MID ULSTER

Policy Review Paper

Planning and Flood Risk
April 2016

Purpose: **To provide the Mid Ulster Council with an overview of the existing flood risk planning policies contained within the Strategic Planning Policy Statement and Planning Policy Statement 15 and their implications for land use planning within Mid Ulster District Council Area.**

Content: **The paper provides information on:**

(i) **an explanation of the context and objectives of the existing policies relating to the land use planning and flood risk;**

(ii) **the linkages between the Mid Ulster Council objectives for future growth, the Sustainability Appraisal and core principles of strategic planning policy;**

(iii) **The planning policy options available for planning and flood risk within the Local Development Plan.**

Recommendation: **That the Council notes the findings and considers how this policy review shall be used to inform subsequent strategic policies and proposals in the Local Development Plan.**

1.0 Introduction

1.1 The purpose of this paper is to inform the Council of the current planning policy associated with land use planning and flood risk and whether or not it achieves the Councils objectives regarding the need to minimise and manage flood risk to people, property and the environment through the new Local Development Plan (LDP) 2030.

1.2 This paper contains an assessment of how existing planning policies relevant to planning and flood risk take account of the Regional Development Strategy 2035 (RDS 2035), the Single Planning Policy Statement (SPPS), Sustainability Appraisal themes and the MUDC flood risk and climate change objectives through the proposed LDP objectives.

1.3 Flooding is a natural process that cannot be entirely prevented. Some areas are already susceptible to intermittent flood from various sources, principally from rivers, the sea or surface water runoff. Climate change is generally expected to increase flood risk, albeit that there remains much uncertainty as to the degree

of climate change that will occur and the implications for particular areas of Northern Ireland.

1.4 The effects of flooding on human activity are wide ranging. Floods have the potential to cause fatalities and injury, displacement of people, pollution and health risk, loss of drinking water, damage to buildings and the environment and to severely compromise economic activities. If not properly managed, flooding to property will also impact on property prices, the ability to get a mortgage agreement and the availability of affordable property insurance.

1.5 There are a number of key challenges to managing future flood risk in Northern Ireland and within Mid Ulster. These key issues include:

- *Climate Change* – predictions indicate that it is likely that there will be more high intensity rainfall events which will overwhelm the urban drainage systems and overtop existing flood defences more defences more regularly.
- *Development and Growth* – development and growth in green (and brown) spaces places more pressure on out sewerage and drainage systems leading to increased flood risk particularly from surface water.
- *Environmental Protection and Improvement* – the need to reduce pollution from run-off and from sewerage overflows during rainfall events to meet EU standards will place further pressures on our sewers and drainage systems.
- *Poor Land Management Practices* – the way we manage land across the catchment influences the volume and speed of rainwater entering rivers and drainage systems. In addition the movement of sediment within rivers can cause changes over time which can reduce flow capacity.
- *Effective Surface Water Management* – the identification of surface water as a significant flood risk may require a new approach to drainage provision, including better coordination between drainage providers.

2.0 Legislative Context

2.1 The following legislation regulates flood risk and flooding within Northern Ireland:

- **The Water Framework Directive (December 2000)**
- **The European Directive on the Assessment and Management of Flood Risks (November 2007)**
- **Water Environment (Floods Directive) Regulations (Northern Ireland) 2009. (December 2009)**
- **The Reservoirs Act (NI) 2015**

2.2 The term *'flooding'* means the temporary covering by water of land not normally covered by water. This shall include floods from rivers, mountain torrents, Mediterranean ephemeral water courses, and floods from the sea in coastal areas, and may exclude floods from sewerage systems. The term *'flood risk'* means the combination of the probability of a flood event and of the potential adverse consequences for human health, the environment, cultural heritage and economic activity associated with a flood event.

2.3 The Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy requires river basin management plans to be developed for each river basin district in order to achieve good ecological and chemical status, and it will contribute to mitigating the effects of floods. However, reducing the risk of floods is not one of the principal objectives of that Directive, nor does it take into account the future changes in the risk of flooding as a result of climate change.

2.4 The significant increase in the incidence of flood events across Europe and the associated impacts led to the adoption by the European Parliament of the Floods Directive in October 2007.[1] The Directive confirms that development and other man-made changes to the environment can exacerbate the consequences of flooding. Accordingly, one of the Directive's outcome measures relates to flood prevention.

2.5 The European Union Floods Directive confirms that development can exacerbate the consequences of flooding and identifies the important role of the planning system in managing development so as to reduce the risks and impacts of flooding. In this regard, the Directive highlights the fundamental importance of preventing or restricting new development in flood prone areas. The Directive recognises the role of the planning system in regulating new development in existing built up areas so as to afford greater protection to people and property, where this is considered appropriate and commensurate with the flood risk.

2.6 It should be noted that compliance with this Directive is the responsibility of the Rivers Agency (Department of Agriculture and Rural Development) and they have begun implementing the directive by establishing flood risk and hazard maps which were published in 2013. With specific reference to flooding in each river basin, DARD have published specific Flood Risk Management Plans (FRMP's) for the three River Basin areas in Northern Ireland (Neagh – Bann, North West and North East). These plans were adopted on the 22 December 2015 and the council should ensure that the

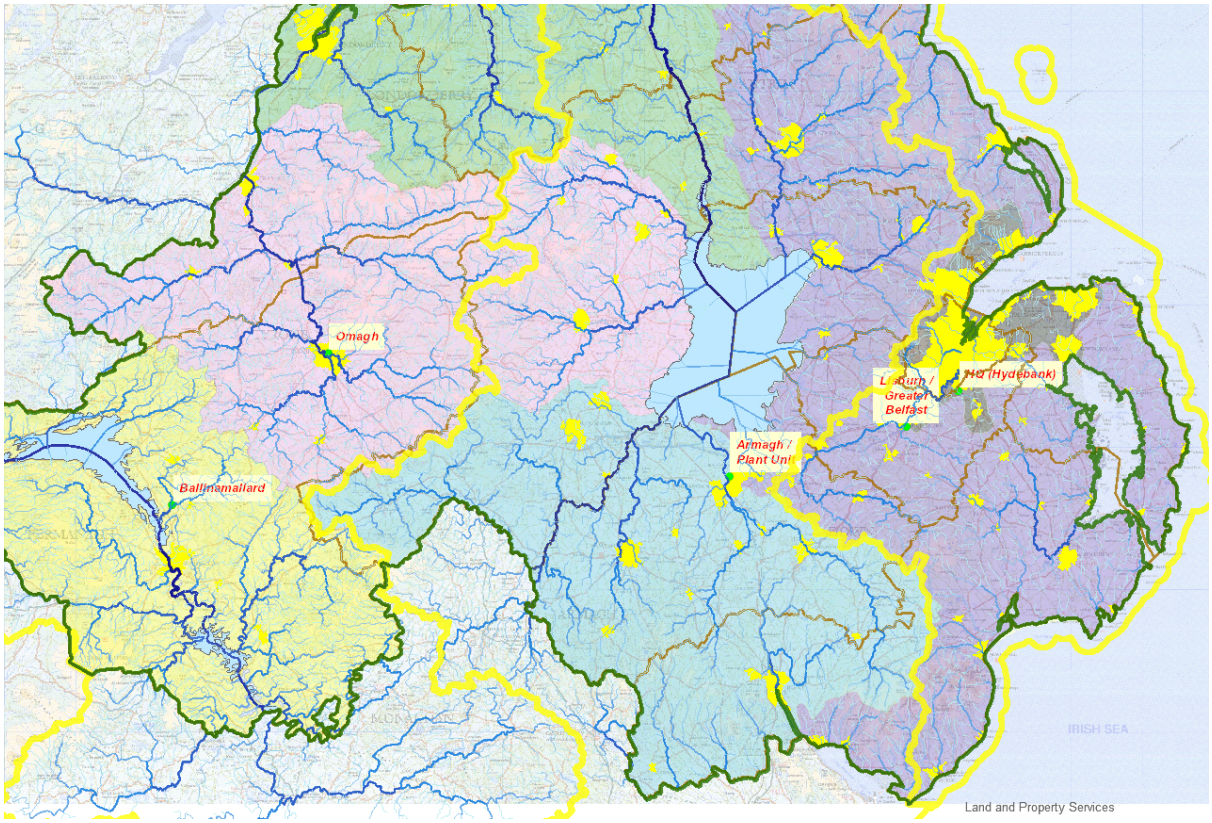
[1] The European Directive on the Assessment and Management of Flood Risks came into force in November 2007 and was transposed into local legislation by The Water Environment (Floods Directive) Regulations (Northern Ireland) 2009.

new LDP is compatible with these FRMP's. The FRMP's focus on three main themes:

Prevention: The avoidance of, where possible, new development in areas of flood risk; Promoting appropriate land use, agriculture and forestry practices.

Protection: Structural and non-structural measures to reduce the likelihood and impact of floods.

Preparedness: Flood warning; Flood emergency planning; Informing the public about flood risk and what to do in the event of a flood to their property; Adapting existing property to the risk of flooding.



Map 1 Mid Ulster District Boundaries and the three River Basins.

2.6 Rivers Agency Planning Advisory Unit advises on the flooding potential for individual sites which are the subject of specific planning applications and where flooding is likely to occur. Rivers Agency will operate a presumption against development in accordance with Planning Policy Statement 15 (PPS15). Rivers Agency has advised that any flooding policy prepared as part of the LDP should be closely aligned with the existing policies within PPS15.

2.7 Furthermore, when preparing local policies as part of stage 2 of the LDP process, the Council should ensure that land which has been identified as being at risk of flooding is not zoned for certain types of development such as

housing or industry. Such zoning would eradicate the natural function of such land as a flood relief pondage area. The LDP should also take account of the 'Climate Change' flood map, Appendix One, as well as the information contained in the Strategic and Hazard Flood Maps.

2.8 The Reservoir Act 2015 aims to ensure that reservoirs are managed and operated to minimise any risk of flooding due to an uncontrolled release of water resulting from dam failure and therefore protecting people, the environment, cultural heritage and economic activity. The legislation came into effect on 24th July 2015. Rivers Agency which will act as the Reservoir Authority. The legislation will apply to reservoirs that are capable of holding 10,000 cubic metres or more of water above the natural level of the surrounding land. These reservoirs will be known as 'controlled reservoirs'. Stage one of the Reservoirs Act (NI) 2015, focuses on with definitions and identification of roles and responsibilities and it was enacted on 24th July 2015. The Second stage of the Act will deal with procedures and enforcement will require further legislative process through the NI Assembly.

Other Government Strategies

2.9 **Managing Stormwater** – A Strategy for Promoting the Use of Sustainable Drainage Systems (SuDS) within Northern Ireland, September 2011; the recommendations of this Strategy have been endorsed by the Northern Ireland Executive. The fundamental aim of the policy is to develop a more integrated and catchment based approach to sustainable drainage that will deliver a variety of sustainable drainage that will deliver a variety of sustainable benefits, including flood risk benefits.

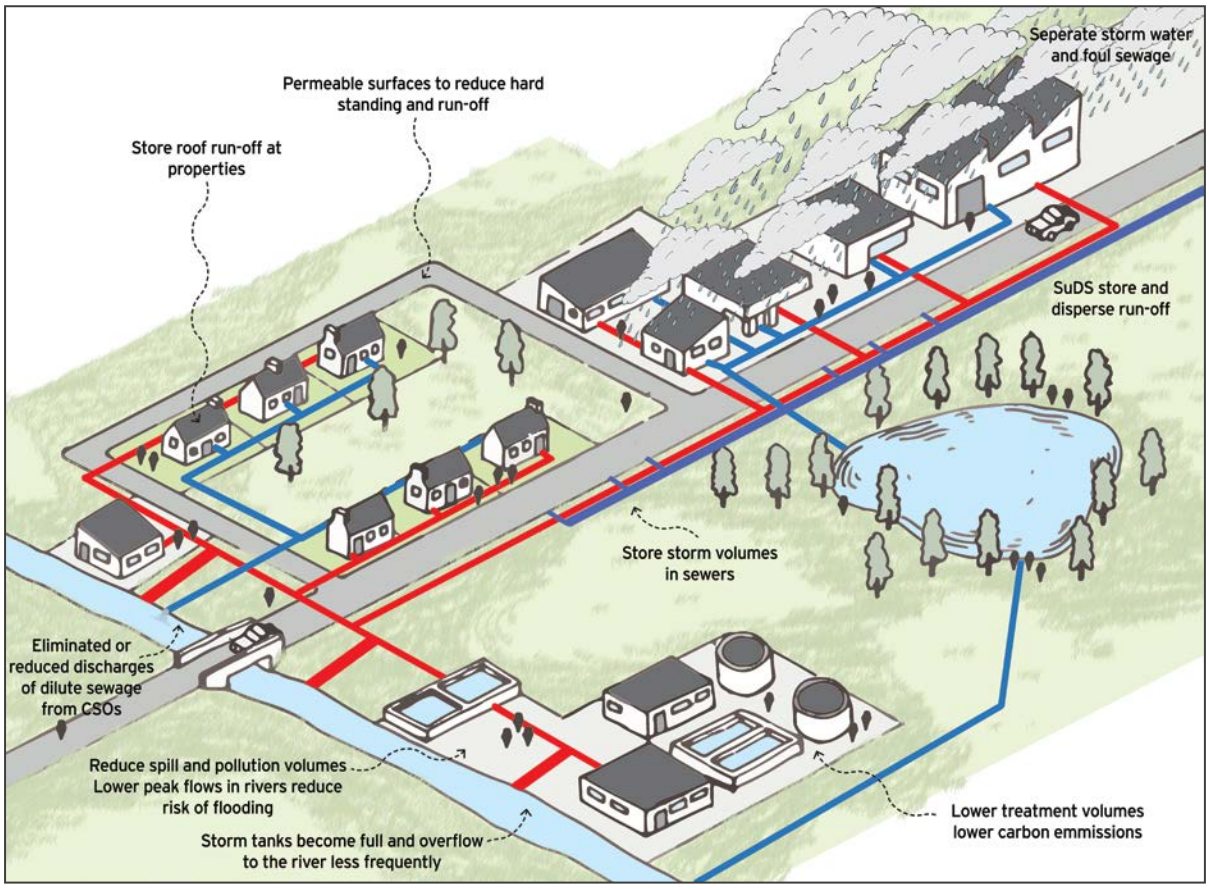
2.10 **DRD Sustainable Water - A Long-Term Strategy for NI -** The Department for Regional Development (DRD) has recently adopted (25th March 2016) a strategy on the best way forward for managing the water supply in Northern Ireland. The paper has 5 parts and was launched for public consultation in June 2014. Part 4 of the document entitled *'Flood Risk Management"* is relevant to the preparation of LDP and due regard should be given to its recommendations.

2.12 The policy calls for the construction of *'resilient development'* which can withstand extreme rainfall events with minimal or no flood damage. The document also stresses that the planning authority should prevent development in areas of high flood risk and ensure that future development does not increase flood risk. The document proposes achieving these aims through the following measures:

- When zoning land for development, large surface water schemes such as lakes, wetlands and wet woodlands could be created to meet the future drainage needs of proposed development in the area.

- Planning policy could require, at design stage, that drainage proposals are considered so that the final design can be such that surface water run-off is minimised. It is likely that a range of SuDS will need to be employed to ensure this. Examples of such are green roofs, permeable paving, soakaways, ponds and wetlands.
- Planning Policy should require that SuDS are the preferred option for new development. The Diagram below shows how Sustainable Drainage Systems work.
- Planning Policy should incorporate the requirement for 'design for exceedance' proposals in all new development. This means that new development must show how the proposed drainage system will cope in the event of water run off flows exceeding normal or expected levels.

Diagram One – Sustainable Drainage Systems



3.0 The Objectives

(a) Mid Ulster Council

3.1 Position Paper Six[2] outlined a number of policy objectives that will assist in formulating the aim and objectives for planning and flood risk in the LDP. Mid Ulster's objectives are:

- **Ensure the LDP is compatible with and compliments the Flood Risk Management Plans as adopted in December 2015**
- **Avoid zoning land for habitable development which has been identified as being at risk of flooding, either on the Strategic / Hazard / Climate Change Flood Maps**

3.2 The paper notes that there are certain areas which are subject to planned flood alleviation schemes. These schemes are yet to be commenced and are currently at design stage meaning it may be several years before they are implemented. They are located at the following locations:

- Coalisland Flood Alleviation Scheme
- Bocketts Road, Ballygawley

(b) Sustainability Appraisal (SA) Objective

3.3 It is important to note that all LDP strategic planning policies will be subject to a Sustainability Appraisal incorporating a Strategic Environmental Assessment (SEA)[3].

3.4 A key objective of the Sustainability Appraisal[4] should be to reduce contributions to climate change and reduce vulnerability to climate change. Current and future planning policies should take account of the need to;

- Reduce the risk of damage to property from storm events.
- Minimise the risk of flooding from rivers and watercourses to people and property.

3.5 MUDC has commenced work on the Sustainability Appraisal required for the LDP. Feedback from key consultation bodies has indicated that there is a need to distinguish Flooding and Flood Risk as a separate SA Theme with its own objectives and indicators.

(c) Regional Development Strategy 2035 (RDS) and the Strategic Planning Policy Statement (SPPS)

[2] Position Paper Six Public Utilities, May 2015, Mid Ulster
[3] Strategic Environmental Assessment, Sustainability Appraisal and the Historic Environment, Historic England
[4] Appendix II Mid Ulster Sustainability Assessment Incorporating Strategic Environmental Assessment June 2015

3.6 The RDS provides an overarching strategic planning framework to facilitate and guide the public and private sectors. It addresses economic, social and environmental issues aimed at achieving sustainable development and social cohesion. This overarching document sets out clear objectives for planning and flood risk that have been fully considered within the formulating for the objectives of the SPPS.

Climate Change

3.7 Climate change is one of Northern Ireland's foremost environmental, social and economic challenges. It is vitally important to ensure that our new and existing infrastructure is as possible to all potential impacts. This includes being able to adapt to both gradual climate change as well as the increased risk of extreme weather events such as flooding.

3.8 The Regional Development Strategy (RDS) underlines that climate change is expected to impact on issues such as river and storm water management and flooding. However, recognising the uncertainty inherent in predictions of climate change and their impacts, the RDS advises that a precautionary approach to potential development problems such as flooding is desirable where scientific evidence cannot offer clear direction.

3.9 A key aim of the Single Planning Policy Statement (SPPS) is to further sustainable development through mitigation and adaption to climate change. In January 2014 'A Northern Ireland Climate Change Adaption Programme' was published, which sets out the strategic objectives and policies by each government Department to adhere too. The Northern Ireland Climate Change Adaptation Programme recognised flooding as one of four primary areas for action, high level actions and activities have been put in place to address priority flooding climate change risks.

3.10 The SPPS sets out the Department's commitment to the adaption programme through the need to identify and implement opportunities to build resilience into the built and natural environment and to develop and implement sustainable strategies to explore, address and manage significant flood risk.

3.11 The planning system should therefore mitigate and adapt to climate change by:

- Shaping new and existing developments in ways that positively build resilience to problems such as flood risk;
- Avoiding development in areas with increased vulnerability to the effects of climate change, particularly areas at significant risk from flooding and highly exposed sites at significant risk from the impacts of storms; and

- Working with natural environmental processes, for example through the use of sustainable drainage systems (SuDs) to reduce flood risk and improve water quality.

3.12 Our health and well-being, and economic prosperity depend upon the services provided by ecosystems and their components which need to be healthy and resilient to change in order to function effectively. A good quality environment can also help to improve resilience to climate change, as trees and other green infrastructure provide important ecosystem services that reduce the effects of flooding and the urban heat island.

3.13 It should be noted that in October 2015 the Northern Ireland Executive Minister asked the UK Committee on Climate Change (CCC) to provide an update on the paper produced by the CCC in 2011 on 'The appropriateness of a Northern Ireland Climate Change Act. The intention is that the report will be included in an evidence paper to be submitted in January 2016 on the case for bringing forward Northern Ireland climate change legislation in the next Assembly term.

Flood Risk

3.14 Flood Risk the statistical probability of an event occurring combined with the scale of the potential consequences of that event. The SPPS sets out Regional Strategic Objectives for the management of flood risk, these are:

- **Prevent inappropriate new development in areas known to be at risk of flooding, or that may increase the flood risk elsewhere;**
- **Ensure that the most up to date information on flood risk is taken into account when determining planning applications and zoning / designating land for development in LDPs;**
- **Adopt a precautionary approach to the identification of land for development through the LDP process and the determination of development proposals, in those areas susceptible to flooding where there is a lack of precise information on present day flood risk or future uncertainties associated with flood estimation, climate change predictions and scientific evidence;**
- **Manage development in ways that are appropriate to the four main sources of flood risk in Northern Ireland, i.e. fluvial, coastal, surface water and water impoundment (reservoir) breach or failure;**
- **Seek to protect development that is permitted within flood risk areas by ensuring that adequate and appropriate measures are employed to mitigate and manage the flood risks;**
- **Promote sustainable development through the retention and restoration of natural flood plains and natural watercourses as a**

form of flood alleviation and an important environmental and social resource;

- **Promote sustainable development through encouraging the use of sustainable drainage for new development and redevelopment / regeneration schemes;**
- **Promote public awareness of flood risk and the flood risk information that is available and of relevance to undertaking development; and**
- **Promote an integrated and sustainable approach to the management of development and flood risk which contributes to:**
    - **The safety and well-being of everyone,**
    - **The prudent and efficient use of economic resources,**
    - **The conservation and enhancement of biodiversity, and**
    - **The conservation of archaeology and the built heritage.**

3.15 These Regional strategic objectives must be taken into account when preparing the LDP. There are also a number of Regional Strategic Policies within the SPPS which generally summaries the PPS15 policies. These strategic policies must be taken into account when preparing the LDP and the Preferred Options Paper (POP).

3.16 The SPPS states that LDPs must:

- **Take account of the potential risks from flooding over the plan period and beyond as this is likely to influence decisions on such matters as the zoning of land for development or the designation of land for open space use. Flood risk may also be a consideration in the definition of settlement limits and in decisions concerning the designation of new settlements. LDPs should also promote sustainable drainage within the plan area, for example by requiring such solutions, where appropriate to individual zonings, as a key site requirement.**
- **Take account of the most up to date information on flood risk, in particular that which is available on the Strategic Flood Map[5]. There should also be consultation with Rivers Agency and other relevant agencies in regard to detailed plan proposals will be necessary where flood risk is identified from the available information as a potential issue.**
- **Apply a precautionary approach to development in areas that may be subject to flood risk presently or in the future as a result of**

[5] Multi layered Strategic Flood Maps are available on the Rivers Agency website: http://www.dardni.gov.uk/strategic-flood-map-ni

climate change predictions. Consequently, LDPs should not being forward sites or zone land that may be susceptible to flooding, now or in the future, unless in exceptional circumstances. Where, exceptionally, a new plan brings forward such a site, it needs to explain the rationale and set out the measures necessary to manage or mitigate the risk.

3.17 It is important to note that the susceptibility of land to flooding is a material consideration in the determination of planning applications. New development may be directly at risk of flooding from a number of sources and / or may increase the risk elsewhere. Where a flood risk is known to exist, the planning authority must have regard to this when determining an application.

3.18 The onus rests with the developer to identify and consider the potential flood risk to the proposed development by referring to the Strategic Flood Map. Where flooding is identified as a potential development constraint, pre-application discussion with the planning authority is advisable as this will help to identify possible alternative options or the information that will be required in order to demonstrate the potential for mitigating and managing the flood risks.

3.19 All planning applications will be determined with reference to the most up to date flood risk information available. The planning authority should consult Rivers Agency and other relevant bodies as appropriate, in a number of circumstances, where prevailing information suggests that flood risk or inadequate drainage infrastructure is likely to be a material consideration in the determination of the development proposal. The purpose of the consultation will often involve seeking advice on the nature and extent of flood risks and the scope for management and mitigation of those risks, where appropriate.

(d) Community Plan

Section 66 (6) of the Local Government Act (NI) 2014 requires that;

'…in the discharge of its duties under subsection (1) a council must where appropriate have regard to its plan strategy and its local policies plan under sections 8 and 9 of the Planning Act (NI) 2011.'

3.20 Subsection (1) states that the Council must initiate, maintain, facilitate and participate in community planning for its district. In other words the Local Development Plan must have regard to the community plan and vice versa.

3.21 The Community Planning Team of MUDC carried out public community consultation in October – December 2014 in the preparation of the draft Community Plan[6]. The feedback did not include anything specific comments regarding planning and flood risk.

[6] The Mid-Ulster Community Plan: Community Consultation Feedback A Summary, March 2015

4.0 Evaluation and Assessment of Planning Policy Statement 15

4.1 Planning Policy Statement 15 (PPS15)[7] sets out the existing planning policies for protection, mitigation and adaption for planning and flood risk. They embody the Government's commitment to sustainable development and environmental stewardship. The primary aim of PPS15 is **to prevent future development that may be at risk from flooding or that may increase the risk of flooding elsewhere.**

4.2 As defined by the European Directive on the Assessment and Management of Flood Risks in Northern Ireland the competent authority is the Department of Agriculture and Rural Development (DARD in the form of the River's Agency.

Rivers Agency Consultation

4.3 It should be noted that the views of Rivers Agency where sought as part of this policy review, October 2015 and March 2016. In general since its introduction in 2006 and revision in 2014, Rivers Agency has found PPS15 to be an effective and robust tool for managing flood risk. River's Agency would advise that when MUDC is formulating its LDP, Council should adhere closely to the existing PPS15. It is noted that with respect to flood risk management, the policies detailed on pages 61 to 68 of SPPS are very similar to policies FLD 1 to FLD 5 of PPS15. Rivers agency had further comments regarding existing policy FLD5, which will be discussed later in the paper. Rivers agency did note that they consider that the existing policies contained in PPS15 (2014) have been successful in managing flood risk and that they should not be changed or amended.

4.4 It should be noted that the key source data regarding Flooding and Flood Risk in Northern Ireland is prepared and updated by Rivers Agency. The main sources to date are **Historical Flood Maps, the Strategic Flood Map (Rivers) and Flooding Hazard Maps (surface water).** These are available via the Rivers Agency website.

Key Definitions

4.5 A **Flood plain** is defined as the generally flat areas adjacent to a watercourse or the sea where water flows in a flood, or would flow, but for the presence of flood defences. The limits of the flood plain are defined by the peak water level of an appropriate return period event (currently defined as 1 in 100 year or AEP of 1% for the river or fluvial flood plain and 1 in 200 year or AEP of 0.5% for the coastal flood plain). Flood plains as so defined are depicted on the Strategic Flood map on the DARD Rivers Agency website. http://www.dardni.gov.uk/strategic-flood-map-ni

[7] Planning Policy Statement 15 – Planning and Floodrisk (September 2014)

4.6 **Fluvial Flooding** is defined as flooding from a river or other watercourse.

4.7 **Pluvial Flooding** is usually associated with convective summer thunderstorms or high intensity rainfall cells within longer duration events, pluvial flooding is a result of rainfall-generated overland flows which arise before run-off enters any watercourse or sewer. The intensity of rainfall can be such that the run–off totally overwhelms surface water and underground drainage systems.

4.8 **Drainage Assessment** this is normally a statement of the drainage issues relevant to a development proposal and the measures to provide the appropriate standard of drainage. The detail of the assessment will be proportionate to the nature of the proposal. It may also be called a drainage impact assessment.

4.9 **Controlled Reservoir** is defined as any reservoir with an individual or combined capacity greater than 10,000 cubic metres above the natural level of any part of the surrounding land.

4.10 **Minor Development** in relation to flooding policy relates to non-residential extensions (Industrial/Commercial/Leisure etc.) with a footprint less than 150 sq. metres. Alterations; development that does not increase the size of buildings e.g. alterations of external finishes. Householder development e.g. sheds, garages etc. within the curtilage of the existing dwelling in addition to extensions to the existing dwelling. This excludes any proposed development that would create a separate dwelling within the curtilage of the existing dwelling e.g. subdivision of a dwelling into flats.

Key Questions

1. **In relation to planning and flood risk, do the policies of PPS 15 accord with the objectives of the;**
   - **Regional Strategic Policy of the SPPS;**
   - **the Local Development Plan objectives, and;**
   - **the Sustainability Appraisal**
2. **Whether or not the Council needs to bring forward alternative tailored strategic policy for planning and flood risk.**

The Policy Approach

4.11 In examining the policy the local authority must be mindful of the precautionary approach and to take account of it. This approach should be used in the assessment of flood risk which requires that lack of full scientific certainty, shall not be used to assume flood hazard or risk does not exist, or

as a reason for postponing cost-effective measures to avoid or manage flood risk. This must be the hallmark against which the proposed three approaches to flood risk and management are assessed.

4.12 The first approach is the adoption of the current flooding policies as set out in PPS15 Planning and Flood Risk. It is acknowledged that these policies are the most prescriptive and restrictive within the UK and Ireland in terms of controlling where development can or cannot take place. The burden of justifying the need for a development proposal within a floodplain or inundation are is on the developer as a Flood Risk Assessment and/or Drainage Assessment is required. However given that the topology of Mid Ulster district the geographical area consisting of floodplains and inundation areas is limited and therefore there is greater scope and sufficient land available for the projected need for developable land over the plan period.

4.13 The second approach is to adopt a more restrictive flood risk policy by implementing a complete and binding ban on all development within existing defined flood plains and inundation areas. These areas are defined by the Strategic Flood Maps and Flood Hazard Maps produced and updated by Rivers Agency on behalf of DARD. In essence this would mean no development in any instance including minor development. Although such a policy would relieve the need for the submission of Assessment Reports for developers it would also mean all identified land subject to flooding would be deemed undevelopable.

4.14 The third approach is to state that flood risk is the full responsibility of the developer and it is the developers responsibility to firstly identify if the proposed development is located in a flood risk area (Historic Flood Maps, Strategic Flood Map and Flood Hazard Map) and secondly, to fully assess and justify the need for the proposed development within the at risk location. This approach would not follow the precautionary approach as required by Rivers Agency but it would place all liability on the developer.

Development in River (Fluvial) and Coastal Flood Plains (FLD1)

SPPS Regional Strategic Policy

4.15 Flood plains store and convey flood water during flood events. These functions are important in the wider flood management system. Development in flood plains should be avoided where possible, not only because of the high flood risk and the increased risk of flooding elsewhere, but also because piecemeal reduction of the flood plains will gradually undermine their functionality.

4.16 Accordingly, built development must not be permitted within the flood plains of rivers or the sea unless the following circumstances apply:

- The development proposal constitutes a valid exception to the general presumption against development in flood plains
- The development proposal is of overriding regional or sub-regional economic importance; and
- The development proposal is considered as minor development[8] in the context of flood risk.

4.17 Even where the proposal constitutes a valid exception to the general presumption against certain types of development in the flood plain including bespoke development for vulnerable groups, essential infrastructure (unless for operational reasons it has to be in the flood plain) and also development for the storage of hazardous substances likely to cause pollution in a flood event.

4.18 Land raising, which involves permanently elevating a site to an acceptable level above the flood plain in order to facilitate development will not be acceptable within the fluvial flood plain, where displacement of flood water would be likely to cause flooding elsewhere.

Policy Options

4.19 **Option 1** - **Retain Policy FLD1** which states that development will not be permitted within the 1 in 100 year fluvial flood plain (AEP of 1%) or the 1 in 200 year coastal flood plain (AEP of 0.5%) unless the applicant can demonstrate that the proposal constitutes an exception to the policy. For further details please refer to Figure 1 below.

[8] Non-residential extensions with a footprint less than 150sq. metres, alterations to buildings and householder development as defined by the prevailing planning legislation.

Figure 1

Where the principle of development is accepted by the planning authority through meeting the '*Exceptions Test'*, as set out below under the Exceptions heading, the applicant is required to submit a Flood Risk Assessment for all proposals. Planning permission will only be granted if the Flood Risk Assessment demonstrates that:

a) All sources of flood risk to and from the proposed development have been identified; and

b) There are adequate measures to manage and mitigate any increase in flood risk arising from the development.

Exceptions are:

Defended Areas

a) Development of previously developed land protected by flood defences that are confirmed by DARD, as the competent authority, as structurally adequate and provide a minimum standard of 1 in 100 year fluvial or 1 in 200 year coastal flood protection.
   - Due to the residual flood risk there will be a presumption against development where proposals include essential infrastructure, storage of hazardous substances, bespoke accommodation for vulnerable groups or development located close to flood defences.
   - Proposals involving significant intensification of uses will be considered on their individual merits and will be informed by the Flood Risk Assessment.

Undefended Areas

b) New development within settlements in the coastal floodplain where the land is raised (through infilling), to an acceptable level above the flood plain and subject to meeting all the following criteria:
   - The proposal is not dependent on the provision of new coastal flood defences or likely to require such protection as a result of anticipated climate change;
   - The site is not in an area likely to be at risk from coastal erosion or land instability and the proposed development will not significantly increase such risks in the locality;
   - The elevation of development above the flood plain will not unduly disrupt the provision and ongoing delivery of essential services, including access, power, water and sewerage.

c) Replacement of an existing building
    - Proposals that include essential infrastructure or bespoke accommodation for vulnerable groups or that involve significant intensification of use will not be acceptable.

d) Development for agricultural use, transport and utilities infrastructure, which for operational reasons has to be located within the flood plain.

e) Water compatible development such as for boat mooring, navigation and water based recreational use, which for operational reasons has to be located within the flood plain.

f) The use of land for sport and outdoor recreation, amenity open space or for nature conservation purposes, including ancillary buildings. This exception does not include playgrounds for children.

g) The extraction of mineral deposits and necessary ancillary development.

Development Proposals of Overriding Regional or Sub-Regional Economic Importance

A development proposal within the floodplain that does not constitute an exception to the policy may be permitted where it is deemed to be of overriding regional or sub regional economic importance and meets both of the following criteria:

- Demonstration of exceptional benefit to the regional or sub-regional economy;
- Demonstration that the proposal requires a location within the flood plain and justification of why possible alternative sites outside the flood plain are unsuitable.

Where the principle of development is established through meeting the above criteria, the planning authority will steer the development to those sites at lowest flood risk. The applicant is required to submit a Flood Risk Assessment for all proposals.

Minor Development[1] will be acceptable within defended and undefended flood plains subject to a satisfactory flood risk assessment.

Flood Protection / Management Measures proposed as part of the planning application, in order to facilitate development within flood plains, will not be acceptable:

- New hard engineered or earthen bank flood defences;
- Flood compensation storage works;
- Land rising (infilling) to elevate a site above the flood level within the undefined fluvial flood plain.

4.20 In addition to each development proposal being assessed on its own merits taking account of the scope for mitigation of the residual flood risk, a second key control mechanism within this policy is that all development proposals that would impact on existing Rivers (fluvial) flood plains (AEP 1 in 100) will require consultation with Rivers Agency. Finally, any planning application located in a known flood plain will require a Flood Risk Assessment.

4.21 It should be noted that Rivers Agency are content with the policy as it stands and suggest that it should be retained in its current form. Based on information provided by Rivers Agency this existing policy takes account of and has regard to legislative requirements, regional planning policy and sustainability appraisal objectives at the strategic level. The policy as it stands complies with statutory requirements. The thrust of the existing planning policy also takes account of the Council's own strategic objective regarding planning and flood risk. Council may wish to consider adopting the relevant parts of the existing policy FLD1 regarding development related to the River (fluvial) flood plains, given that Mid Ulster has no coastal boundaries.

4.22 **Option 2** – *Alternative Policy Approach* – Council may wish to develop new policy by introducing a more restrictive approach, similar to **Special Countryside Areas**, within which all types of development will not be permitted within River (fluvial) Flood Plains i.e. a blanket ban on new development within identified fluvial flood plains.

Preferred Option

4.23 It is considered that Option 1 is the preferred approach at this time which ensures that where relevant protection is provided. In adopting this approach a policy could be worded along the following lines:

- **Development within fluvial floodplains identified as subject to an 1 in 100 year fluvial flood risk (AEP of 1%) will not accord with the plan unless the following circumstances apply:**
  - **The development proposal constitutes a valid exception to the presumption against development in flood plains (Figure 2);**
  - **The development proposal is of overriding regional economic importance;**
  - **The development proposal is comprised of a minor non-residential development of less than 150 square metres or is a minor extension or alteration or ancillary householder development associated with an existing residential development**
- **The following types of development will not be allowed in an identified fluvial flood plain under any circumstances:**
  - **Essential Infrastructure such as power supply and emergency services;**
  - **Storage of Hazardous Substances**
  - **Bespoke accommodation for Vulnerable Groups such as schools, residential/ nursing homes, sheltered housing; or**
  - **Development located close to flood defences**
- **Land infilling, which involves permanently elevating a site to an acceptable level above the flood plain in order to facilitate development will not be acceptable within the fluvial flood plain, where displacement of flood water would be likely to cause flooding elsewhere.**
- **Where flood Protection and /or management measures are required in order to facilitate development within flood plains, the following will not be acceptable:**
  - **New hard engineered or earthen bank flood defences;**
  - **Flood compensation storage works;**

- **Land rising (infilling) to elevate a site above the flood level within the undefined fluvial flood plain.**

Figure 2

Exceptions to the Presumption against Development in Flood Plains

Defended Areas

Previously developed land protected by flood defences, as identified by Rivers Agency on their Strategic Flood Map.

All other undefended Areas

- Replacement of an existing building;
- Development for agricultural use, transport and utilities infrastructure, which for operational reasons has to be located in the flood plain;
- Water compatible development, such as for boating purposes, navigation and water based recreational use, which for operational reasons has to be located in the flood plain;
- The use of land for sport or outdoor recreation, amenity open space or for nature conservation purposes, including ancillary buildings;
- The extraction of mineral deposits and necessary ancillary development.

Protection of Flood Defence and Drainage Infrastructure

SPPS Regional Strategic Policy

4.24 Flood defence and drainage infrastructure are critical in providing a level of flood protection to people and property and adequate land drainage. Accordingly, development proposals that would impede operational effectiveness or hinder access for maintenance purposes should not be permitted. Generally, this will require the retention of an adequate working strip alongside watercourses and a general presumption against development therein. The erection of buildings or other structures over the line of a culverted watercourse should also be resisted.

Policy Options

4.25 **Option 1** – **Retain Policy FLD2** which states that the planning authority will not permit development that would impede the operational effectiveness of flood defence and drainage infrastructure or hinder access to enable their maintenance. Such flood defences and drainage infrastructure are critical in providing a level of flood protection to people and property and adequate land drainage. It is essential that a working strip is retained to facilitate future maintenance by Rivers Agency, other statutory undertaker or the riparian landowners. The working strip should have a minimum width of 5 metres, but

up to 10 metres where considered necessary, and be provided with clear access and egress at all times. The retention of a working strip along watercourses will have added benefits, including general amenity, enhanced biodiversity and increased control over water pollution, the latter assisting in the implementation of the Water Framework Directive. In addition there is a presumption against the erection of buildings or other structures over the line of a culverted watercourse in order to facilitate replacement, maintenance or other necessary operations. It is also proposed that this policy should be combined with Policy FLD4.

4.26 There is no alternative option for this existing policy. It should be noted that Rivers Agency are content with the policy as it stands and suggest that it should be retained in its current form. Based on information provided by Rivers Agency this existing policy takes account of and has regard to legislative requirements, regional planning policy and sustainability appraisal objectives at the strategic level. The policy as it stands complies with statutory requirements. The thrust of the existing planning policy also takes account of the Council's own strategic objective regarding planning and flood risk.

4.27 The existing policy reflects the precautionary approach to flooding and flood risk management. It helps to ensure that new and existing development is as resilient as possible to all potential impacts.

Preferred Option

4.28 It is considered that Option 1 is the preferred approach at this time which ensures that where relevant protection is provided. In adopting this approach a policy could be worded along the following lines:

- **The planning authority will not permit development that would impede the operational effectiveness of flood defence and drainage infrastructure**.

Artificial Modification of Watercourses

SPPS Regional Strategic Policy

4.29 While culverting may in some instances alleviate local flood risk, it cannot eliminate it and often increases the flood risk downstream by the accumulation of higher flows. The artificial modification of watercourses through culverting or canalisation is also widely considered to be environmentally unsustainable as such operations can adversely impact upon landscape quality, ecological integrity and biodiversity of watercourses.

4.30 Planning authorities should only permit the artificial modification of a watercourse in the exceptional circumstances where culverting of a short length of a watercourse (usually less than 10m) is necessary to provide

access to a development site (or part thereof), or where such operations are necessary for engineering reasons unconnected with any development proposal.

Policy Options

4.31 **Option 1 – Retain Policy FLD4** which states that the planning authority will only permit the artificial modification of a watercourse, including culverting or canalisation operations, in either of the following exceptional circumstances: where the culverting of short length of a watercourse is necessary to provide access of a development site or part thereof; where it can be demonstrated that a specific length of watercourse needs to be culverted for engineering reasons and that there are no reasonable or practicable alternative courses of action. There is scope to shorten and combine this existing policy with Policy FLD2.

4.32 There is no alternative option for this existing policy. It should be noted that Rivers Agency are content with the policy as it stands and suggest that it should be retained in its current form. Based on information provided by Rivers Agency this existing policy takes account of and has regard to legislative requirements, regional planning policy and sustainability appraisal objectives at the strategic level. The policy as it stands complies with statutory requirements. The thrust of the existing planning policy also takes account of the Council's own strategic objective regarding planning and flood risk.

Preferred Option

4.33 It is considered that Option 1 is the preferred approach at this time which ensures that where relevant protection is provided. In adopting this approach a policy could be worded along the following lines:

- **Development proposals which require the artificial modification of a watercourse will not accord with the plan. Exceptions are where:**
    - **culverting of a short length of a watercourse less than 10 metres is necessary to provide access to a development site (or part thereof);**
    - **or where such operations are necessary for engineering reasons unconnected with any development proposal.**

Development at Surface Water (Pluvial) Flood Risk outside Flood Plains

SPPS Regional Strategic Policy

4.34 Surface water or pluvial flooding occurs as a result of high intensity rainfall which overwhelms natural or man-made drainage systems resulting in water flowing overland and ponding in depressions in the ground. It is a particular problem in urban areas which are often dominated by non-permeable surfaces such as roofs, roads, patios and car parking areas that restrict infiltration of water into the ground and promote run-off. The steady growth of urban areas has served to intensify surface water run-off and to place additional pressures on the piped drainage network. It is not uncommon for drainage systems to be overwhelmed during periods of high intensity rainfall, particularly when blockages occur. The problem is exacerbated in many areas by an outdated drainage infrastructure that has not been updated to cope with the rate of development.

4.35 Planning authorities should only facilitate development in areas where there is evidence of a history of surface water flooding when a developer is able to demonstrate, through a Drainage Assessment (DA), that the flood risk can be effectively controlled and mitigated and that it will not create greater potential for surface water flooding elsewhere. Particular account should be taken of adverse impact upon other development or features of importance to nature conservation, archaeology or the built heritage.

4.36 A DA will be required for all development proposals that exceed any of the following thresholds: a residential development comprising of 10 or more dwelling units; a development site in excess of 1 hectare; or a change of use involving new buildings and / or hard surfacing exceeding 1000 square metres in area. A DA will also be required for any development proposal, except for minor development, where the proposed development is located in an area where there is evidence of a history of surface water flooding; or where surface water run-off from the development may adversely impact upon other development or features of importance to nature conservation, archaeology or the built heritage.

4.37 A development requiring a DA will be permitted where it is demonstrated through the DA that adequate measures will be put in place so as to effectively mitigate the flood risk to the proposed development and from the development elsewhere. Where the proposed development is also located within a fluvial or coastal flood plain, then the policy on ‘Development in River (Fluvial) and Coastal Flood Plains’ will take precedence.

4.38 In some areas there may be potential for surface water flooding, as opposed to a known history of this type of flooding. Where there is potential for surface water flooding, for example as indicated by the surface water layer of the Strategic Flood Map, the onus should rest upon the developer to assess the flood risk and drainage impact and to mitigate the risk to the development and any adverse impacts beyond the site.

4.39 In managing development, particularly in areas susceptible to surface water flooding, planning authorities should encourage developers to use sustainable drainage systems (SuDS) as the preferred drainage solution. Such systems are widely used in other UK jurisdictions and have been shown to be more effective than traditional piped drainage in reducing surface water flooding as well as providing other environmental, economic and social benefits. Furthermore using permeable materials for hard landscaped surfaces in new developments can reduce soil sealing.

4.40 **If it becomes a statutory requirement, through NI Climate Change legislation to implement Sustainable Drainage Systems during the timeframe of the LDP than a bespoke policy for SuDS shall be adopted. Until such times as there is a legislative requirement to implement SuDS, the SPPS regional strategic policy for Flood Risk shall be in place.**

Policy Options

4.41 **Option 1 – Retain Policy FLD3** which states a Drainage Assessment will be required for all development proposal that exceed any of the following thresholds: A residential development comprising of 10 or more dwelling units; a development site in excess of 1 hectare; a change of use involving new buildings and /or hard surfacing exceeding 1000 square metres in area. Further details are set out in Figure 3 below.

Figure 3

A Drainage Assessment will be required for all development proposal that exceed any of the following thresholds:

- A residential development comprising of 10 or more dwelling units;
- a development site in excess of 1 hectare;
- a change of use involving new buildings and /or hard surfacing exceeding 1000 square metres in area

A Drainage Assessment will also be required for any development proposal, except for minor development, where:

- The proposed development is located in an area where there is evidence of a history of surface water flooding.
- Surface water run-off from the development may adversely impact upon other development or features of importance to nature conservation, archaeology or the built heritage.

Such development will be permitted where it is demonstrated through the drainage assessment that adequate measures will be put in place so as to effectively mitigate the flood risk to the proposed development and from the development elsewhere.

Where a Drainage Assessment is not required but there is potential for surface water flooding as indicated by the surface water layer of the Strategic Flood Map, it is the developer's responsibility to assess the flood risk and drainage impact and to mitigate the risk to the development and any impacts beyond the site.

Note that where the proposed development is located within a fluvial flood plain, then Policy FLD1 will take precedence.

4.42 It should be noted that Rivers Agency are content with the policy as it stands and suggest that it should be retained in its current form. Based on information provided by Rivers Agency this existing policy takes account of and has regard to legislative requirements and sustainability appraisal objectives at the strategic level. The policy as it stands complies with statutory requirements. The thrust of the existing planning policy also takes account of the Council's own strategic objective regarding planning and flood risk.

4.43 **Option 2** *Alternative Policy Approach* Council may wish to consider develop a new policy which states that a Drainage Assessment is required for all development proposals located within areas of Surface Water (Pluvial) Flood Risk, no exceptions. This would be a much more restrictive policy.

Preferred Option

4.44 It is considered that Option 1 is the preferred approach at this time which ensures that where relevant protection is provided. In adopting this approach a policy could be worded along the following lines:

- **New development will be required to demonstrate that there is adequate drainage to accord with the plan. A Drainage Assessment will be required for all development proposals that exceed any of the following thresholds:**
  - **A residential development comprising of 10 or more dwelling units;**
  - **A development site in excess of 1 hectare;**
  - **A change of use involving new buildings and /or hard surfacing exceeding 1000 square metres in area**
- **A Drainage Assessment will be required for any development proposal where:**
  - **The proposed development is located in an area where there is evidence of a history of surface water flooding; and**
  - **Surface water run-off from the development may adversely impact upon other development or features of importance to nature conservation, archaeology or the built heritage**

  Such development will be permitted where it is demonstrated through the Drainage Assessment that adequate measures will be put in place so as to effectively mitigate the flood risk to the proposed development and from the development elsewhere
- **Where a Drainage Assessment is not required but there is potential for surface water flooding as indicated by the surface water layer of the Strategic Flood Map, it is the developer's responsibility to assess the flood risk and drainage impact and to mitigate the risk to the development and any impacts beyond the site.**

Development in Proximity to Reservoirs

4.45 Water impounding structures such as reservoirs are a recognised source of flood risk because of the potential for downstream flooding which may ensue if the structure fails, is overtopped, or in event of a controlled release of water from the reservoir as part of the normal management regime. In any of these circumstances there is potential for rapid inundation of downstream areas and response times to flooding are likely to be short.

4.46 New development within the flood inundation area[9] of a controlled[10] reservoir can only be justified where the condition, management and maintenance regime of the reservoir are appropriate to provide assurance regarding reservoir safety. Accordingly, planning permission for new development should only be granted to such assurance, provided by a suitably qualified engineer and supported by DARD Rivers Agency, as the responsible body for the management of reservoir flood risk.

4.47 Applications for built development in these areas must also be accompanied by a FRA which demonstrates an assessment of the downstream flood risk in various scenarios (for example, controlled release of water, uncontrolled release due to reservoir failure, change in flow paths as a result of the proposed development). The FRA will also need to set out suitable measures to manage and mitigate the identified flood risks, including details of emergency evacuation procedures.

4.48 Development will be precluded where the FRA indicates a likelihood of fast flowing and / or deep inundation. There will also be a presumption against certain types of development in the flood inundation area including bespoke development for vulnerable groups, essential infrastructure for the storage of hazardous substances likely to cause pollution in a flood event.

River Agency Consultation Response Policy FLD5

4.49 River's Agency commented that the policy was needed as the flood risk from reservoirs was not adequately addressed in the original version of PPS15, as highlighted during the drafting process for the new reservoir safety legislation for Northern Ireland. Rivers Agency considers that this policy is robust, and is working to provide development maps which will assist applicants to comply with the policy. It is envisaged that Reservoir Development Management maps will be available to the Council in 2016.

4.50 FLD5 requires the applicant to demonstrate that the condition, management and maintenance regime of the reservoir is appropriate. In the case of publically owned reservoirs this should be relatively straightforward and the

[9] As defined by Rivers Agency for individual reservoirs

[10] Reservoirs with an individual or combined capacity greater than 10000 cubic metres above the natural level of any part of the surrounding land as defined by the emerging Reservoirs Bill

applicant should approach the public body for information. For privately owned reservoirs, it is likely that the applicant will be required to do some investigatory work themselves.

4.51 Rivers Agency has identified five Reservoirs within the Mid Ulster District Council. These are:

- Dungannon
- Castledawson
- Upperlands
- Cappagh
- Straw

Policy Options

4.52 **Option 1 – Retain Policy FLD5** Details of the existing policy are set out in Figure 4 below.

Figure 4

New Development

New development will only be permitted within the potential flood inundation area of a 'controlled reservoir as shown on the Strategic Flood Map if:

- the application can demonstrate that the condition, management and maintenance regime of the reservoir is appropriate to provide sufficient assurance regarding reservoir safety, so as to enable the development to proceed;
- the application is accompanied by a Flood Risk Assessment which demonstrates:
  1. an assessment of the downstream flood risk in the event of:
     - a controlled release of water;
     - an uncontrolled release of water due to reservoir failure;
     - a change in flow paths as a result of the proposed development, and;
  2. that there are suitable measures to manage and mitigate the identified flood risk, including details of emergency evacuation procedures

Replacement Buildings

A proposal for the replacement of an existing building within the potential flood inundation area downstream of a controlled reservoir must be accompanied by a Flood Risk Assessment. Planning permission will be granted provided it is demonstrated that there is no material increase in the flood risk to the development or elsewhere.

All Development

There will be a presumption against development within the potential flood inundation area for proposals that include:

- essential infrastructure;
- storage of hazardous substances;
- bespoke accommodation for vulnerable groups;

and for any development located in areas where the Flood Risk Assessment indicates potential for an unacceptable combination of depth and velocity.

4.53 **Option 2 – Blanket Ban Approach** Under this approach no new development regardless of type or size would be permitted within the identified inundation area associated with all controlled reservoirs. The inundation areas for each controlled reservoir in Mid Ulster district would be required from the competent body i.e. Rivers Agency. These Maps would need to be publicly available and clearly illustrate the affected inundation areas.

4.54 **Option 3 – No Policy on Development in Proximity to Reservoirs** Under the policy approach Mid Ulster would not provide operational planning policy on development in proximity to reservoirs. Currently there is an absence of Maps or data relating to reservoir inundation areas for the reservoirs within Mid Ulster. Such information is not readily available to planning officers or indeed the public. Therefore a member of the public in making an application would not be aware that they were proposing to locate in such an area. It is the view of Mid Ulster that this is an untenable situation and that until such times as this information is available to both the planning officers and the public then an operational policy should not be provided.

4.55 It is important to note that this does not result in a policy void at this time since the operational planning policy contained within PPS15 remains in place until the Plan Strategy is adopted and indeed strategic policy is contained within the SPPS. It is hoped that this matter will have been progressed further with the Rivers Agency by the time that the Plan Strategy is published and that an agreed and workable solution will have been arrived at.

Preferred Option

4.56 It is considered that Option 3 is the preferred approach at this time.

5.0 Recommendation

5.1 It is recommended that the policy options contained within this Paper together with the preferred options are subjected to Sustainability Appraisal/Strategic Environmental Assessment, before any final decisions are made on which options will go forward for public consultation in the Preferred Options Paper.

Appendix Three – Extent of Climate Change Flood Risk in Mid Ulster District

Mid Ulster Q100 Climate Change 2030 Flood Map

Development Limit

Q100 Climate Change 2030 Flood Extent

Comhairle Ceantair Lár Uladh Mid Ulster District Council