

Draft Sustainability Audit of the Draft Flood Risk and Development Planning Guidance

1.0 Background

- 1.1 Flood risk is a key sustainability issue for the City of Salford. Significant levels of existing property and new development lie within floodplain areas that are at risk of future flooding. The risk of flooding will increase as the impacts of climate change are felt.
- 1.2 The Flood Risk and Development Planning Guidance has not been written as a statutory part of the Local Development Framework. As such it has not been considered necessary to undertake a formal Sustainability Appraisal under the Planning and Compulsory Purchase Act (2004).
- 1.3 Nevertheless, it is considered valuable to undertake a basic sustainability audit, albeit not in compliance with the process set out in the Office of the Deputy Prime Minister Consultation Paper, "Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents". To that extent, no SA Scoping Report has been undertaken or statutory consultations, in advance of this Sustainability Audit.

2.0 Draft Flood Risk and Development Planning Guidance (DFR&DPG)

- 2.1 The Flood Risk and Development Planning Guidance explains how Policy EN19 in the Adopted UDP will be interpreted. The Flood Risk and Development Planning Guidance consists of 11 policies which address the requirements for new development to be located and designed in such a way as to minimise their exposure to flood risk and ensure that infrastructure is designed and managed to maximise flood resilience.
- 2.2 This DFR&DPG will ensure that flood risk is managed through the planning and design process in order to minimise risk to life and property. An important aspect of the Flood Risk and Development Planning Guidance is to maintain investor confidence to ensure that essential regeneration within the Lower Irwell floodplain in particular is maintained.

3.0 Purpose of the Sustainability Audit

3.1 The purpose of the Sustainability Audit is to examine the contribution that the Flood Risk and Development Planning Guidance document will make in relation to a range of desirable sustainability outcomes, identified through the following 16 Sustainability Objectives:

Social Objectives

- To improve the health of the population
- To improve the education and skills of the population
- To improve the safety and security of people and property
- To reduce deprivation within the city
- To ensure that everyone has a good home that meets their needs
- To promote vibrant communities which participate in decision making
- To improve accessibility for all the community

Environmental Objectives

- To maintain and improve, biodiversity flora and fauna
- To improve the quality of watercourse
- To reduce greenhouse gas emissions and improve air quality
- To reduce vulnerability to climate change
- Prudent and efficient use of energy and natural resources
- To protect and enhance the historic environment
- To maintain and enhance the quality of landscapes and townscapes

Economic Objectives

- To maximise sustainable economic growth
- To ensure good quality employment opportunities are available to all.

4.0 Baseline Data

- 4.1** Figure 1 indicates that in total there are 10,226 properties across Salford that are at a high risk of flooding (Flood Zone 3) and an additional 2, 022 properties that are at Medium risk of flooding (ie 12,248 in Flood Zone 2and 3).
- 4.2** Figure 2 indicates that most of the properties at a risk of flooding in Salford are in the floodplain of the River Irwell. The remaining properties across Salford that are at a high risk of flooding are located in the floodplains of Worsley Brook, Platts Brook, Salteye Brook, Folly Brook and Shaw Brook.
- 4.3** The Littleton Road Flood Storage Basin in combination with the flood defence bunds, provides protection from flooding to 6450 properties to a 1: 75 standard.
- 4.4** It is anticipated that approximately 2,461 new properties which will be built in the floodplain of the River Irwell will be lifted out of flood risk in the sense that they will be designed to be protected against flooding at the 1:100 Year Event. As a result of a range of mitigation measures, the properties will also be resilient to flooding to the impacts of flooding for a more severe flooding event. Most of these new properties will be built in Lower Broughton, Charlestown and Lower Kersal. Nevertheless, this will still leave approximately 5,500 properties with a standard of protection lower than the minimum expected for the 1:100 year event.

Figure 1: Number of residential and business properties at risk of flooding across Salford.

Community Committee Area	High Flood Risk Zone 3 (area covered by 1:100 year floodplain)			Medium Flood Risk Zone 2 (area covered by 1:1,000 year floodplain)		
	Total	Residential properties	Business Properties	Total	Residential properties	Business Properties
East Salford	6636	6370	266	7355	7057	298
Eccles	2213	2151	62	2702	2634	68
Irlam	520	482	38	1304	1219	85
Swinton	-	-	-	-	-	-
Walkden and Little Hulton	481	472	9	640	630	10
Worsley	376	631	15	457	436	21
Total	10226	9836	390	12458	11976	482

Figure 2: Number of properties at high risk of flooding in the River Irwell Floodplain and elsewhere in Salford.

Total	River Irwell 1:100 year floodplain (High Flood Risk Zone 3)	1:100 year floodplains outside River Irwell (High Flood Risk Zone 3 outside River Irwell)
10226	6636	3590

5.0 Audit of Strategic Options

5.1 A Sustainability Audit has considered two options as part of the process in order to weigh the relative advantages /disadvantages and agree appropriate mitigation in order to minimise residual harmful impacts.

- 1 Appraisal against the objectives if there is no Flood Risk and Development Planning Guidance
- 2 Appraisal against the objectives if the Flood Risk and Development Planning Guidance is applied.

Option A: Do Nothing

Sustainability Objective	Do Nothing Impact: Positive/ Negative/ Neutral	Comments	Mitigation
Social Objectives			
To improve the health of the population	Negative	As the threat of flooding increases people living in high flood risk locations may suffer stress and increasing levels of concern about the potential impacts on their lives. Some people may be unable to secure appropriate insurance cover.	Producing Flood Risk and Development Planning Guidance will ensure that the level of risk for existing residents does not increase, but it will also require action by the EA to secure a second flood storage basin and alleviate risks levels further.
To improve the education and skills of the population	Neutral	No impacts.	N/a
To improve the safety and security of people and property	Negative	Nearly 10,000 households and 390 businesses are currently located within High Flood Risk Zones. Over the next 10 years it is projected that an additional 7,000 people will move into Lower Broughton and	Produce Flood Risk and Development Planning Guidance. The Flood Risk and Development Planning Guidance will not address the problems faced by existing

Sustainability Objective	Do Nothing Impact: Positive/ Negative/ Neutral	Comments	Mitigation
		<p>Charlestown. They will not have the opportunity to live in a flood resilient location unless appropriate mitigation is undertaken.</p> <p>It is likely that existing properties would find it increasingly difficult to obtain appropriate and affordable insurance if action was not taken to reduce the impact of flooding.</p>	properties in areas of high flood risk.
To reduce deprivation within the City	Negative	<p>Reducing deprivation is a major aspiration. To achieve this will require significant levels of investment to secure physical regeneration of rundown areas located within the Lower Irwell Floodplain.</p> <p>Without clear guidance on how new development is able to mitigate against the impact of flood risk, new development deemed essential to regeneration and therefore reducing deprivation, may not be granted planning permission.</p>	<p>Produce Flood Risk and Development Planning Guidance.</p> <p>The production of Flood Risk & Development Planning Guidance will not provide the necessary flood resilience / protection for existing property. This will need to be addressed through other improvement programmes and public infrastructure.</p>
To ensure that everyone has a good home that meets their needs	Negative	Without policy to demonstrate that flood risk can be mitigated, the difficulties in obtaining planning permission may discourage investment in new housing and undermine the objectives of strategic regeneration and benefits of the Housing Market Renewal Fund.	Produce Flood Risk and Development Planning Guidance.

Sustainability Objective	Do Nothing Impact: Positive/ Negative/ Neutral	Comments	Mitigation
To promote vibrant communities which participate in decision making	Neutral	Existing Housing Market Renewal Fund and other regeneration strategies are operating to reverse population loss and improve community confidence in the places where they live. The threat of flooding can undermine the confidence in the long term future of an area.	The Flood Risk and Development Planning Guidance will give additional confidence that existing Housing Market Renewal and regeneration strategies will secure their objectives.
To improve accessibility for all the community	Neutral	N/a	N/a
Environmental Objectives			
To maintain and improve, biodiversity flora and fauna	Neutral	Sustainable Urban Drainage may provide small scale opportunities to create new habitats through Green Roofs and attenuation ponds.	Continue with existing biodiversity strategies and production of Sustainable Design and Construction.
To improve the quality of watercourse	Neutral	The Water Framework Directive requires local authorities to secure improvements to water quality in their water courses. Surface water flooding can introduce significant amounts of debris and pollutants into rivers and streams. Without guidance on flood risk mitigation measure such as SUDS, the opportunity to consolidate existing improvements in water quality could be missed.	Continue to secure improvements to existing watercourse quality through the Irwell Action Plan and partnerships through the Mersey Basin Campaign. The FR&DPG will seek to reduce /slow down the levels of runoff from new development.
To reduce greenhouse gas emissions and improve air quality	Neutral	N/a	N/a
To reduce vulnerability to climate change	Negative	Without clear guidance on how new developments should make allowances for increases in flood risk as a result of climate change, people	Produce Flood Risk and Development Planning Guidance. Produce other guidance such as

Sustainability Objective	Do Nothing Impact: Positive/ Negative/ Neutral	Comments	Mitigation
		and property will be more vulnerable to flooding in the future.	Sustainable Design and Construction SPD.
Prudent and efficient use of energy and natural resources	Neutral	N/a	N/a
To protect and enhance the historic environment	Neutral	N/a	N/a
To maintain and enhance the quality of landscapes and townscapes	Neutral	N/a	N/a
Economic Objectives			
To maximise sustainable economic growth	Negative	Without clear guidance on how new development is able to reduce flood risk, new development deemed essential to regeneration and the creation of a vibrant modern economy might not be granted planning permission.	Produce Flood Risk and Development Planning Guidance.
To ensure good quality employment opportunities are available to all	Negative	Without clear guidance on how new development is able to reduce flood risk, new employment development may not be granted planning permission.	Produce Flood Risk and Development Planning Guidance.
Summary	<p>It is considered that overall the ‘Do Nothing’ option would have a significantly negative impact on sustainable development. Clearly without guidance on how development can mitigate flood risk, it would be more difficult to obtain planning permission for new development deemed essential to regenerate communities and create vibrant places with a long term future . A worst case scenario would be that new development would not take place at all. In the case of the Lower Irwell Valley , this would create a “ significant” barrier to new investment, effectively blighting its potential to fulfil a future role as part of the Regional Centre. Without the Flood Risk & Development Planning Guidance, other opportunities to make cumulative improvements in river water quality would be missed. These would not be negative impacts as there will be other strategies in the city to improve water quality and biodiversity as a result of new development. The most significant way to mitigate the negative impacts of flood risk and ensure that opportunities for significant new development are not lost is to produce planning guidance on flood risk and development.</p>		

Option B: Produce Flood and Risk and Development Planning Guidance

Sustainability Objective	Planning Guidance Impact: Positive/ Negative/ Neutral	Comments	Mitigation
Social Objectives			
To improve the health of the population	Positive	New development that is resilient to flooding is likely to reduce resident's worries about their properties being damaged in a flood. This will reduce insurance risk and secure long term financial security against the impacts of flooding.	Any residual risk to personal safety would need to be addressed through the emergency planning process.
To improve the education and skills of the population	Neutral	N/a	N/a
To improve the safety and security of people and property	Positive	New development that mitigates the impacts of flooding will reduce the risk of loss of life and damage to property.	Any residual flood risk to personal safety would need to be addressed through the emergency planning process.
To reduce deprivation within the City	Positive	New development that mitigates the impacts of flooding will encourage new investment and viable communities which more easily allow the benefits of regeneration to take place in areas of the City that suffer from deprivation.	N/a
To ensure that everyone has a good home that meets their needs	Positive	Production of the planning guidance will enable housing development to proceed in areas of high flood risk which otherwise would have been considered inappropriate.	N/a

Sustainability Objective	Planning Guidance Impact: Positive/ Negative/ Neutral	Comments	Mitigation
		The planning guidance will provide confidence in Housing Market Renewal Fund strategies to meet their objective to provide homes for the needs of the community.	
To promote vibrant communities which participate in decision making	Positive	Production of the planning guidance will encourage regeneration of areas of low housing market demand which otherwise might have resulted in further population loss.	N/a
To improve accessibility for all the community	Neutral	N/a	N/a
Environmental Objectives			N/a
To maintain and improve, biodiversity flora and fauna	Neutral / Positive	In certain circumstances, it may be appropriate that Sustainable Drainage Systems (SUDS) will result in the creation of green roofs or storage ponds that may provide habitats for flora and fauna.	N/a
To improve the quality of watercourse	Positive	SUDS incorporated into new development can improve the quality of surface water run-off that flows into rivers by filtering out pollutants at an early stage.	N/a
To reduce greenhouse gas emissions and improve air quality	Neutral	N/a	N/a
To reduce vulnerability to climate change	Positive	In designing new development in High Flood Risk Zones, the modelled height of floor levels is required to make a 20% allowance for increased river flows, as a result of climate change. This will ensure that new	The residual risk to personal safety as a result of flooding will need to be addressed through the Emergency Planning Process.

Sustainability Objective	Planning Guidance Impact: Positive/ Negative/ Neutral	Comments	Mitigation
		development is protected against the worsening impact of increased rainfall and storm events.	
Prudent and efficient use of energy and natural resources	Neutral	N/a	N/a
To protect and enhance the historic environment	Neutral	N/a	N/a
To maintain and enhance the quality of landscapes and townscapes	Positive	The Flood Risk and Development Planning Guidance will ensure that flood defences along rivers which may obscure river views, do not have to be raised to protect property from flooding.	N/a
Economic Objectives			
To maximise sustainable economic growth	Positive	New Development incorporating flood risk mitigation measures will enable regeneration to take place in some of the most deprived areas of the City, in the Lower Irwell Valley.	N/a
To ensure good quality employment opportunities are available to all	Positive	New development incorporating flood risk mitigation measures will enable regeneration including new business premises, to take place in deprived areas of the City, particularly the Lower Irwell Valley.	N/a

Sustainability Objective	Planning Guidance Impact: Positive/ Negative/ Neutral	Comments	Mitigation
Summary	<p>The Flood Risk and Development Planning Guidance would make a positive contribution towards sustainable development by:</p> <ul style="list-style-type: none"> • allowing new development to take place in deprived areas where it is considered essential to regenerate communities and to maximise economic growth; • ensuring new development built in flood risk areas incorporates measures that reduce flood damage to property and and risk of loss of life of residents; and • providing guidance on flood risk mitigation which can improve water quality in rivers and in certain circumstances encourage opportunities for new greenspaces with biodiversity potential. 		

6.0 Conclusion

- 6.1 The appraisal of the two strategic options demonstrates that Option B 'produce Flood Risk and Development guidance' is clearly more beneficial to contributing towards sustainable development objectives than Option A 'do nothing'. One of the key contributions to sustainable development that the Flood Risk and Development Planning Guidance makes, is that it will allow regeneration to take place in deprived communities lying within High Flood Risk Zones.
- 6.2 The planning guidance will also make a number of positive secondary impacts on sustainable development by recommending the use of sustainable drainage systems (SUDS) that can provide habitats for biodiversity and improve water quality of surface water runoff into watercourses.

7.0 Next Steps

7.1 The next steps for the Sustainability Audit are to:

1. Seek Lead Member for Planning's approval for the Draft Sustainability Audit to go out to consultation in conjunction with the Draft Flood Risk and Development Planning Guidance;
2. Consult the public on the Draft Sustainability Audit for a 6 week period between 29th June and 8th August 2007;
3. Revise Draft Sustainability Audit after consultation;
4. Seek council approval of the final Sustainability Audit along with the Flood Risk and Development Planning Guidance and
5. Publish Sustainability Audit on the council's website.