the introduction of the FRR 2009 and FWMA 2010. These responsibilities include:

- **Investigating flood incidents** – Section 19 of FWMA 2010 state LLFAs have a duty to investigate and record details of significant flood events within their area. This duty includes identifying which authorities have flood risk management functions and what they have done or intend to do with respect to the incident, notifying risk management authorities where necessary and publishing the results of any investigations carried out.
- **Asset Register** – Section 21 of FWMA 2010 state LLFAs have a duty to maintain a register of structures or features which, in the opinion of the authority, are likely to have a significant effect on a flood risk in its area, and a record of information about each of those structures or features, including information about ownership and state of repair. The register must be available for inspection and the Secretary of State will be able to make regulations about the content of the register and records.
- **Local Strategy for Flood Risk Management** – Under Section 9 of FWMA 2010 LLFAs are required to develop, maintain, apply and monitor a local strategy for flood risk management in its area. The local strategy will build upon information such as national risk assessments and will use consistent risk based approaches across different local authority areas and catchments. Halton's current Strategy was adopted in 2015, and is subject to ongoing review, with a full revision due in 2021 in line with the PFRA process.
- **Works powers** – LLFAs have powers to undertake works to manage flood risk from surface runoff and groundwater, consistent with the local flood risk management strategy for the area.
- **Designation powers** – Under Schedule 1 Section 30 of the FWMA 2010, LLFAs and the Environment Agency have powers to designate structures and features that affect flooding or coastal erosion in order to safeguard assets that are relied upon for flood or coastal erosion risk management.
- **Duty to Cooperate and Share information** – LLFAs, as well as other Flood Authorities (Environment Agency, Water Company, other LLFAs) have a duty to cooperate with each other, and also the power to request information, in connection with flooding, of any person or body.

- **Consenting changes to Ordinary Watercourses (Amendment to Land Drainage Act 1991: Sections 23, 24 and 25)** – 'Regulation' is the management of activities undertaken on watercourses. It involves granting consent for acceptable work to be carried out and taking enforcement action if work is unacceptable. If riparian owners wish to build a culvert/structure or make any alteration likely to affect the flow of an ordinary watercourse, land drainage consent is required from the Council as an LLFA.

Halton Borough Council have fully complied to the aforementioned responsibilities since the first publication of the PFRA and will continue to strengthen these for the period 2017 – 2023.

4. Methodology and Data Review

4.1 Introduction

The PFRA is a high-level screening exercise used to identify areas where the risk of flooding is considered to be significant and warrants further examination and management through the production of flood risk and flood hazard maps and flood risk management plans.

In January 2017 DEFRA replaced its guidance on significant risk for the identification of FRAs for LLFAs about the criteria for assessing and reviewing whether a risk of flooding is significant. This replaced the previous guidance published in 2010 (updated March 2011).

The PFRA involves:

- Collecting information on past (historic) and future (potential) floods.
- Assembling the information into a preliminary assessment report.
- Identifying FRAs.

4.1.1 Methodology

The following phased process has been undertaken in order to produce this report:

Table 4: Report Phases

| Phase | Description |
|-------|---|
| 1 | <ul style="list-style-type: none"> ➤ Key partnership liaison - internal and external data collection ➤ Stakeholder partnership meetings |
| 2 | <ul style="list-style-type: none"> ➤ Review and analysis of historic flood risk data ➤ Review and analysis of future flood risk data ➤ GIS mapping of data ➤ Draft report writing |
| 3 | <ul style="list-style-type: none"> ➤ Review of indicative FRAs ➤ GIS mapping ➤ Draft report writing |
| 4 | <ul style="list-style-type: none"> ➤ Internal draft report review from EA and internal Council staff ➤ Draft PFRA submitted to EA by 22nd June 2017 ➤ Council board approval |

4.2 Phase 1 – Data Collection

4.2.1 Partner Organisations

The following authorities and organisations that were identified and contacted to share data for the preparation of the PFRA include:

- United Utilities;
- Environment Agency;
- Local Planning Authority;
- Emergency Services.

4.2.2 Critical Services

Within this PFRA critical services have been mentioned throughout. Critical services are defined by the EA as:

- Schools;
- Police Stations / Prisons;
- Nursing / Care / Retirement Homes;
- Fire Stations / Ambulance Stations / Hospitals;
- Electricity Installations / Sewage Treatment Works.

4.2.3 Data Collection

Table 7 catalogues the relevant information and datasets received from partner organisations and provides a description of each of the datasets that were obtained by Halton Borough Council.

The data is geo-referenced where possible. This has made it possible to display this information using GIS software and overlay layers to identify the spatial distribution of historic flood events and relate these datasets to receptor information, in order to assess the overall flood risk.

The majority of the data has been specifically provided for this PFRA study and is not publicly available due to data protection requirements, therefore there are restrictions on data use. Halton Borough Council must adhere to these data security measures. All data collected is stored on secured local servers, which are password protected.

Table 5 illustrates the restrictions on the use of this data.

Table 5: Summary of data restrictions and licensing details

| Organisation | Restrictions on Use of Data |
|--------------------|---|
| United Utilities | The use of provided data is restricted to Halton Borough Council and their partners for the preparation of its preliminary flood risk assessment |
| Environment Agency | The use of some data is restricted to Halton Borough Council and their consultants for the preparation of its preliminary flood risk assessment. The use of other data is unrestricted. |

Table 6: Data Quality Assessment

| Data Quality Score | Description | Explanations | Example |
|--------------------|------------------------------|---|--|
| 1 | Best possible | No better available; not possible to improve in the near future | <ul style="list-style-type: none"> High resolution LIDAR River/sewer flow data Rain gauge data |
| 2 | Data with known deficiencies | Best replaced as soon as new data are available | <ul style="list-style-type: none"> Typical sewer or river model that is a few years old |
| 3 | Gross assumptions | Not invented but based on experience and judgement | <ul style="list-style-type: none"> Location, extent and depth of much surface water flooding Operation of un-modelled highway drainage 'future risk' inputs e.g. rainfall, population |
| 4 | Heroic assumptions | An educated guess | <ul style="list-style-type: none"> Ground roughness for 2D models |

Table 7: Relevant Information and Datasets Description

| Owner | Dataset | Description | Rating |
|------------------------|---|--|--------|
| Environment Agency | Risk of Flooding from Surface Water (RoFSW) | Published 2013 national surface flood map supersedes Areas Susceptible to Surface Water Flooding maps (2008) and Updated Flood Map for Surface Water (2010) Dataset provides banding for High, Medium and Low risk to depth and velocity. Dataset is updated annually. | 2 |
| | Flood Map (Rivers & Sea) | Shows the extent of flooding from rivers with a catchment of more than 3km ² and from the sea. | 2 |
| | Areas Susceptible to Groundwater Flooding (AStGF) | 1 kilometre square grid that identifies at a broad scale areas susceptible to flooding from groundwater on the basis of geological and hydrogeological conditions. | 3 |
| | National Receptor Database (NRD) | A national dataset of social, economic, environment and cultural receptors including residential properties, school, hospitals, transport infrastructure and electricity substations. | 2 |
| | Indicative Flood Risk Areas | Nationally identified flood risk areas, based on the definition of 'significant' flood risk described by DEFRA & WAG. | 2 |
| | Historic Flood Map (HFM) | GIS layer showing the maximum extent of all individual Recorded Flood Outlines from river, the sea and groundwater springs and shows areas of land that have previously been subject to flooding | 3 |
| | Mersey Estuary Catchment Flood Management Plan (CFMP) | CFMP's consider all types of inland current and future flooding, from rivers, groundwater, surface water and tidal flooding and are used to plan and agree the most effective way to manage flood risk in the future. | 2 |
| | LiDAR Data | Topographic Information held for Halton Borough Council is generally high resolution. | 1 |
| | Rain Gauge Information | 2no. Gauge information available at selected sites across Halton Borough Council – available on request | 2 |
| | Telemetry | EA operates telemetry system across Halton, watercourse level and flow information collected. – available on request | 1 |
| Halton Borough Council | Anecdotal information | Anecdotal information: flood risk, flood history and local flood hotspots. | 4 |
| | Area Flood Risk Studies | Flood Risk Studies commissioned by the Council. | 2 |
| | CMM Partnership Ordinary Watercourse Critical Asset Identification & Condition Survey | Outputs from partnership work consist of: <ul style="list-style-type: none"> • Identification of critical assets • CCTV survey of identified culverts • Flood modelling • Ordinary Watercourse Condition data | 2 |
| | Halton Borough Council Flood Risk Asset Inspection Project | Borough wide asset inspection works undertaken by Consultant on behalf of Halton Borough Council & Blockage Sensitivity Testing. | 2 |
| | Strategic Flood Risk Assessment Level 1 | The Stage 1 SFRA focuses on collecting information regarding all sources of flooding. This helps to identify the spatial distribution of flood risk sources. | 3 |
| | Strategic Flood Risk Assessment Level 2 | The Stage 2 SFRA focuses on the details nature of flood hazard taking into account the presence of flood risk management measures such as flood defences and the location of key development and regeneration areas. | 2 |
| | Critical Infrastructure dataset | Contains information of critical infrastructure. | 2 |
| | Water Cycle Strategy | The Water Cycle Strategy identifies the water services infrastructure that is needed to support and enable sustainable development in the mid Mersey area. | 2 |
| | Surface Water Management Plan Flood Depth Mapping | Surface Water Flood Modelling conducted as part of the SWMP Stage 2. | 2 |
| | Surface Water Management Plan Stage Interim Reports | Information on future surface water flood risk is outlined in these documents. | 2 |
| | S19 Flood Investigation reports | LLFAs have a duty to investigate and record details of significant flood events within their area. Reports include photographic evidence during and after flood event. | 2 |
| | Historic Flooding Records | Historic records of flooding from surface water, groundwater and ordinary watercourses. | 2 |
| | Asset Register / Record | Register of flood risk management assets. | 2 |
| | Scheme Business Cases | Business cases for schemes contain information regarding risk and potential solutions. | 2 |
| United Utilities | Flooding Register | Registers logs and records of sewer flooding incidents for each area. | 2 |
| | Modelling Information | Models of drainage systems operated and maintained by United Utilities. | 2 |
| | Asset Register | Asset register available to Halton Borough Council on request. | 2 |
| | Telemetry | Information regarding sewer performance | 2 |
| Fire & Rescue | Incident Response Register | Issue logs of all events recorded by Cheshire Fire and Rescue Service. This includes internal floods such as burst pipes and sewerage problems. Data from the website has been used as this is considered to be the best available data and for further information readers should visit the following website - http://www.cheshirefire.gov.uk/ | 2 |
| Other | Media Records | Information obtained from online media – news websites / social media etc. | 2 |

4.2.4 Data Limitations

The first edition of the PFRA identified a number of issues during the data collection process. Whilst a number of processes have since been improved a number of limitations still remain.

Inconsistent Recording Systems

Previously the lack of a consistent flood data being captured within one central recording system within Halton Borough Council had led to inconsistencies in the recording of flood event data. Halton Borough Council will continue to address this issue as part of day to day flood incident recording and in undertaking its' duties under Sections 19 and 21 of the FWMA 2010. Whilst sections of the study area that have recently been flooded have been scrutinised for consistency, the limitation of inconsistent recording still applies for those sections of the study area that have only experienced flooding historically.

Incomplete Datasets

Some of the datasets collated are not exhaustive and are questionable to accurately represent the complete local flood risk issues in a particular area. Halton Borough Council, along with the other stakeholders, has strived to reduce the number of incomplete datasets since 2011. Records for recent flooding locations are now more comprehensive, however knowledge gaps still remain in sections of the study area that have only experienced flooding historically and therefore hinder the identification of accurate FRAs.

Varied Quality of Data

Depending upon stakeholder objectives of collecting information there have been leniencies in the varied quality in historic flood records. This has made it difficult to accurately assess the consequences of historic local flooding.

Records of Consequences of Flooding

It is not always possible to clearly identify and compartmentalise flooding, particularly from engineered systems that are typically interconnected, which results in flooding from a combination of sources.

Data records provided by the other partner organisations were not always comprehensive for specific past flood events. Since 2011 there has been increased co-operation with stakeholders to standardise the recording procedure to become more aligned and comprehensive, increasing confidence to identifying flooding source and consequence.

Quality Assurance

Data collected was subject to quality assurance measures to monitor and record the quality and accuracy of acquired information and datasets. A data quality score was given, which is a qualitative assessment based on the Data Quality System provided in the Surface Water Management Plans (SWMP) Technical Guidance document (March 2010). This system is explained in Table 6. A confidence rating for the dataset was then determined as summarised in Table 7.

4.3 Phase 2 – Data Review and Analysis

4.3.1 Assessing Historic Flood Risk

Existing datasets, reports and anecdotal information from the stakeholders have been collated and reviewed to identify details of major past flood events which had locally significant harmful consequences. The analysis included an assessment of economic damage, environmental and cultural consequences and impact on the local population.

For further information on historical flooding please refer to Section 5 of this PFRA.

4.3.2 Assessing Future Flood Risk

The identification of FRAs through the PFRA should also take into account future floods, defined as any flood that could potentially occur in the future. This definition includes predicted floods extrapolated from current conditions in addition to those with an allowance for climate change. The assessment of future flood risks will primarily rely on a technical review of the Environment Agency's Risk of Flooding from Surface Water (RoFSW) maps first published in 2013 and updated annually.

The previous PFRA relied upon a technical review of surface water flood depth maps (1 in 200 annual chance of flood with 180 minute duration) produced for the Surface Water Management Plan (SWMP) as the best available information. For areas not covered by the SWMP modelling the Environment Agency's Areas Susceptible to Surface Water Flooding Map was used. Both datasets have been superseded by the RoFSW which when compared to observe actual flooding better represents the flood extents.

In January 2017 the PFRA guidance, first published in 2011, was revised due to increased understanding of the FWMA 2010 requirements, data collection and recording methods, completion of flood alleviation schemes, and technological advances to produce more accurate model predictions. Table 8 summarises the main differences between the guidance documents.

Table 8: Differences between assessment criteria

| Description | 2011 PFRA | 2017 PFRA |
|---|---|---|
| Rainfall Return Period for analysis | 1 in 30 year (3.3%) 1 in 200 year (0.5%) | 1 in 30 (3.3%) 1 in 100 (1%) 1 in 1000 (0.1%) |
| Number of "blue squares" formed within a 3x3 km square grid to create a cluster. Refer to Section 4.1 for further information | 5 | 5 |

RoFSW maps were generated using 'direct rainfall' modelling (the application of rainfall to all cells in a 2D model, and runoff is routed within the hydraulic model). RoFSW maps do not take into account any non-surface water influences such as rivers, sea, sewers or groundwater.

Table 9: Risk Categories for RoFSW maps

| Banding | Return Period |
|----------|---|
| High | >1 in 30 years (3.3%). |
| Medium | Between 1 in 100 (1%) and 1 in 30 years (3.3%). |
| Low | Between 1 in 1000 (0.1%) and 1 in 100 years (1%). |
| Very Low | <1 in 1000 years (0.1%). |

Risk categories, to depth and velocity of flood waters, have been assigned based on the information provided by the Environment Agency. **Even though it is based as an annual chance of the event occurring, there is no limit on the event taking place at multiple times throughout the year.**

Table 10: Information contained in the RoFSW banding

| Predicted Depth (mm) Banding | Predicted Velocity (m/s) Banding |
|------------------------------|----------------------------------|
| >900 | >0.25 |
| 300 to 900 | <0.25 |
| <300 | |

Further information regarding the Risk of Flooding from Surface Water Maps (formerly known as the updated Flood Map for Surface Water - uFMfSW) is available at the following webpage: <https://www.gov.uk/government/publications/flood-maps-for-surface-water-how-they-were-produced>

The following factors were considered when assessing the future flood risk across the study area:

- Topography.
- Location, and type, of drainage systems.
- Characteristics of watercourses (lengths, modifications).
- Location of Ordinary Watercourses and Flood Plains that retain water.
- Residential / economical areas.
- Effectiveness of any works constructed for the purpose of flood risk management.
- Current and predicted impact of climate change.
- Proposals for future development.

For further information on future flooding please refer to Section 6 of this PFRA.

4.4 Phase 3 – Reviewing Indicative Flood Risk Areas

Information on historic and future flood risk has been used to formally review FRAs. Flood risk indicators have been used to determine the impacts, and consequences, of flooding on human health, economic activity, environment and cultural heritage.

The flood risk indicators have been selected and analysed by DEFRA and the Environment Agency in order to identify areas where flood risk and potential consequences exceed a pre-determined threshold. The areas that have been identified using this methodology, and exceed 30,000 people at risk, have been mapped nationally and identified as Indicative FRAs (Appendix A, Figures 11-14).

Table 11: Key Flood Risk Indicators and Impacts

| Impact of flooding on: | Flood Risk Indicators |
|------------------------|--|
| Human Health | Number of residential properties. Critical services (Hospital, Police / Fire / Ambulance Stations, Schools, Nursing, Homes, etc.). The number of critical services can be identified using the National Receptor Dataset (NRD). However the LLFAs note that NRDs do not show the impact of flooding of individual sites. |
| Economic Activity | Number of non-residential properties. Principal road that is flooded for longer than 12 hours. Area of agricultural land. With the details of the lengths placed into NRDs. It is also important to consider significant consequences by looking at the importance of the route (national, regional, local), alternatives and diversions. This is important in a case of any settlement, routes, rail networks being cut off by flooding. |
| Environment | Designated sites (SSSIs, SACs, SPAs, etc.) and BAP habitat. It also identifies the flooding consequences around pollution (PPC, COMAH) and Contaminated land. |
| Cultural Heritage | Cultural heritage sites (World Heritage Sites), Scheduled Ancient Monuments, Listed Buildings, Conservation Areas, Registered Parks and Gardens. |

4.4.1 The Criteria

Table 12 sets out for people, services, properties and communities, the level of flood risk which LLFAs should consider to be significant for the purposes of the Regulations. These indicators and criteria relate to the risk of surface water flooding from a rainfall event with a 1% (or 1 in 100) chance of occurring in any one year.

The Environment Agency has provided a set of indicative FRAs for LLFAs to consider. These are shown in Figure 15, Appendix A. LLFAs are only required to do this in relation to local flood risks, including risks of flooding from surface water, groundwater and ordinary watercourses. They do

not need to consider risks of flooding from the sea, main rivers or reservoirs, except where these may affect flooding from another source.

Table 12: Indicators and criteria for assessing whether the risk of local flooding is significant for the purposes of identifying FRAs

| Method | Definition | Indicator | Criteria |
|----------------------------|---|---|--|
| Cluster method | A cluster is formed where, within a 3x3 km square grid, at least 5 of the 1km squares meet the criteria for one or more of the indicators. Where multiple overlapping grids meet the requirement, these are unified to form a larger cluster. All of the clusters (both small and large) have been identified as indicative flood risk areas. | Number of people at risk of surface water flooding* | 200 people or more per 1km grid square Number of people taken as 2.34 times the number of residential properties at risk. |
| | | Number of key services at risk of surface water risk* e.g. utilities, emergency services, hospitals, schools | More than one per 1km grid square |
| | | Number of reportable properties (residential and non-residential) properties at risk* | 20 or more per 1km grid square |
| Communities at risk method | Community areas, as defined by the Office for National Statistics built-up areas (BUAs) and built-up areas sub-divisions (BUASD), where there is a large number of properties at risk. | Number of reportable properties (residential and non-residential) properties at risk* | 3,000 or more reportable properties (residential and non-residential) within a BUA/BUASD. |

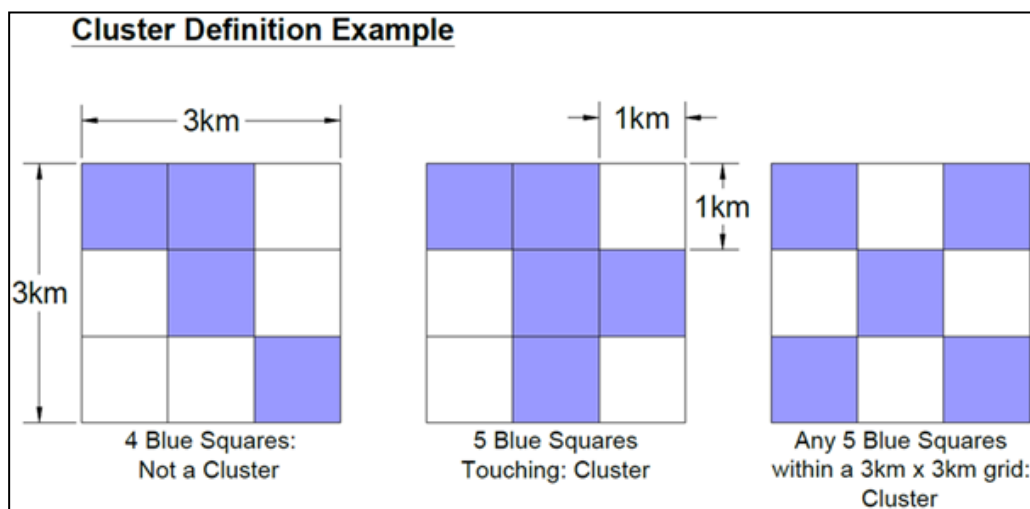
*Risk of surface water flooding from a rainfall event with a 1% (or 1 in 100) chance of occurring in any one year

The Environment Agency has used two methods and information held nationally to derive these indicative areas. The methods are:

1. The Flood Risk Areas cluster method

As used in the first cycle to identify high concentrations of risk. The country was divided into 1km squares and national information used to identify the squares meeting one or more of the cluster method related criteria in Table 12. A cluster is formed wherever, within a 3x3 km square grid, there are at least 5 squares meeting the criteria. Often multiple grids that meet this requirement will overlap. Overlapping grids are unified to form a larger cluster. All clusters, large and small are identified as indicative FRAs.

A rainfall event with a 1% chance (1 in 100 year return period) of occurring in any year has been utilised to generate the clusters rather than 0.5% chance (1 in 200 year return period) as in 2011 PFRA. This is because current surface water risk products do not include the assessment of a 0.5% chance rainfall event.



2. The Environment Agency's Communities at Risk method

Developed since 2010 which complements and validates the cluster method by identifying built up areas where total flood risk is high. Indicative FRAs are identified wherever there are 3,000 or more reportable properties (residential and non- residential) at risk within a built-up area (BUA) or built-up area sub-division (BUASD) as defined by the Office for National Statistics.

As with method 1, this is for a rainfall event with a 1% chance of occurring in any year.

When determining their FRAs, Halton Borough Council began with the Environment Agency's indicative FRAs and used its local knowledge and information to provide confidence with reference to Table 7.

The Environment Agency has suggested some additional indicators and criteria to consider in relation to Table 7 at the local level which may be sufficient for a flood risk to be considered significant factors to identify a change from the indicative FRAs:

- Flood risk from other local sources e.g. groundwater, local watercourses
- The combined impact of flooding from multiple sources.
- Areas susceptible to more frequent, less extensive flooding, that could over time result in significant damages.
- Vulnerable local sites, such as caravan parks or camp sites.
- Consequences of flooding for agricultural land.
- Consequences of flooding for roads, rail or other infrastructure.
- Consequences of flooding for internationally or nationally designated environmental sites or internationally or nationally important cultural heritage features, and
- Location of sites subject to Integrated Pollution Prevention and Control or Control of Major Accident Hazard regulation.

There is no national criterion for these local factors, but when considering whether a local factor related risk is significant, it should be assessed whether the magnitude of risk in relation to a local factor, or a combination of local factors, is comparable to the scale of the risk presented by the criteria in Table 12. Additional information to the methods used by the Environment Agency to develop indicative FRAs for this PRFA review is contained in Appendix B

4.4.2 Review

The following sections consider these additional local factors. Mapping has been presented in Appendix A and further analysis has been undertaken to ascertain the scale of the potential risk, to identify whether it is necessary to declare additional FRAs within Halton.

Method 1 - The Flood Risk Areas cluster method

Referring to Figure 2 of Appendix A there are 3 “blue squares” (1km grid squares) identified within the Halton Borough Council Boundary. Only 3 of these are contained within a 3x3 km square grid. No cluster identified.

The DEFRA / EA identified 1km² Squares Above Flood Risk Threshold (Blue Squares) for Halton is shown in Figure 2 of Appendix A.

Method 2 - The Environment Agency’s Communities at Risk method

Table 13: Indicative FRAs – Method 2 ‘Communities at Risk’ Approach

| Rank | Sub Division | Total properties at risk | Intersecting LLFAs | % of BuA within LLFA boundary |
|------|--------------|--------------------------|--------------------|-------------------------------|
| 28 | Liverpool | 4,413 | Halton | 0.0% |
| | | | Knowsley | 15.3% |
| | | | Liverpool | 82.9% |
| | | | Sefton | 1.7% |

Figure 15, Appendix A shows the geographical extent of the national Indicative Flood Risk Area (with over 30,000 people) for Liverpool which is ranked 13 by number of people at risk in England. The proposed Flood Risk Area also covers large parts of the Liverpool, Knowsley and Sefton LLFA administrative areas. This area encroaches slightly into a predominantly rural area within Halton. It does not correspond with any future flood high risk areas (identified in the Halton Borough Council PFRA using local flood risk knowledge and data) which are summarised in the mapping of Annex A

It is proposed that minor changes to the Liverpool indicative Flood Risk Area in Halton to more accurately reflect local conditions. The Liverpool Flood Risk Area has been removed from the Halton area as it only slightly encroaches into a predominantly rural area, on the periphery, of the borough and does not coincide with the locally defined areas of consequence. This revision reflects the relevant administrative boundaries, urban areas, the limited historical flood incident records in the area and the analysis of significant future flood risk resulting from this study. Halton Borough Council will take on the responsibility of reporting this information within Annex 3 of their Preliminary Assessment Spreadsheet.

4.4.3 Conclusion

There are no indicative FRAs or Clusters identified within the Halton Borough Council administrative area.

5. Historic Flood Risk – Assessment of Past Flooding

5.1 Introduction

This section summarises the readily available and relevant information on historic floods. The PFRA guidance requires floods identified with “significant harmful consequences” to be reported in the spreadsheet in Annex 1 of this report.

“Significant harmful consequences” are considered to be impacts of flooding that may have negative consequences for human health, the social and economic welfare of individuals and communities, infrastructure, and the environment (including cultural heritage).

The definition of a past flood with “significant harmful consequences” is determined by the LLFA. The level of significance is chosen so that only relatively harmful flood events are included in the PFRA. Such flood events are those that would be deemed significant when considered from a national perspective.

For the purposes of this PFRA, the definition of “significant” has been defined by Halton Borough Council as followed:

Table 14: Historically Significant Harmful Consequences

| Impact of flooding on: | Category | Consequence |
|------------------------|--------------------------------------|---|
| Human Health | Number of individuals | ≥ 200 |
| Economic Activity | Number of critical services | ≥ 2 |
| | Number of residential properties | ≥ 83 |
| | Number of non-residential properties | ≥ 20 |
| | Principal Highway Network | Transport links impassable for more than 12+ hours. |
| Environment | - | - |
| Cultural Heritage | - | - |

Using the definition above, Halton Borough Council has no records of local floods with historically significant harmful consequences.

Irrespective of “significance”, Halton Borough Council considers that all flood events that affect property or people justify consideration. Therefore, where known, information on all flood events has been gathered. A summary of the information specific to each source of flooding relevant to the PFRA is included in this chapter. Other floods that do not meet the criteria, or for which the consequences are not known, are not included in Annex 1, as per the PFRA guidance, but their locations are plotted on the relevant figures.

It is noted that flooding can be the result of complex interactions between the different sources (e.g. Main River and surface water) and the degree of influence from other sources are not always fully understood.

The Halton Borough Council Local Flood Risk Management Strategy, first published in March 2015, addressed these issues from the first publication of the PFRA. The strategy is to be reviewed by June 2021.

5.2 Overview

5.2.1 Surface Water Flooding (Overland Flow)

Surface water flooding, also known as pluvial flooding, results from overland flow before the runoff enters a watercourse or drainage system. It is usually the result of high intensity rainfall exceeding the hydraulic capacity of the receiving system. However it can also occur with lower intensity rainfall when the land has a low permeability and/or is already saturated, frozen or developed.

Surface water flooding within the United Kingdom is becoming a regular issue due to the high rate of developments creating large impermeable surfaces.

Figures 3 and 5 (Appendix A) show the locations of all known past flood events collated from key RMAs and stakeholders. There are a total of 97 recorded historical surface water flooding events of varying significance and type.

Halton Borough Council has identified no incidents of historically significant harmful consequences for surface water flooding. Areas affected by surface water flooding which have not been classified as having significant harmful consequences will be reviewed as part of Halton Borough Council's longer-term strategy.

5.2.2 Ordinary Watercourse Flooding (Fluvial)

Flooding from any type of watercourse, also known as fluvial flooding, occurs when intensive or prolonged rainfall causes a watercourse to exceed hydraulic capacity. The additional inflow causes the water to rise above its banks or retaining structures and subsequently flows onto the land.

All watercourses within the study area have been identified using the Environment Agency's Detailed River Network (DRN) and are classified as either Main River or Ordinary Watercourse. These are indicated in Figure 4.

Main Rivers are usually larger rivers and streams. Other rivers are called Ordinary Watercourses. The Environment Agency carries out maintenance, improvement or construction work on Main Rivers to manage flood risk under the Water Resources Act 1991. Environment Agency powers to carry out flood defence work apply to main rivers only. Lead local flood authorities, district councils and internal drainage boards carry out flood risk management work on ordinary watercourses. The Environment Agency decides which watercourses are Main Rivers. It consults with other risk management authorities and the public before making these decisions. The Main River map is then updated to reflect these changes. Inclusion of Main Rivers is beyond the scope of this PFRA.

Ordinary Watercourses are any watercourses that are not designated a Main River by the Environment Agency and therefore come under the powers of Halton Borough Council. These include every river, stream, ditch, drain, cut, dyke, sluice, sewer (other than a public sewer) and passage through which water flows and which does not form part of a Main River.

Ordinary Watercourses with known flood risks associated to them (limited channel capacity, channel constrictions or a poor maintenance regime) were previously designated Critical Ordinary Watercourses (COWs). These were not classified as Main River but which the Council had agreed with the Environment Agency to be critical because they have the potential to put at risk from flooding large numbers of people or property. In 2006/7, the Environment Agency reclassified all COWs as Main Rivers and took over responsibility for their maintenance and management, in a process known as enmainment.

Halton Borough Council has identified no historically significant harmful consequences for fluvial flooding from Ordinary Watercourses. Areas affected by fluvial flooding which have not been classified as having significant harmful consequences will be reviewed as part of Halton Borough Council's longer-term strategy.

5.2.3 Sewer Flooding

Sewer flooding is often caused by drainage systems exceeding hydraulic capacity during periods of intensive, or prolonged, rainfall. These drainage systems, owned and maintained by the sewage undertaker (United Utilities), receive either:

- Foul only flows;
- Surface water flows;
- Both foul and surface water flows (combined system).

Combined sewerage systems are mostly associated with sections of the study area developed during the Victorian era. To maintain hydraulic efficiency the combined system contains a number of relief structures to divert excess flows to adjacent watercourses to reduce the risk of sewer flooding from manholes. These structures are known as Combined Sewer Overflows (CSOs). The operation of these increases the risk of fluvial flooding, as well as pollution of the watercourse. Developments from the late 1970s / early 1980s have been constructed using individually separate foul and surface water systems.

There are some housing developments from the early 20th century that utilise the principles of the separate system where both foul and surface water flows are routed in the one manhole. These dual manholes operate in a similar manner to CSOs and are normally situated at the head of the sewerage network, whereas CSOs are situated in the main body of the system. Dual manholes can cause major pollution problems from storm sewage discharges or dry weather discharges via surface water sewers as a result of foul sewer blockages.

United Utilities have provided an incident register for locations that have experienced internal (i.e. flooding within a property) and external flooding from a number of sources. The register has been filtered to identify hydraulic issues, such as overloading of the sewerage system or restriction at outfall locations caused by high level in the receiving watercourse. "Other" causes of flooding, for example blockages, asset failure or other operational issues, have been discounted from this PFRA.

Figure 5 in Appendix A presents the historic sewer flooding information provided by United Utilities. There have been a total of 14 flooding incidents (10 external and 4 internal) across the study area. Areas where the historic data suggests that sewer flooding may be a particular issue are Appleton and Grange Wards. This corresponds with Halton Bough Council records.

Halton Borough Council has identified no historically significant harmful consequences due to flooding from the sewerage system. Areas affected by sewer flooding which have not been classified as having significant harmful consequences will be reviewed as part of Halton Borough Council's longer-term strategy.

5.2.4 Groundwater Flooding

Groundwater flooding occurs when the water table rises above normally expected and anticipated levels and emerges at the ground surface. Groundwater flooding occurs in response to a combination of already high groundwater levels (regularly during mid or late winter) and intense or unusually prolonged periods of rainfall. Other mechanisms which produce groundwater flooding including:

- Artificial structures;
- Groundwater rebound (which occurs when abstraction, typically for drinking water, industrial or mine dewatering purposes, stops and water levels return to pre-abstraction levels);
- Mine water rebound;
- High in-bank river levels.

The occurrence of groundwater flooding is usually localised and, unlike flooding from watercourses, does not generally pose a significant risk to life due to the slow rate at which the water level rises but can last several months and can cause significant social and economic disruption to the affected areas.

Halton Borough Council has identified no historically significant harmful consequences due to flooding from groundwater. Areas affected by groundwater flooding which have not been classified as having significant harmful consequences will be reviewed as part of Halton Borough Council's longer-term strategy.

5.2.5 Canals

Canals are heavily controlled and are unlikely to respond in the same manner during periods of rainfall as natural watercourses. The probability of flooding is more associated with residual risks, such as overtopping of canal banks, breaching of embanked reaches or asset (gate) failure. Each canal also has significant interaction with other sources of flood risk, such as the main rivers and the minor watercourses that feed them, or drains that cross beneath them.

There are two canals operated by subsidiary companies on behalf of Peel Ports Group within Halton, they are:

- Bridgewater Canal operated by the Bridgewater Canal Company Ltd,
- Manchester Ship Canal operated by Manchester Ship Canal Company Ltd.

Halton Borough Council owns and maintains parts of the Sankey Canal within the Halton Borough Council boundary.

Halton Borough Council has identified no historically significant harmful consequences for flooding from canals within the administrative boundary. There has been one historical significant flooding incident from the Manchester Ship Canal; this was contained within the administrative area of neighbouring Warrington Borough Council. Details are contained within Warrington Borough Council's PFRA 2017 document.

Areas affected by canal flooding which have not been classified as having significant harmful consequences will be reviewed as part of Halton Borough Council's longer-term strategy.

5.2.6 Interaction with Main Rivers

Many of the sources previously mentioned connect to the Main Rivers which eventually drain to the Irish Sea. For the study area the Main Rivers are:

- The River Mersey
- The Weaver Navigation (engineered section of the River Weaver)
- Rams Brook
- Ditton Brook
- Bowers Brook
- Stewards Brook
- Keckwick Brook

Ordinary Watercourses flow into Main Rivers, and vice versa, and Main Rivers flow into or under canals and urban drainage systems outfall into Main Rivers. Flooding mechanisms associated with these interactions are often the result of flow backing up because another source has prevented normal discharge.

The Environment Agency is responsible for managing these main tributaries of the River Mersey.

The Canals and Rivers Trust are responsible for the section of the Weaver Navigation through Halton

Information about historical flooding will often be due to an unknown source, or because of interactions between sources. This interaction will be difficult to identify without detailed flood risk studies.

High water levels in the River Mersey are common due to tidal and fluvial events. Although flooding from main rivers does not need to be included in the PFRA, it is thought that there is a strong link between surface water flooding, sewer flooding incidents and flooding from ordinary watercourses and water levels on the River Mersey and its tributaries. There is evidence to suggest that surface water flooding is exacerbated in some areas, during high tidal cycles when gravity drains and outfalls are blocked with high tidal waters. However, due to the incomplete nature of the information available at present, the degree of influence on local flood risks cannot be determined.

Information about historical flooding will often be due to an unknown source, or because of interactions between sources. This interaction will be difficult to identify without detailed flood risk studies.

5.3 Summary

Halton Borough Council have reviewed and identified that there are no nationally significant or historical local significant flooding incidences within the study area. There are instances of flooding that are not significant, which the Council are aware. The consequence of past flooding means that no records match the threshold to be reported in the Annex Spreadsheets as historic locally significant flooding.

6. Future Flood Risk

6.1 Introduction

Whilst analysis of past flooding provides valuable information on the nature and extents of flooding that has occurred in Halton in the past, it does not necessarily inform us about how and where flooding may occur in the future.

Predictions of future flood risk are produced using combinations of hydrological and hydraulic modelling and analysis of past hydrological records to make future predictions. The following sections of this PFRA discuss the potential sources of flooding within the study area. The following sources of flooding have been considered in subsequent sections of this report:

- Ordinary watercourses (fluvial);
- Surface water;
- Groundwater;
- Canals;
- Reservoirs.

6.2 Overview

6.2.1 Surface Water Flooding

As identified in Table 7 there are a number of national and local level surface water flooding datasets available for the study area.

Since 2008 The Environment Agency has produced a series of surface water flood maps to aid local authorities in determining areas at risk of flooding. The latest version of the maps is the Risk of Flooding from Surface Water (RoFSW) maps. This has been previously discussed in Section 4.3.2 of this report.

Environment Agency guidance on using surface water flood risk information recommends that Halton Borough Council, as a LLFA, should: review, discuss, agree and record, with the Environment Agency, United Utilities, and other interested parties, what surface water flood data best represents their local conditions, known as “locally agreed surface water information”. Whilst this is not a requirement under the Regulations, it does inform the PFRA process as this information should play an important role in identifying FRAs.

Halton Borough Council has agreed with all interested parties that the Risk of Flooding from Surface Water (RoFSW) mapping is the most appropriate dataset that represents the risk of flooding from surface water within the study area at a high level.

Figure 6 (Appendix A) identifies areas within Halton Borough Council potentially at risk of surface water flooding. It should be noted that the RoFSW dataset, the successor to uFMfSW, does contain the following limitations:

- In urban areas, rainfall is reduced to 70% to represent infiltration, then a rainfall reduction of 12mm/hr is applied to represent the effects of the drainage system.
- Large subsurface drainage elements, such as flood relief culverts and flood storage, are not included. These assumptions can affect the modelled extent and pattern of flooding. Modelled flood extents are particularly sensitive to the drainage rate used.
- At the national scale there is limited recorded surface water flood data that exists for LLFAs to perform validation, so in many places no validation has been carried out yet.

- As with many other flood models the input information, model performance and modelling that were used to create the RoFSW vary for different areas; these affect the reliability of the mapped flood extents and, in turn, the suitability for different applications.
- RoFSW does not take individual property threshold heights into account.
- The flood extents show predicted patterns of flooding based on modelled rainfall. In reality, no two storms are the same, and so two floods of similar rarity may result in different patterns of flooding and consequently these maps cannot definitively show that an area of land or property is, or is not, at risk of flooding.
- It does not show future scenarios, for example climate change.

This dataset has been used to assess the potential surface water flood risk to properties across the study area, summarised in Table 15.

Table 15: Numbers of Properties, Services and People Potentially at Risk from Surface Water Flooding in the Future (RoFSW)

| Susceptibility to surface water flooding banding | Category | Halton Borough Council Review | Environment Agency Review | Difference (absolute value) |
|--|----------------------------|-------------------------------|---------------------------|-----------------------------|
| High (1 in 30 yr) | All Properties | 242 | - | - |
| | Residential Properties | 177 | - | - |
| | Non-Residential Properties | 62 | - | - |
| | Key Services (inc elec) | 3 | - | - |
| | People | 414 | - | - |
| Medium (1 in 100 yr) | All Properties | 964 | 936 | 28 |
| | Residential Properties | 726 | 809 | 83 |
| | Non-Residential Properties | 221 | 127 | 94 |
| | Key Services (inc elec) | 17 | 18 | 1 |
| | People | 1,699 | 1,893 | 194 |
| Low (1 in 1000 yr) | All Properties | 4,581 | 4,716 | 135 |
| | Residential Properties | 3,615 | 3,886 | 271 |
| | Non-Residential Properties | 911 | 830 | 81 |
| | Key Services (inc elec) | 55 | 59 | 4 |
| | People | 8,459 | 9,093 | 634 |

Halton Borough Council has carried out its own review of the affected categories. It can be seen there is some discrepancy between the data sets, most noticeable being Non-Residential Properties. This may be due to counting points that are "blank" (i.e. not defined as a property or other feature). However, as other differences are between 3 - 7% this is considered acceptable for the purpose of the PFRA and confidence may be held in the data for areas at risk 1 in 30 year event which was not completed by EA as part of PFRA. Further minor differences result from different methods used when trimming the data to the Halton Borough boundary (Actual boundary vs 1km² grid square)

Whilst it is recognised that due to future effects of climate change the overall susceptibility to surface water flooding will increase. Properties will still be banded as being at 'Low' risk through to 'High' risk of surface water flooding.

Property counts are derived from counts undertaken using GIS software and the National Receptor Database. The level of future flood risk and the estimated associated consequences are provided in the spreadsheet in Annex 2.

Further information to background and limitations to risk of surface water mapping by the Environment Agency can be obtained via the following link:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297432/LIT_898_8_Obf634.pdf

6.2.2 Sewer Flooding

Hydraulic (1D) sewer models have been created which cover the majority of the sewerage network maintained by United Utilities. These have been verified against a flow survey to provide an accurate representation of network performance during both dry weather and storm conditions. A suite of design storm events of differing return periods, durations, and inclusive of the effects of climate change, are then applied to the models to assess hydraulic performance. The outputs include a range of predicted surcharge levels and flood volumes at individual node locations. Clusters of flooding nodes are then grouped based upon the common hydraulic deficiencies and / or geographic location and are checked against historical records to confirm existing flooding locations, as well as a tool to predict future flooding locations.

Whilst this data allows a high-level analysis of sewer flood risk, there are a number of limitations with the data:

- Not all sewer networks are modelled.
- Model confidence is low in sections of the network that were not covered by flow monitor during the survey period.
- The models are calibrated for a particular period and conditions the flow survey was installed and may not fully take into consideration the effects of seasonality.
- 1D models do not represent the flow path unlike 2D and Integrated Catchment Modelling (ICM) models. Predicted flood volume in 1D models departures and returns to the system at the same node location, in truth this may not be the case.
- Not all models accurately represent interaction watercourses at outfall locations. A number of 1D models are to be upgraded to include representation of watercourses, Integrated Catchment Modelling (ICM) which includes the 2D element, during the coming years. This will enable increased understanding of hydraulic interactions of all systems, in particular the operational performance of CSOs and flood routing paths of surfaces waters.

Figure 5 in Appendix A presents the historic sewer flooding information provided by United Utilities. There have been a total of 14 flooding incidents (10 external and 4 internal) across the study area. Areas where the historic data suggests that sewer flooding is a particular issue are Appleton, Widnes and Grange, Runcorn. These known flooding locations are coherent with predictions from the hydraulic sewer model, and HBC records, therefore providing confidence to sections of the study area where flooding is predicted but has gone unreported.

Based on information readily available on their website in their “Strategic Direction Statement” United Utilities are proposing to address a significant number of sewer flooding problems by 2020. Based on figures from 2015, this will include a 40% reduction to the number of North West properties experiencing internal foul flooding. This is to be achieved through investment in the completion of a number of studies and capital works projects.

6.2.3 Groundwater Flooding

Groundwater flooding occurs as a result of water rising up from the underlying aquifer or from water flowing from abnormal springs. This tends to occur after long periods of sustained high rainfall, and the areas at most risk are often low-lying where the water table is more likely to be at shallow depth. Groundwater flooding is known to occur in areas underlain by major aquifers, although increasingly it is also being associated with more localised floodplain sands and gravels. Halton Borough Council’s Contaminated Land Officer, has previously confirmed that the

groundwater levels in Halton have historically been artificially depressed and they are starting to rebound but there is no known risk of any aquifers within 2m of the ground surface (there is a major aquifer within the Sherwood Sandstone Group)

The Environment Agency's national dataset, Areas Susceptible to Groundwater Flooding (AStGWF) provides the main dataset used to assess the future risk of groundwater flooding.

The AStGWF map uses four susceptible categories to show proportion of each 1km grid square where geological and hydrogeological conditions show that groundwater might emerge. It does not show the likelihood of groundwater flooding occurring. In common with the majority of datasets showing areas which may experience groundwater emergence, this dataset covers a large area of land, and only isolated locations within the overall susceptible area are actually likely to suffer the consequences of groundwater flooding. Unless an area identified as "susceptible to groundwater flooding" is also identified as "at risk from surface water flooding", it is unlikely that this location would actually experience groundwater flooding to any appreciable depth, and therefore it is unlikely that the consequences of such flooding would be significant.

The AStGWF dataset was derived using the British Geological Society (BGS) 1:50,000 scale Groundwater Flood Susceptibility Map produced in 2010, utilising the top two susceptibility bands. Two hydrogeological conceptual models have been used in the development of the susceptibility dataset. These are:

- **Permeable Superficial Deposit (PSD) flooding** - Associated with shallow unconsolidated sedimentary aquifers which overly non-aquifers. These aquifers are susceptible to flooding as the storage capacity is restricted. Direct rainfall recharge can be relatively high and the sediments may be very permeable thus creating a good hydraulic connection with adjacent watercourses. Intense rainfall can cause a rapid response in groundwater levels; rising river levels. As the upstream catchment responds to the rainfall, this can create increased heads that drive water into the aquifer.
- **Clearwater flooding** - caused by the water table in an unconfined aquifer rising above the land surface in response to extreme rainfall. Occurs when antecedent conditions of high groundwater levels and high unsaturated zone moisture content combine with intense rainfall

The Groundwater Flood Susceptibility Map does not incorporate anomalous discharge from springs or flooding associated with urban groundwater rebound, mine water discharge, urban drainage, or any other flooding associated with changes in the engineered environment.

Figure 7 in Appendix A shows the AStGWF map and indicates that some parts of the borough are at risk from rising groundwater levels. However, it is not backed up by historical evidence and high groundwater levels are known to exist in other areas not highlighted by the dataset.

As well as the national Groundwater Flood Map, there are a number of other national and more local datasets and studies which contain some details about possible groundwater flooding in Halton, for example the ESI Groundwater Flood Risk Map of England of Wales.

6.2.4 Ordinary Watercourses

There is at present no specific Borough wide modelling for ordinary watercourses however the Environment Agency have produced Flood Zone Maps which shows the results of coarse modelling of catchments over 3km² (Figure 8 in Appendix A). The Environment Agency Flood Map does not provide information on flood depth, speed or volume of flow.

In order to better understand the risk of flooding from ordinary watercourse, Halton Borough Council in 2012 commissioned JBA Consulting to assist the Council with development of an asset database and also to determine the flood risk associated with the assets collated.

JBA Consulting simulated flooding caused by 100% blockage scenario in pipes, culverts or bridges using JScreen software. JScreen defined the extent of flood, and analysed its consequences highlighting the different property types that are vulnerable to flood risk if a culvert or any other flood risk asset were to fail.

In 2014/15, Halton Borough Council as part of the Cheshire Mid-Mersey Partnership (CMMP) undertook a project to improve the knowledge of flood risk from the ordinary watercourse network across the partnership area by undertaking asset inspections, topographical surveys and modelling works on ordinary watercourses which had been identified using the best available information at the time as potentially high risk. This project was considered to build upon the previous work completed by JBA due to the increase in collection of information.

CH2M Hill was appointed in November 2014 under the Water and Environment Management (WEM) Framework to undertake appropriate assessment of more than 30 km of non-main watercourse across the CMMP areas. Three separate surveys were outlined to capture the required data for the proposed study outputs;

- T98 Conditional Asset Assessment.
- CCTV survey.
- Topographical survey.

Catchment wide modelling and mapping was undertaken by CH2M following the completion of the survey investigations enabling visualisation of possible implications of events with return periods of 1 in 5 year, 1 in 30 year and 1 in 100 year. The modelled flood risk mapping represents the current situation of assets on the ground using the surveyed data to populate model data. (Locations mapping shown in Figure 9, Appendix A)

Model results have been used to produce depth grids, flood outlines and property counts based on properties from the Nation Receptor Database (NRD) to identify properties at risk.

The small size of the watercourses considered within this study means there were no observed flow data sets available, therefore best practice outlined by the Environment Agency was followed:

- Catchments delineated using GIS and FEH CDROM.
- Catchment descriptors from FEH CDROM used within ReFH analysis to calculate inflows for required return periods.

Summary of property counts (locations extracted from NRD) within flood outline for modelled reach as part of CH2M Hill study are shown in the table below:

Table 16: Numbers of Properties Potentially at Risk from Surface Water Flooding in the Future (CH2M)

| Location | Description | Property Count (1 in 5 year) | Property Count (1 in 30 year) | Property Count (1 in 100 year) |
|---------------|----------------------------------|---------------------------------|----------------------------------|-----------------------------------|
| Halton Site 1 | Widnes – St Michaels Golf Course | 37 | 89 | 118 |
| Halton Site 2 | Runcorn – Sandymoor (East) | 4 | 4 | 4 |
| Halton Site 3 | Runcorn – Sandymoor (West) | 20 | 22 | 23 |
| Halton Site 4 | Runcorn – Beechwood (East) | 5 | 9 | 9 |
| Halton Site 5 | Runcorn – Beechwood (Central) | 0 | 0 | 8 |
| Halton Site 6 | Runcorn Town Park | 5 | 6 | 7 |

Although it appears that flooding may occur, at the above sites, property counts at five of the six locations do not achieve the threshold to be determined as having “significant harmful consequences”. Widnes – St Michaels is predicted to be the most vulnerable area within the administrative district of Halton Borough Council and is within the threshold of potential flooding with “significant harmful consequences” for an event with a return period of 1 in 30 years.

The level of future flood risk and the estimated associated consequences are provided in the spreadsheet in Annex 2.

Note – The River Mersey

The Environment Agency do not classify the reach of the River Mersey through Halton Borough Council as main river. Although not classified as a main river, the Environment Agency does manage the river, with the River Mersey and its five main tributaries forming the focus of the Environment Agency's Flood Risk Management Strategy for Halton Borough Council.

6.2.5 Canals

Following the Boxing Day 2015 floods, and the impact of flooding from the Manchester Ship Canal in neighbouring authorities, regular joint meetings have been held between the relevant LLFAs, EA and Manchester Ship Canal Company to enable joined up working on flood management strategies and to gain a better understanding of operations.

The main canal/river interactions are summarised below:

- River Mersey - It is possible that embankment breach or overtopping of the Manchester Ship Canal where the watercourse runs in parallel with the River Mersey could result in additional water flowing into the river.
- Sankey Brook - The Sankey Canal, (which is also known as the Sankey Brook Navigation and the St Helens Canal) runs along the valley of the Sankey Brook to the point where the brook joins the River Mersey.
- Bowers Brook - The Bowers Brook runs alongside the disused St Helens Canal at Spike Island. It is possible that breach of the canal around the confluence with Bowers Brook would result in additional water flowing into the river.
- Keckwick Brook and the Bridgewater Canal - It is possible that breach of the Bridgewater Canal around the confluence with Keckwick Brook at Preston Brook Marina would result in additional water flowing into the river. It is not considered possible for flow from Keckwick Brook to enter the canal at this location because of the elevation difference.

- Keckwick Brook and the Manchester Ship Canal - The northern end of Keckwick Brook lies in close proximity to a Manchester Ship Canal drain at Oxmoor Lake. Embankment. It is possible that breach of the MSC around the confluence with Keckwick Brook would result in additional water flowing into the river. It is also considered possible for flow from Keckwick Brook to enter the canal drain at this location.

6.2.6 Reservoirs

Key reservoirs within or upstream of Halton are as follows:

- Wharford Farm Balancing Pond, Runcorn
- Oxmoor Basin, Runcorn
- Pex Hill Reservoirs, Cronton, Knowsley
- Fiddlers Ferry Power Station Ash Lagoons, Warrington
- Fiddlers Ferry Power Station Cooling Tower Ponds, Warrington
- Clifton Brine Reservoir, Runcorn

Whilst this is not a prerequisite for the current PFRA review, and the probability of dam or embankment failure is small, the consequences of such an event occurring may be significant particularly in an urban setting.

A reservoir flood map is available at:

<https://flood-warning-information.service.gov.uk/long-term-flood-risk>

6.3 Summary

Based on DEFRA thresholds of more than 30,000 people at flood risk, there is no evidence to indicate that there is a significant flood risk from local flooding sources in Halton Borough Council. However as stated in the summary table below, there are up to 936 properties potentially at risk during a flood event with a 1% (1 in 100) annual probability:

| LLFA Name | Residential properties (100) | Non-residential properties (100) | Key Services (100) | Number of People (100) |
|---------------------------|------------------------------|----------------------------------|--------------------|------------------------|
| Warrington (B) | 890 | 117 | 25 | 2,083 |
| Liverpool District (B) | 2,839 | 466 | 52 | 6,643 |
| Knowsley District (B) | 1,013 | 100 | 28 | 2,370 |
| Cheshire West and Chester | 1,767 | 251 | 43 | 4,135 |
| Halton (B) | 809 | 127 | 18 | 1,893 |
| Wirral District (B) | 2,367 | 202 | 43 | 5,539 |
| Cheshire East | 2,204 | 430 | 31 | 5,157 |
| Staffordshire County | 8,074 | 1,029 | 87 | 18,893 |
| St. Helens District (B) | 1,650 | 133 | 33 | 3,861 |
| Sefton District (B) | 17,388 | 1,501 | 288 | 40,688 |

7. Climate Change and Long Term Development

Generally, preliminary assessment reports in 2011 described only the broad implications of climate change at river basin district level, based on UK Climate Projections, 2009 (UKCP09).

The next set of climate projections is due in 2018 (UKCP18). Until then UKCP09 is still a valid tool to aid decision-makers to assess the full range of risks from the changing climate and advise to adapt.

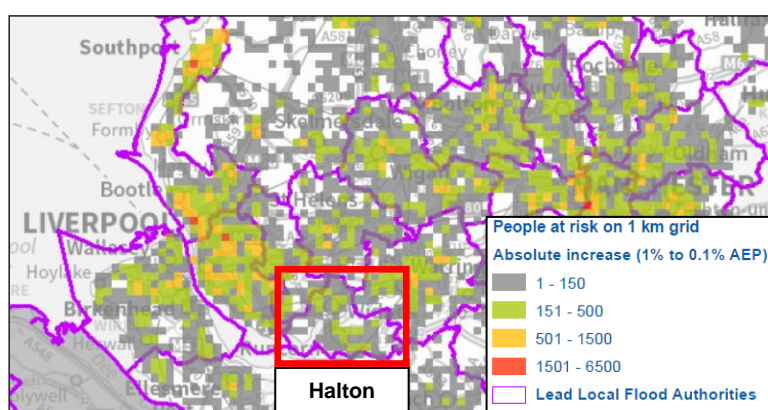
7.1 Initial Review

Whilst a significant amount of work has been completed since the introduction of the PFRA in 2011 it is still recognised that the implications of climate change for local flood risk are still not well understood.

The Environment Agency have carried out a simple analysis at the national level to compare the number of people at risk from surface water flooding from a rainfall event with a 1% chance (1 in 100 year return period) of occurring in any year to the number at risk from an event with a 0.1% chance (1 in 1000 year return period) of occurring in any year. The numbers of people at risk are counted per 1 kilometre grid square across England. The resulting 'heat map' shows how the absolute number of people at risk increases between these two rainfall events for each 1km grid square.

This method is not based on climate projections, and it does not account for future population growth. It does provide a simple way, however, of identifying areas that could be susceptible to increased rainfall intensity as a proxy for climate change. It is a reasonable proxy for an upper end climate change scenario for the end of the century, both in the pattern of change across the country and the percentage increase in intensity compared to the current climate. Figure R3 shows an extract from the 'heat map' (Figure 13, Appendix A). Red and orange squares indicate the highest increase in numbers of people at risk, and green and grey indicate lower increases.

Figure R3: Extract from the 'heat map' illustrating absolute increase in numbers of people at risk from surface water flooding for a 0.1% (1000 year) rainfall event compared to a 1% (100 year)



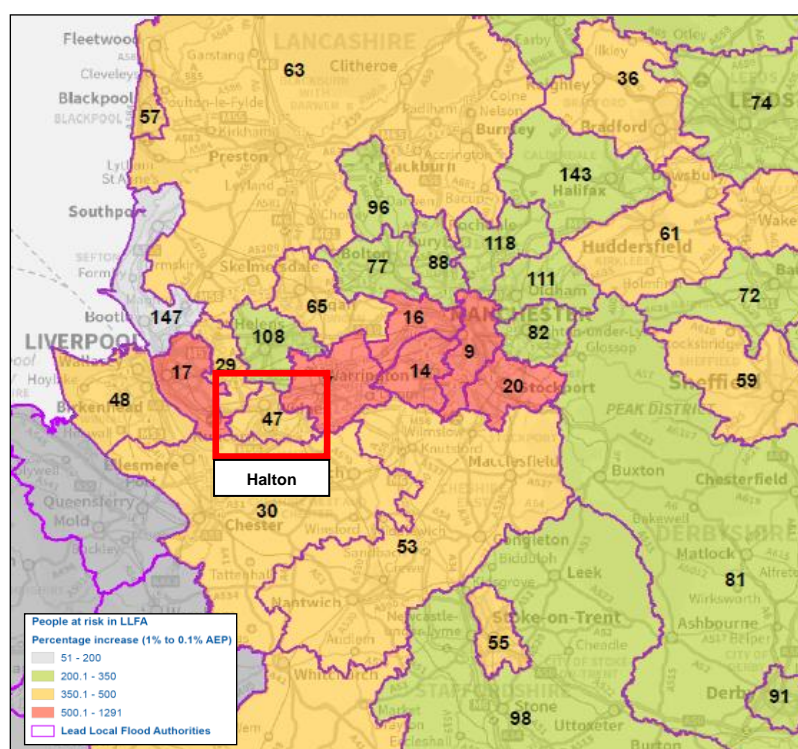
This 'heat map' provides an initial understanding of how climate change may affect local flood risk in the future, and helpful when considering the indicative FRAs as part of this PFRA review.

At the national scale the administrative area of Halton Borough Council is positioned 47th out of 152 LLFAs when reviewing the percentage increase in people at risk of flooding in LLFAs for the 0.1% rainfall event compared with the 1% event.

Table 17: Absolute and percentage Increase in the number of people at risk of flooding by LLFA for 0.1% (1000 year) rainfall event compared with 1% (100 year) event

| Rank | LLFA Name | Residential properties (100 year) | Residential properties (1000 year) | Non-residential properties (100 year) | Non-residential properties (1000 year) | Key Services (inc electricity sub-station) (100 year) | Key Services (inc electricity sub-station) (1000 year) | Number of People (100 year) | Number of People (1000 year) | Absolute increase between 1 in 100 and 1 in 1000 year | Percentage increase in people at risk |
|------|---------------------------|-----------------------------------|------------------------------------|---------------------------------------|--|---|--|-----------------------------|------------------------------|---|---------------------------------------|
| 7 | Warrington (B) | 890 | 7,298 | 117 | 855 | 25 | 142 | 2,083 | 17,077 | 14,994 | 720 |
| 17 | Liverpool District (B) | 2,839 | 18,152 | 466 | 2,573 | 52 | 270 | 6,643 | 42,476 | 35,833 | 539 |
| 29 | Knowsley District (B) | 1,013 | 5,483 | 100 | 426 | 28 | 109 | 2,370 | 12,830 | 10,460 | 441 |
| 30 | Cheshire West and Chester | 1,767 | 9,403 | 251 | 1,096 | 43 | 159 | 4,135 | 22,003 | 17,868 | 432 |
| 47 | Halton (B) | 809 | 3,886 | 127 | 830 | 18 | 59 | 1,893 | 9,093 | 7,200 | 380 |
| 48 | Wirral District (B) | 2,367 | 11,355 | 202 | 876 | 43 | 206 | 5,539 | 26,571 | 21,032 | 380 |
| 53 | Cheshire East | 2,204 | 10,481 | 430 | 1,343 | 31 | 148 | 5,157 | 24,526 | 19,369 | 376 |
| 98 | Staffordshire County | 8,074 | 32,580 | 1,029 | 3,912 | 87 | 412 | 18,893 | 76,237 | 57,344 | 304 |
| 108 | St. Helens District (B) | 1,650 | 6,363 | 133 | 566 | 33 | 126 | 3,861 | 14,889 | 11,028 | 286 |
| 147 | Sefton District (B) | 17,388 | 35,772 | 1,501 | 2,886 | 288 | 500 | 40,688 | 83,706 | 43,018 | 106 |

Figure R4: Extract from (Figure 14) percentage increase in the number of people at risk of flooding by LLFA for 0.1% (1000 year) rainfall event compared with 1% (100 year) event



Label in LLFA indicates the rank of the LLFA in order of largest to smallest percentage increase in number of people at risk.

7.2 The Impacts of Climate Change – The Evidence

Over the past century around the UK sea level rises have occurred and more of our winter rain falling in intense wet spells. Seasonal rainfall is highly variable. It seems to have decreased in summer and increased in winter, although winter amounts changed little in the last 50 years. Some of the changes might reflect natural variation; however the broad trends are in line with projections from climate models.

Greenhouse gas (GHG) levels in the atmosphere are likely to cause higher winter rainfall in future. Past GHG emissions mean some climate change is inevitable in the next 20-30 years. Lower emissions could reduce the amount of climate change further into the future, but changes are still projected at least as far ahead as the 2080's.

There is enough confidence in large scale climate models to say that Halton Borough Council and the UK must plan for change. There is more uncertainty at a local scale but model results can still help to plan to adapt. For example it is now understood that rain storms may become more intense, even though there are still uncertainties about exactly where or when. By the 2080s, the latest UK climate projections (UKCP09) are that there could be around three times as many days in winter with heavy rainfall (defined as more than 25mm in a day). It is plausible that the amount of rain in extreme storms (with a 1 in 5 annual chance, or rarer) could increase locally by 40%.

7.3 Key Projections for North West River Basin District

If emissions follow a medium future scenario, UKCP09 projected changes by the 2050s relative to the recent past in the North West are:

- Winter precipitation increases of $\approx 14\%$ (very likely to be between 4 and 28%)
- Precipitation on the wettest day in winter up by $\approx 11\%$ (very unlikely to be more than 25%)
- Relative sea level at Morecambe very likely to be up between 6 and 36cm from
- 1990 levels (not including extra potential rises from polar ice sheet loss)
- Peak river flows in a typical catchment likely to increase between 11 and 18%

Increases in rain are projected to be greater near the coast than inland.

7.4 Implications for Flood Risk

Climate changes can affect local flood risk in several ways. Impacts will depend on local conditions and vulnerability.

Wetter winters and more of this rain falling in wet spells may increase river flooding especially in steep, rapidly responding catchments. More intense rainfall causes more surface runoff, increasing localised flooding and erosion. In turn, this may increase pressure on drains, sewers and water quality. Storm intensity in summer could increase even in drier summers, so Halton Borough Council needs to be prepared for the unexpected.

Drainage systems in the district have been modified to manage water levels and could help in adapting locally to some impacts of future climate on flooding, but may also need to be managed differently. Rising sea or river levels may also increase local flood risk inland or away from major rivers because of interactions with drains, sewers and smaller watercourses.

Where appropriate, Halton Borough Council will be involved in local studies to understand climate impacts in detail, including effects from other factors like land use. Sustainable development and

drainage will help with adaptation to climate change and manage the risk of damaging floods in future.

7.5 Adapting to Change

Past emission means some climate change is inevitable. It is essential Halton Borough Council and the UK respond by planning ahead. Halton Borough Council can prepare by understanding current and future vulnerability to flooding, developing plans for increased resilience and building the capacity to adapt. Regular review and adherence to these plans is key to achieving long-term, sustainable benefits.

Although the broad climate change picture is clear, Halton Borough Council has had to make local decisions with less certainty. A range of measures therefore will need to be considered to retain the flexibility to adapt. This approach, embodied within flood risk appraisal guidance, will help to ensure that Halton Borough Council does not increase the vulnerability to flooding.

7.6 Long Term Developments

It is possible that long term developments might affect the occurrence and significance of flooding. However current planning policy aims to prevent new development from increasing flood risk.

In England, Section 10 of National Planning Policy Framework (section of relevance formally Planning Policy Statement 25 - PPS25) on development and flood risk aims to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas at highest risk. Where new development is, exceptionally, necessary in such areas, policy aims to make it safe without increasing flood risk elsewhere and where possible, reducing flood risk overall.

In Wales, Technical Advice Note 15 (TAN15) on development and flood risk sets out a precautionary framework to guide planning decisions. The overarching aim of the precautionary framework is "to direct new development away from those areas which are at high risk of flooding."

Adherence to Government policy ensures that new development does not increase local flood risk. However, in exceptional circumstances the Local Planning Authority may accept that flood risk can be increased contrary to Government policy, usually because of the wider benefits of a new or proposed major development. Any exceptions would not be expected to increase risk to levels which are "significant" (in terms of the Government's criteria).

Halton Borough Council will ensure new developments will manage surface water at source and ensure developments do not contribute to flooding problems elsewhere. Where possible, new developments may relieve existing problems by improved management of surface water flows.

7.7 Local Drainage Capacity

Since the introduction of the FWMA 2010, Halton Borough Council has strived to increase its knowledge to the local drainage systems in order to ascertain capacity. This has been documented as part of the asset register, although there still remains a knowledge gap in sections of the study area. To develop flood alleviation strategies within the study area, additional investigation to identify these local drainage systems are required. This is an ongoing exercise and will be addressed in future reports.

8. Review of Indicative Flood Risk Areas

8.1 Overview

As described in Section 4 in order to ensure a consistent national approach, DEFRA have identified significant criteria and thresholds to be used for defining FRAs.

Guidance on applying these thresholds has been released in the Environment Agency's *"Review of preliminary flood risk assessments (Flood Risk Regulations 2009): Guidance for lead local authorities in England"* (25th January 2017) which superseded DEFRA's *"Selecting and reviewing Flood Risk Areas for local sources of flooding"* (first published September 2013, withdrawn February 2017). This guidance document sets out agreed key risk indicators and threshold values which must be used to determine FRAs.

The methodology is based on using national flood risk information to identify 1km grid squares where local flood risk exceeds a defined threshold. Where a cluster of these grid squares leads to an area where flood risk is most concentrated and over 30,000 people are predicted to be at risk of flooding, this area has been identified as an Indicative FRA.

Figures 11/12 in Appendix A shows the High Risk Areas identified by DEFRA.

None of the clusters shown affect more than 30,000 people across the study area and therefore there are no Indicative FRAs within the Halton Borough Council's boundary as defined by the PFRA criteria.

Halton Borough Council has accepted the current proposed indicative significant FRAs. However, it is recognised that Halton Borough Council does not have many locally significant flood risk issues.

9. Next Steps

9.1 Future Data Management Arrangements

9.1.1 Investigation

In order to continue to fulfil the role of Local Lead Flood Authority, Halton Borough Council is required to investigate future flood events and ensure continued collection, assessment and storage of flood risk data and information. The central flood data collection spreadsheet will be updated with each flood event. The method for collection is through the Council Contact Centre.

9.1.2 Policy for Investigation and Recording

All flood events will be subject to investigations and recording. Halton Borough Council has no minimum local threshold as such for formal investigation leading to publication under Section 19, but does consider a number of criteria to inform whether or not to complete a full investigation relating to:

- Internal flooding of residential/commercial property
- Major disruption to flow of traffic
- Posed risk to human health
- Adverse effect on critical infrastructure
- Harmful environment/social impacts
- Repeated flooding event which results in significant consequences

It is crucial that all records of flood events are documented consistently and in accordance with the INSPIRE Directive (2007/2/EC), European Directive transposed into UK Law in December 2009. The centralised database will be kept up to date by Halton Borough Council, who has the overall responsibility to manage flood data throughout the administrative area. This can be used as an evidence base to inform future assessments and reviews and for input into the mapping and planning stages.

9.1.3 Asset Register

Section 21 of FWMA 2010 state LLFAs have a duty to maintain a register of structures or features which, in the opinion of the authority, are likely to have a significant effect on a flood risk in its area, and a record of information about each of those structures or features, including information about ownership and state of repair. Halton Borough Council will continue to develop this database.

9.2 Review Procedures

Meeting quality standards is important in order to ensure that the appropriate sources of information have been used to understand flood risk and the most significant FRAs are identified.

The review procedure will comprise two key steps, namely, Local Authority Review and Environment Agency Review. The Review Checklist in Annex 4 of this document is used by all LLFA's and the Environment Agency to review and ensure a consistent review process is applied.

The review of the PFRA for Halton Borough Council will be undertaken by the Service Manager-Highway Development (Lead Local Flood Officer) and the Council's Environment and Urban Renewal Policy and Performance, and Executive Boards.

9.2.1 Local Authority Review

The first part of the review procedure is through an internal Local Authority review of the PFRA in accordance with appropriate internal review procedures and quality assurance. The Draft Document will then be taken for approval by the Council's Environment and Urban Renewal Policy and Performance, and Executive Boards prior to final publication by the Environment Agency (EA), following EA checks to ensure national consistency.

The PFRA must be reviewed and updated every 6 years. The first edition of the PFRA was submitted to the Environment Agency on 22nd June 2011. This report (the second edition) is the first review and is to be submitted to the Environment Agency on 22nd June 2017 under Sections 10 and 17 of FRR 2009.

9.2.2 Environment Agency Review

Under Section 10 of FRR 2009 the Environment Agency has been given a role in reviewing, collating and publishing all of the PFRAs once submitted.

The Environment Agency will undertake a technical review (area review and national review) of the PFRA, which will focus on instances where FRAs have been amended and ensure the format of these areas meets the provide standard. Once satisfied, the Environment Agency EA will then recommend submission of the PFRA to the relevant Regional Flood and Coastal Committee (RFCC) for endorsement if satisfied. RFCCs will make effective use of their local expertise and ensure consistency at a regional scale. Once the RFCC has endorsed the PFRA, the relevant Environment Agency Regional Director will sign it off.

All PFRAs obtained by the Environment Agency will then be collated, published and submitted to the European Commission by 22nd December 2017 under Section 16 of FRR 2009.

Future review cycles, of no more than 6 years, will use the same procedure described above.

9.3 Spatial Developments

The PFRA, along with the SFRA and SWMP, will inform the Local Development Framework (LDF). Strategic development will be approached through planning and development, appropriate design, situation and location of future development can all contribute to reducing the risk of flooding, including;

- Application of property and location specific flood protection measures;
- Application of sustainable urban drainage techniques for new developments;
- Identify river corridors and the natural flood plain to provide potential riverside storage and urban river corridors in built up areas.

Halton Borough Council is a statutory consultee for major developments which have surface water implications. Halton Borough Council as LLFA is to provide comments in relation to surface water drainage aspects of planning applications within 21 days, and continues to be involved in the Land Allocations Planning process.

Appendix A: Figures

| | |
|-----------|---|
| Figure 1 | Halton Borough Council Boundary and PFRA Study Area |
| Figure 2 | DEFRA / EA Identified 1km ² Squares Above Flood Risk Threshold (<i>Blue Squares</i>) |
| Figure 3 | Halton Borough Council Spatial Distribution of Historic Flood Records |
| Figure 4 | Classification of Watercourses Within The Administrative Boundary of Halton BC |
| Figure 5 | United Utilities / Cheshire Fire Spatial Distribution of Historic Flood Records |
| Figure 6 | Environment Agency Risk of Flooding from Surface Water Dataset (<i>December 2013</i>) |
| Figure 7 | Environment Agency Areas Susceptible to Groundwater Flooding Map (<i>AStGWF</i>) |
| Figure 8 | Environment Agency Flood Map for Planning (<i>Feb 2017</i>) |
| Figure 9 | Ordinary Watercourse Model Outputs from Cheshire Mid-Mersey Partnership Project (<i>CH2M</i>) |
| Figure 10 | Critical Services Review |
| Figure 11 | PFRA2016 Method1 Clusters 100 with BS BS12 NW and Mids (<i>PDF provided by the EA</i>) |
| Figure 12 | PFRA2016 Method1 Clusters 100 with NumPeople BS12 NW and Mids (<i>PDF provided by the EA</i>) |
| Figure 13 | PFRA2016 People sensitivity CCproxy England (<i>PDF provided by the EA</i>) |
| Figure 14 | PFRA2016 People sensitivity CCProxy LLFAs (<i>PDF provided by the EA</i>) |
| Figure 15 | Indicative Flood Risk Areas (<i>PDF provided by the EA</i>) |

Appendix B: Methods used to develop indicative FRAs for the second cycle *Extract from Review of preliminary flood risk assessments (Flood Risk Regulations 2009): guidance for lead local flood authorities in England (25th January 2017 – produced by the Environment Agency)*

We used two methods to identify areas of potentially significant risk as the basis for the indicative FRAs. In each case we used national information from the current (2016) Risk of Flooding from Surface Water (RoFSW) map - previously known as the updated Flood Map for Surface Water (uFMfSW) - and a rainfall event with a 1% chance of occurring in any year.

Method 1 - Cluster analysis for concentrations of people/property at risk

In this method, 1km grid squares of places where surface water flood risk is an issue ("blue squares") were identified wherever at least 200 people or 20 non-residential properties or more than 1 key service might be flooded.

In some areas these blue squares are densely packed together representing a concentration of high consequences from surface water flooding and providing a way of identifying areas where flood risk could be significant. Where many grid squares are close together (clustered) and the risk is most concentrated, these clusters form indicative FRAs.

All clusters contain at least 5 adjacent blue squares. The flood risk indicators used in the identification of indicative FRAs are summarised in the table below. These are similar to those used to develop indicative FRAs in 2011, but using a rainfall event with a 1% chance of occurring in any year rather than 0.5% chance as in 2011. This is because current surface water risk products do not include the assessment of a 0.5% chance rainfall event.

Table B1: Definition of flood risk indicators used in cluster analysis

| Indicator | Definition | Threshold |
|----------------------------|---|--|
| People | Number of people at risk taken as 2.34 times the number of residential properties at risk of flooding | 200 people or more per 1km grid square |
| Key Services | Number of key services at risk, for example utilities, emergency services, hospitals, schools | More than one per 1km grid square |
| Non-residential Properties | Number of non-residential properties at risk from flooding | 20 or more per 1km grid square |

Method 2 - Communities at risk (C@R)

Method 1 identifies locations where the density of flood risk is highest across the country. There are other locations where the total flood risk is high but not as concentrated as those areas identified in method 1. So, to complement method 1, we have used information from our C@R work.

For C@R we have analysed the surface water flood risk for communities according to [Office for National Statistics built-up areas \(BUAs\) and built-up areas sub-divisions \(BUASDs\)](#).

Built-up areas (BUAs) are characteristic of settlements including villages, towns or cities. In 2011 across England and Wales 95 per cent of the usually resident population lived in BUAs. They include areas of built-up land with a minimum of 20 hectares (200,000m²). Any areas with less than 200 metres between them are linked to become a single BUA, with BUASDs identified.

Where available, we have used BUASDs to provide greater granularity of communities in large urban areas. Where this approach identifies 3,000 or more reportable properties at risk of surface water flooding, the BUA/BUASD forms an indicative FRA. As with method 1, this is for a rainfall event with a 1% chance of occurring in any year.

The National Receptor Database (NRD2014) property point dataset with the uFMfSW Property Point v3 attributes was used to classify a property as 'at risk' of flooding from surface water. 'At risk' properties were counted by BUASD boundary (to exclude non-reportable property points e.g. telephone boxes, advertising hoardings).

Combining method 1 and method 2 and identifying indicative FRAs

In some locations, clusters of blue squares from method 1 and BUA/BUASDs from method 2 overlap. Where this is the case, the indicative FRA is the total extent of the two areas combined.

Limitations of Analysis

Method 1 - Cluster analysis for concentrations of people/property at risk

Grid-based approach

Halton Borough Council had two main concerns regarding the approach taken by the Environment Agency.

1. The requirement for two critical services to be within the threshold may be misrepresentative of the importance of those critical services. For example:
 - Two nursing homes would outrank a hospital or;
 - Two electricity sub-stations would outrank a school.

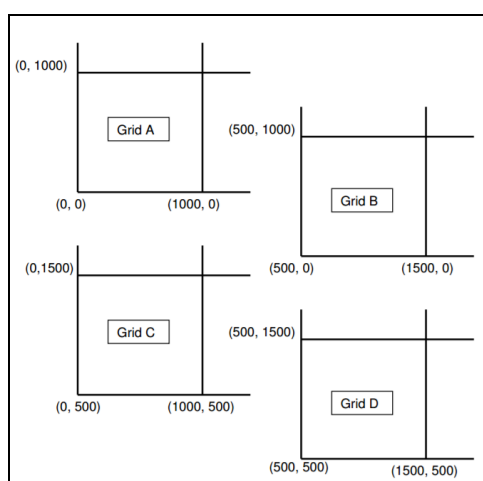
Whilst these issues can be followed up on an individual basis, the standard procedure would not pick up a grid square containing a single, but vital, critical service.

Halton Borough Council undertook an internal review of the dataset to identify all critical services with the Borough. Halton Borough Council agrees with all the critical service locations identified by the Environment Agency at risk of flooding, including those which are above the threshold. There were no locations identified that resulted in outranking as in the aforementioned example.

2. The grid-based approach contains an arbitrary reference. The geographical location of each grid square depends upon the grid origin, which is set by the Ordnance Survey grid system. If for example the grid square was repositioned by 500m, as illustrated in Figure C-1, then the number of critical services within a 1km² may alter and thus may / may not adhere to the desired threshold.

Halton Borough Council did not undertake any further analysis to a shift in the grid system as the Ordnance Survey grid system is considered to be a national standard.

Figure C-1: Variation to shift in grid system



Allocation of Critical Services

The National Receptor Dataset (NRD) contains a property categorisation code that links to methods in the Multi-Coloured Manual (MCM) for estimating flood damages based on flood depth. NRD links individual property types in the property points dataset (known as OS BaseFunction property types) to MCM codes, to facilitate flood damage estimation. Each MCM code is therefore a broad category (such as 'hospital') containing a number of detailed property types. In defining the detail of flood risk indicators the Environment Agency based indicators on MCM codes where suitable, and used more detailed OS BaseFunction property types where the property classification was not suitable. For the purpose of the PFRA, critical services are defined by the Environment Agency in Table C-1

Table C-1: Critical Services

| Critical Service | MCM Code | Description |
|-------------------------------|----------|---|
| Schools | Not used | Initially MCM code 610 was considered (described as School, College, University, Nursery). However this includes some OS Base Function property types that are not critical services, such as 'vehicle driver training' and 'training'. Instead the Environment Agency chosen a set of OS Base Function types: <div> <div>Education</div> <div>First School</div> <div>Further Education College</div> <div>High School</div> <div>Higher Education</div> <div>Infant School</div> <div>Junior School</div> <div>Middle School</div> <div>Nursery</div> </div> <div> <div>Primary School</div> <div>Private School</div> <div>School</div> <div>School for the Deaf</div> <div>Secondary School</div> <div>Special School</div> <div>Technical School</div> <div>University</div> <div>Pre-school Education etc..</div> </div> |
| Hospitals | 660 | - |
| Nursing/Care/Retirement Homes | 625 | Predominately comprises nursing homes and rest homes, but also covers a number of other institutions, including prisons. |
| Police Stations | 651 | - |
| Fire and Ambulance Stations | 650 | - |
| Prisons | 625 | Predominately comprises nursing homes and rest homes, but also covers a number of other institutions, including prisons. |
| Sewerage Treatment Works | 840 | - |
| Electricity Installations | 960 | - |

Halton Borough Council undertook a sensitivity analysis as part of the PFRA review. Whilst the methodology utilised by the Environment Agency is considered acceptable, caution was required to the sub-classification of these and their relevance. Reviewing the 2013 Multi-Coloured Manual (Chapter 5: Flood damage to non-residential properties) a number of NRD codes were incorrect, duplicated, or categorised as generic within the Halton Borough Council area. An example of this is illustrated in Table C-2.

Further information to the classification of NRD to MCM codes can be obtained from the following location: <http://www.mcm-online.co.uk/wp-content/uploads/2015/05/Ch5-Matching-NRD-to-MCM-Codes.pdf>

Table C-2: Example of Critical Services Discrepancy within Halton Borough Council

| Environment Agency Review | | Halton Borough Council Review | |
|---------------------------|----------|-------------------------------|----------|
| Critical Service | MCM Code | Critical Service | MCM Code |
| Hospitals | 660 | Hospice | 6 |
| | | Hospital | 6 |
| | | Hospital / Hospice | 6 |
| | | Medical | 6 |
| | | Professional Medical Service | 6 |

The internal review process identified no additional critical services at risk of flooding with respect to the Environment Agency review. However, it did provide an overview to critical services which are beyond the threshold but may be vulnerable to future flooding

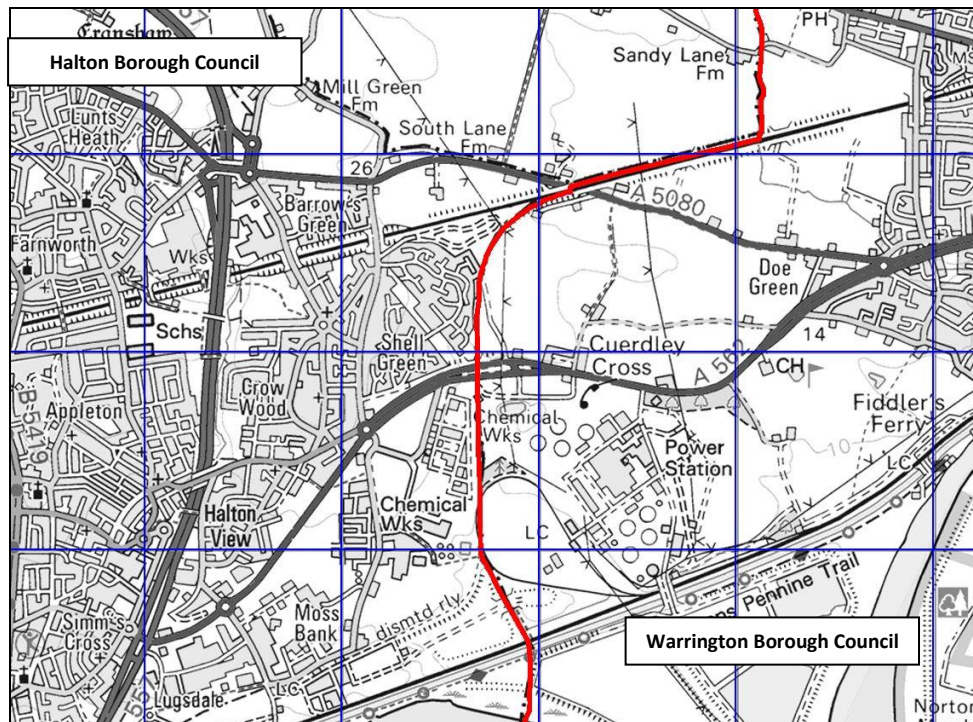
Number of people at risk of surface water flooding

In order to verify information provided by Environment Agency, Halton Borough Council undertook an internal review to assess confidence in the data.

The population per household for the PFRA assessment has been set by the Environment Agency as 2.34. The 2.34 multiplier is based on the Office for National Statistics General Household Survey, 2006. According to the Office for National Statistics Census information, the average household size in the UK was 2.30 people per household, compared to 2.40 in 2001. The average population for Halton Borough Council is 2.36 (2011 census). Whilst the population factor used for the PFRA is considered acceptable for Halton Borough Council at the national level, caution is required due to the population distribution at the local level which may result in a 1km² exceeding the ≥200 people threshold.

Council Boundary - 1km² grid vs Actual Boundary

The outputs of calculating critical services, residential and non-residential properties within the Halton area is contained within the 1km² grid square provided by the Environment Agency. As illustrated in Figure C-2 the administrative boundary divides the square, thus a discrepancy is created between the Council's dataset and that provided by the Environment Agency. Halton Borough Council was in regular consultation with neighbouring authorities to confirm the correct definition of the administrative boundary, identify any areas of cross broader developments, and confirm which grid squares may skew the results of data analysis (i.e. double counting). Only minimal discrepancies were identified thus enabling to increase confidence in the dataset provided by the Environment Agency.

Figure C-2: Example of Administrative Boundary dividing 1km² Grid Square

Annexes

| | |
|----------|------------------|
| Annexe 1 | Past Floods |
| Annexe 2 | Future Floods |
| Annexe 3 | Flood Risk Areas |
| Annexe 4 | PFRA Checklist |

REPORT TO: Executive Board

DATE: 20 July 2017

REPORTING OFFICER: Chief Executive

PORTFOLIO: Leader's Portfolio

SUBJECT: Syrian Refugee Crisis

WARDS: **Boroughwide**

1.0 PURPOSE OF THE REPORT

- 1.1 To update Executive Board Members on the ongoing work being undertaken to ensure Halton is part of the Government's commitment to support Syrian Refugees caught up in the civil war.

2.0 RECOMMENDATION: That

- 1) the contents of the report be noted;**
- 2) the Board supports the Chief Executive's use of Delegated Powers for an early termination of the support contract currently delivered by Refugee Action within the Liverpool City Council service specification; and**
- 3) the Board supports the use of a wavier of the procurement rules to allow the Council to extend/amend existing Supporting People contract with Plus Dane Shap to provide ongoing support to Syrian Refugees in accordance with Home Office funding requirements.**

3.0 SUPPORTING INFORMATION

- 3.1 In February 2016 Executive Board Members agreed to support the Government's request to engage with both the Widening Dispersal programme for Asylum Seekers and the Syrian Resettlement Programme (SRP) for Refugees.
- 3.2 Since this decision was taken, officers have been developing relationships, governance structures and processes to fully engage with both programmes.
- 3.3. This report deals **only** with the Syrian Resettlement Programme, through which Halton BC agreed to provide a resettlement home to 100 individuals, as part of the Liverpool City Region commitment of 510. This includes 12 months intensive support from date of arrival, followed

by a decreasing level of support across year's two to five.

- 3.4 In November 2016, Liverpool City Council commissioned Refugee Action for a period of 4 years. This included the delivery of the 12 months dedicated support that is a requirement of the Home Office funding arrangements. Halton along with two other local authorities in the Liverpool City Region agreed to "buy-in" into the contract for a period of two years.
- 3.5 Refugee Action (RA) work towards a self-empowerment programme not to dissimilar to that used by other support providers, including that of Plus Dane Shap (PDS) who are presently managing the Halton BC support contract.
- 3.6 The model of support used by RA works well in a more diverse community, where a family is likely to seek assistance from other members of the community including the general public, people from a place of worship, school staff, and local businesses. The refugees can communicate and interact with such community members who can assist them to navigate life outside of the one visit a week that RA calls "intensive support".
- 3.7 Officers feel that the RA model of delivery does not sit as well in a less diverse urban community such as Halton.
- 3.8 Whilst it's acknowledged that RA staff have a wealth of experience with this client group, Officers feel an alternative approach may offer greater support to Refugees located in Halton.
- 3.9 It is proposed to terminate the existing contract with RA, by giving the required contractual three months' notice. This would ensure a termination date of mid-October 2017. The existing Supporting People contract with Plus Dane Shap could then be extended to include the provision of ongoing support to the existing families within the Borough, with an anticipated start date of August/September 2017. This will also allow PDS preparation time for new arrivals expected later in 2017 and early 2018.
- 3.10 The contract with RA allows the Authority to pay for services provided up to the end of the notice period, and then terminate all future support with the existing provider, Refugee Action. Whilst there will be a small overlap of service provision provided by two Partners during the interim period, it is considered necessary to ensure continuation of support for existing families, as required by the Home Office.
- 3.11 The purpose of the award via the waiver process is to appoint a designated local provider. Halton BC would encounter considerable difficulty in finding a suitable provider within the current time constraints (i.e. 3 months). Added to this difficulty is the fact that this is a relatively

new and niche market with only a limited number of suppliers offering such a service. The delivery of a specialist niche service and the lack of suitable providers within this market limit service choice and availability and following the advice from both legal and procurement services can be justified for the purposes of seeking a waiver.

4.0 POLICY IMPLICATIONS

Whilst there is no obvious impact on existing Council policies, officers have engaged with colleagues from Procurement and Legal Services to ensure the local authority is fully compliant.

5.0 FINANCIAL IMPLICATIONS

As the programme is Home Office funded, there is no direct financial implication for the local authority; however by going through this process it is considered a more cost effective service.

6.0 IMPLICATIONS FOR THE COUNCIL'S PRIORITIES

6.1 Children and Young People in Halton

By awarding the proposed new contract, it is felt that there will be more direct support for these vulnerable children and young people.

6.2 Employment, Learning and Skills in Halton

No obvious impact foreseen.

6.3 A Healthy Halton

There is no foreseen additional impact other than previously outlined last year, which sits alongside the Home Office requirements.

6.4 A Safer Halton

There is no foreseen additional impact other than previously outlined last year, which sits alongside the Home Office requirements. However, the potential to engage with a local provider will encourage a more integrated level of local support.

6.5 Halton's Urban Renewal

No obvious impact foreseen.

7.0 RISK ANALYSIS

- 7.1 All risks will be assessed and mitigated where possible, and whilst there will be a small overlap of provision provided by two Partners,,it is

considered necessary to ensure continuity of support for existing families during the interim period, as required by the Home Office.

8.0 EQUALITY AND DIVERSITY ISSUES

No obvious impact foreseen.

9.0 REASON(S) FOR DECISION

Will provide a more efficient and cost effective service to vulnerable clients within the Borough.

10.0 ALTERNATIVE OPTIONS CONSIDERED AND REJECTED

Alternative arrangements have been considered but could not be facilitated due to time constraints and limited resources.

11.0 LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF THE LOCAL GOVERNMENT ACT 1972

None under the meaning of the Act.

By virtue of paragraph(s) 3 of Part 1 of Schedule 12A
of the Local Government Act 1972.

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