

**APPENDIX C - Leeds Local Flood Risk Management Strategy - List of Measures**

ID	Priority	Scheduled Review/Completion Date	Measure	Location (if applicable)	Category	Relevant Objective from LFRMS	Progress/Comments (reference other sources of information)	Benefits/ Outcome	Costs/ Resource Implications	Lead Organisation	Support Organisation	Measure Owner	Last Updated
<b>POLICIES</b>													
P3	HIGH	On-going	Develop register of structures and features which are likely to have a significant effect on flood risk.	City wide	4. Asset management and maintenance	6. Improve understanding of local flood risk and seek to decrease local flood risk through implementation of affordable, high quality measures to alleviate flooding where practicable.	This is a requirement under Section 21 of the Flood and Water Management Act (2010). LCC are progressing this and have purchased new software "FloodVu" which will assist with the recording of asset information. This software links directly with the LCC's	Improve knowledge of existing infrastructure and conditions and promote a sustainable approach to asset management and maintenance.	Staff resource	Leeds City Council	Environment Agency & Yorkshire Water Services	LCC Flood Risk Management	20/01/15
P4	HIGH	On-going	Identify locations where culverts can be removed or improved through redevelopment	City wide	2. Spatial planning and development control	3. Develop a consistent, affordable and sustainable approach to planning and investment in flood risk management: land allocation, SuDS, SABs;	This measure is listed in the Aire CFMP for the Leeds Policy Unit - to be progressed by 2015.	Improve knowledge of existing infrastructure and conditions and promote a sustainable approach to asset management and maintenance. Redevelopment plans will include consideration of the removal of problem culverts	Staff resource	Environment Agency	Leeds City Council	Environment Agency	20/01/15
P5	HIGH	On-going	Watercourse and beck condition surveys	City wide	4. Asset management and maintenance	6. Improve understanding of local flood risk and seek to decrease local flood risk through implementation of affordable, high quality measures to alleviate flooding where practicable.	TBC	Improve knowledge of existing infrastructure and conditions and promote a sustainable approach to asset management and maintenance.	Staff resource	Leeds City Council	Environment Agency	LCC Flood Risk Management	20/08/13
P6	HIGH	On-going	Improve communications, engagement and coordination of activities with internal and external partners (including RMA's): Leeds City Council Flood Risk Management Group; Technical Standards and Guidance; Planning and Flood Risk; Yorkshire and Humber Learning Alliance, Metro (transport network).	-	1. Flood awareness, response and recovery	1. Improve co-operation between LLFA and other RMA's, in terms of procedure, to meet the requirements of new legislation and achieve holistic (catchment wide) solutions to identified risks and problems – emergency planning;	Engagement and consultation is under way as part of LFRMS. Regular meetings required to share knowledge, review policy, strategy documents, list of measures...etc.	Formalise and improve cooperation between RMA's on FRM	Staff resource	Leeds City Council	Internal LCC departments and external stakeholders	LCC Flood Risk Management	20/08/13
P7	MEDIUM	On-going	Pump operation - carbon reduction	City wide	4. Asset management and maintenance	2. Promote sustainable flood risk management through: WFD compliance, climate change adaptation (UKCIP), land management, habitat protection and creation;	TBC	Reduce carbon emissions and improve energy efficiency	Staff resource	Leeds City Council	Environment Agency	LCC Flood Risk Management	20/08/13
P8	MEDIUM	Apr-15	Implement SuDS through Planning	City wide	2. Spatial planning and development control	3. Develop a consistent, affordable and sustainable approach to planning and investment in flood risk management: land allocation, SuDS, SABs;	This has replaced the SuDS Regulations, under Flood & Water Management Act 2010, that would have set up SABs	Development control - ensure new drainage systems incorporate SuDS measures to reduce runoff rates and therefore flood risk.	Staff resource	Leeds City Council	Environment Agency	LCC Forward Planning & Implementation, Sustainable Development Unit, Flood Risk	20/01/15
P9	MEDIUM	6 Monthly	Provide regular feedback to senior officers and elected members on FRM progress: working groups, strategies, list of measures...etc - Director of City Development (quarterly) - City Development (annually) - Other key officers as needs arise - City Development Scrutiny Board (annually) - All Area Committees (two-yearly)	-	1. Flood awareness, response and recovery	3. Develop a consistent, affordable and sustainable approach to planning and investment in flood risk management: land allocation, SuDS, SABs;	TBC	Ensures that there is ownership and awareness of on-going FRM work at appropriate levels of accountability.	Staff resource	Leeds City Council	Internal LCC departments and external stakeholders	LCC Flood Risk Management	20/08/13
P10	MEDIUM	Annually	Review and update Emergency Handbook, Generic Flooding Plan, Community Flood Action Plans, West Yorkshire Major Flood Incident Plan, Reservoir Emergency Plan	-	1. Flood awareness, response and recovery	1. Improve co-operation between LLFA and other RMA's, in terms of procedure, to meet the requirements of new legislation and achieve holistic (catchment wide) solutions to identified risks and problems – emergency planning;	Plans need to be updated with latest contact details, departments and processes. SG/HH have discussed with Paul Seddon in Peacetime Emergency Planning Unit and he is progressing this. This measure is listed in the Aire CFMP for the Leeds Policy Unit.	Ensures plans for coordination of FRM activities in the event of a flood are up to date and consequences and disruption of flooding are minimised.	Staff resource	Leeds City Council	Environment Agency & West Yorkshire Authorities	Peacetime Emergency Planning Unit	20/08/13
P11	MEDIUM	On-going	Engagement and communication with public on FRM issues - Targeted 'flood fairs' held in at-risk locations highlighting flood protection products; - Wider public information campaigns for at-risk households drawing attention to useful resources; - Engage with local flood action groups (EA and PEPU).	-	1. Flood awareness, response and recovery	5. Increase community awareness of flood risk and the work of the LLFA in managing this risk; engage with local communities and involve them in decision making – localism agenda;	Engagement and consultation has begun as part of LFRMS - Graham Lindsey and Paul Seddon are points of contact for flood action groups	Involve communities in decisions - localism agenda	Staff resource	Leeds City Council	Internal LCC departments and external stakeholders	LCC Flood Risk Management & Peacetime Emergency Planning Unit	20/08/13
P12	MEDIUM	On-going	Leeds City Council to increase their flood risk management capacity, knowledge and skills (as Lead Local Flood Authority) in order to deliver their new responsibilities as conferred under the Flood and Water Management Act 2010.	-	1. Flood awareness, response and recovery	4. Increase internal skills and ultimately capacity for flood risk management;	In accordance with Defra guidance on capacity building. Improve understanding of flood risk in the city and expertise to better manage consequences.	Increases local authority capacity and skills in flood risk management	Staff resource	Leeds City Council	Environment Agency	LCC Flood Risk Management	20/08/13
P13	MEDIUM	On-going	Significantly increase the percentage take-up of properties registered for flood warnings in flood warning areas across city. City wide campaign as current take-up is low.	City wide	1. Flood awareness, response and recovery	5. Increase community awareness of flood risk and the work of the LLFA in managing this risk; engage with local communities and involve them in decision making – localism agenda;	This measure is listed in the Aire CFMP for the Leeds Policy Unit - to be progressed by 2030.	The consequences of flooding will be reduced through the increased potential for effective action to take place following receipt of a flood warning	Staff resource	Environment Agency	Leeds City Council	Environment Agency	20/08/13
P14	LOW	2018	Review Local Flood Risk Management Strategy (LFRMS)	-	2. Spatial planning and development control	3. Develop a consistent, affordable and sustainable approach to planning and investment in flood risk management: land allocation, SuDS, SABs;	The LFRMS will be reviewed once every 6 years. This will link the LFRMS review with the cycles for reviewing the PFRA as outlined in the FRR. The first review is scheduled to be completed by October 2018.	Ensures LFRMS is updated with relevant information to reflect any changes in FRM	Staff resource	Leeds City Council	Internal LCC departments and external stakeholders	LCC Flood Risk Management	20/08/13
P15	LOW	Annually	Review LFRMS List of Measures	-	2. Spatial planning and development control	3. Develop a consistent, affordable and sustainable approach to planning and investment in flood risk management: land allocation, SuDS, SABs;	Review scheduled to take place at least annually to assess progress with current measures and add or remove measures as appropriate. First review scheduled for 1 year after the strategy is published.	Will assess progress with List of Measures and ensure continuous improvement	Staff resource	Leeds City Council	Internal LCC departments and external stakeholders	LCC Flood Risk Management	20/08/13
P16	LOW	6 Monthly	Review Council Policy on FRM - e.g. 'Maintaining Water Resources and Responding to Flood Incidents' approved by Exec Board on 17 May 2006 to ensure that it conforms to the requirements of the FWMA that local authorities should lead on the management of local flood risk, with the support of the relevant organisations.	-	2. Spatial planning and development control	1. Improve co-operation between LLFA and other RMA's, in terms of procedure, to meet the requirements of new legislation and achieve holistic (catchment wide) solutions to identified risks and problems – emergency planning;	The Policy should be reviewed in light of the publication of the FWMA.	Ensures clarity around Council's legal roles and responsibilities and that work programmes have a sound foundation.	Staff resource	Leeds City Council	Internal LCC departments and external stakeholders	LCC Flood Risk Management	20/08/13
P17	LOW	Annually	Maintain internet and intranet web pages to provide comprehensive information to all stakeholders on: - The sources of flooding and who is responsible for what; - How to prepare for flooding emergencies; - What to do when flooding occurs and who to report this to; - How flood risk is treated within the planning process.	-	1. Flood awareness, response and recovery	5. Increase community awareness of flood risk and the work of the LLFA in managing this risk; engage with local communities and involve them in decision making – localism agenda;	Internet and intranet pages in place and launched. Further feedback required from services on-going basis.	Ensures that there is a single consistent source of information on flood risk management.	Staff resource	Leeds City Council	Internal LCC departments and external stakeholders	LCC Flood Risk Management	20/08/13
P18	LOW	On-going	Promote the use of sustainable design principles in all future developments to ensure that the risk of flooding and climate change are fully taken into account e.g. - Promoting use of SuDS - Incorporating policies and recommendations within Leeds LDF - Developer contributions in Core Strategy - Biodiversity and local amenity - Climate Change Adaptation	City wide	2. Spatial planning and development control	2. Promote sustainable flood risk management through: WFD compliance, climate change adaptation (UKCIP), land management, habitat protection and creation;	This measure is listed in the Aire CFMP for the Leeds Policy Unit - to be progressed by 2015.	By embedding the requirements for SuDS and urban design principles within local policy we will be able to improve the management of the water environment in all new developments.	Staff resource	Leeds City Council	Environment Agency & Yorkshire Water Services	LCC Forward Planning and Implementation & Sustainable Development Unit	20/08/13
P19	LOW	Six Yearly	Review and update as appropriate the Strategic Flood Risk Assessment (SFRA) produced by Jacobs in October 2007.	-	2. Spatial planning and development control	3. Develop a consistent, affordable and sustainable approach to planning and investment in flood risk management: land allocation, SuDS, SABs;	24/04/12 - SG had meeting with DF to discuss this. DF indicated that the EA have published data updates online - document as a whole is broadly up to date.	Helps ensure there is a more complete understanding of flood risk at a high-level which takes account of YWS's network and other lessons learned or gaps.	Staff resource	Environment Agency	Leeds City Council	LCC Flood Risk Management & Forward Planning and Implementation	20/08/13
<b>COMPLETED POLICIES SINCE 2011</b>													
P20	Completed	October 2012	Undertake Strategic Environmental Assessment (SEA) for LFRMS	-	2. Spatial planning and development control	2. Promote sustainable flood risk management through: WFD compliance, climate change adaptation (UKCIP), land management, habitat protection and creation;	This is part of process of producing LFRMS. SEA Workshop planned for July 2012 to appraise the objectives and measures in the LFRMS - see 19	Will ensure LFRMS is sustainable and workable and also secure buy in from stakeholders	Staff resource	Leeds City Council	Environment Agency	LCC Sustainable Development Unit & Flood Risk Management	20/08/13
P1	Completed	Mar-14	Publish Local Flood Risk Management Strategy	-	2. Spatial planning and development control	3. Develop a consistent, affordable and sustainable approach to planning and investment in flood risk management: land allocation, SuDS, SABs;	Draft strategy currently being developed in parallel with an SEA.	Will raise awareness of the LFRMS and FRM issues in the city	Staff resource	Leeds City Council	Environment Agency	LCC Flood Risk Management	20/08/13
P2	Completed	Mar-14	Publish LFRMS List of Measures	-	2. Spatial planning and development control	3. Develop a consistent, affordable and sustainable approach to planning and investment in flood risk management: land allocation, SuDS, SABs;	List of measures currently being developed.	Will assess progress with List of Measures and ensure continuous improvement	Staff resource	Leeds City Council	Internal LCC departments and external stakeholders	LCC Flood Risk Management	20/08/13