

APPENDIX 1.

Worcestershire Local Flood Risk Management Strategy

Action Plan 2015 – 2021

1. Introduction

- 1.1. This document sets out the actions planned by the LLFA and the other Risk Management Authorities in Worcestershire over the next 6 years.
- 1.2. Each action is identified as contributing to one or more of the aims and objectives outlined in the Local Flood Risk Management Strategy and collectively they define how the FRM approaches described in the Strategy will be implemented
- 1.3. The purpose of the action plan is to define what will be done, by whom, when and at what cost.
- 1.4. This initial action plan identifies some activities which have already commenced but mostly those which are planned to commence in the short to medium term. However, the actions identified will be influenced by a number of factors vents and as such are provisional, and may be subject to change.
- 1.5. When determining priorities and actions, the Flood Risk Management Strategic Co-ordinating Group will direct its resources to areas where there is the greatest risk, and where investment will bring the greatest benefits. Demand for schemes and works will exceed available resources, so the LLFA and partners must be able to clearly define which action or scheme has the highest priority and this document should therefore be read in conjunction with the LFRMS and SWMP.
- 1.6. Sources of funding have been identified for some actions, however, there remains a significant resource gap and actions or schemes will only be brought forward when further assessment is made of their viability and after successful application for funds to the organisation responsible.
- 1.7. Therefore, flexibility about priorities will be needed during the delivery period of the LFRMS to allow for such changes. To this end the action plan will be reviewed on an annual basis to assess:
 - any material changes which may have impacted upon the LFRMS
 - progress against the LFRMS objectives
 - successful delivery in accordance with the action plan;
 - priorities and measures for the next period

2. Action plan

Status	Definition
Green	On target, no issues
Amber	On target, issues
Red	Off target/late

Aim 1 - Understand and appropriately prioritise flood risk								
Objective	Action	Lead	Partners	By when	Cost (est)	Potential funding sources	Previous Status	Current Status
1.1 Develop a County-wide flood risk management strategy	Develop a County wide flood risk management strategy	WCC	EA, STWL, NWWM, SWLDP, LSIDB	31/07/16	WCC staff time	Defra Capacity Grant, WCC	Done	Done
1.2 Develop a County-wide Surface Water Management Plan (SWMP).	Develop a countywide SWMP	WCC	NWWM, SWLDP, EA, STWL	01/04/17	N/A	Defra, WCC		

1.2 Develop a County-wide Surface Water Management Plan (SWMP).	Produce and publish local Flood Risk Management Plan for Bromsgrove Town Centre	WCC	NWWM, EA, STWL, HA	17/09/17	N/A	Defra, WCC		
1.2 Develop a County-wide Surface Water Management Plan (SWMP).	Produce and publish local Flood Risk Management Plan for Droitwich Town Centre	WCC	SWLDP, EA, STWL, HA	31/12/17	N/A	Defra, WCC		
1.3 Review and record relevant Risk Management Authority data in a register and make available to the public and partners subject to data sharing and confidentiality agreements.	Develop the Asset Register and make available to the public and partners	WCC	NWWM, SWLDP, EA, STWL, LSIDB	2015/16	N/A	N/A	Done	Done
1.3 Review and record relevant Risk Management Authority data in a register and make available to the public and partners subject to data sharing and confidentiality	Maintain and further populate the asset register.	WCC	NWWM, SWLDP, EA, STWL, LSIDB	Ongoing	N/A Delegation to NWWM/SWLDP	WCC		

agreements.								
1.3 Review and record relevant Risk Management Authority data in a register and make available to the public and partners subject to data sharing and confidentiality agreements.	Populate the asset register to include assets at all relevant flood spots.	WCC	NWWM, SWLDP, EA, STWL, LSIDB	01/04/17	N/A Delegation to NWWM/ SWLDP	WCC		
1.4 Develop a County-wide protocol and ongoing performance milestones to populate the register and record of flood assets	Develop a policy for the Asset Register to be published within the LFRMS	WCC	NWWM, SWLDP, EA, STWL, LSIDB	2015-16	N/A	N/A	Done	Done
1.5 Develop a protocol for undertaking the Duty to Investigate	Develop a policy for the Duty to Investigate for inclusion within the LFRMS	WCC	NWWM, SWLDP, EA, STWL, LSIDB, HA	2015-16	N/A	N/A	Done	Done
1.6 Develop a County wide protocol and implementation plan for the designation of flood risk assets	Develop a protocol for the designation of flood risk assets for inclusion within the LFRMS	WCC	NWWM, SWLDP, EA, STWL, LSIDB	2015-16	N/A	N/A	Done	Done

Aim 2 - Manage and minimise the likelihood and impact of flooding

Objective	Action	Lead	Partners	By when	Cost (est)	Potential funding source	Previous Status	Current Status
2.1 Ensure that FRM is fully taken into account by those planning new infrastructure and developments	Develop local SuDS guidance that will promote the concept of multifunctional spaces as part of the master planning process.	WCC	NWWM	01/04/17	£5,000 WCC £? NWWM	WCC		Awaiting consultant to complete
2.2 Develop flood alleviation schemes	Produce and implement a plan for the procurement, installation, management and interpretation of a network of weather stations	NWWM SWLDP	WCC	Ongoing	£30,659 (current spend by NWWM) (plus ongoing maintenance costs)	£2k Cllr Funding £15k RBC Capital Rest revenue		
2.2 Develop flood alleviation schemes	Install flood storage, Callow Brook, Rubery	NWWM	WCC	2015 - 16	£53,000	£10,000 BDC £10,000 WCC	Done	Done

						£33,000 Trent RFCC		
2.2 Develop flood alleviation schemes	Investigate and develop scheme at Bournheath Village	NWWM	WCC, STWL, Parish Council, BDC, EA	01/04/17	£225k	WCC, STW, NWWM, Parish Council, RFCC		
2.2 Develop flood alleviation schemes	Carry out investigations and modelling at Bromsgrove Town Centre	EA	NWWM, WCC, STWL	31/03/17	£80k	RFCC		
2.2 Develop flood alleviation schemes	Raise New Road, Worcester	WCC Highways	EA, STW, Worcs Cricket Club, WCityC	01/01/18	£1.2m	Local Growth Fund, WCC		
2.2 Develop flood alleviation schemes	Carry out highway adaptation scheme, Pershore Bridges	WCC Highways	EA	01/04/18	£600k	Local Growth Fund, WCC		
2.2 Develop flood alleviation schemes	Carry out highway adaptation scheme, Wood Norton, Evesham	WCC Highways	EA	01/12/16	£400k	Local Growth Fund, WCC	Done	Done

2.2 Develop flood alleviation schemes	Carry out highway adaptation scheme, Marina Rd, Upton upon Severn	WCC Highways	EA	01/05/19	£1.8m	Local Growth Fund, WCC		
2.2 Develop flood alleviation schemes	Carry out highway adaptation scheme, Powick roundabout, Worcester	WCC Highways	EA	01/09/16	£60k	Local Growth Fund, WCC	Done	Done
2.2 Develop flood alleviation schemes	Repair Perdiswell Culvert, Worcester	Worcester City Council	EA, WCC, SWLDP	2016	£760k	Severn RFCC, Worcester City Council	Done	Done
2.2 Develop flood alleviation schemes	Investigate possible Tenbury flood alleviation scheme	EA	WCC	Ongoing	£5m	tbc		
2.2 Develop flood alleviation schemes	Investigate possible flood alleviation scheme, Severn Stoke	EA	WCC	Ongoing	£1.5m	tbc		
2.2 Develop flood alleviation schemes	Carry out modelling and possible feasibility study at Lower Moor	SWLDP	WCC	TBC ASAP	£20k	FDGiA, WDC, PC, WCC		

2.2 Develop flood alleviation schemes	Install flood storage area on Badsey Brook, Broadway	EA	WCC, SWLDP	31/12/17	£4.43m	FDGiA, Levy, local match, WCC, WDC		
2.2 Develop flood alleviation schemes	Improve existing flood alleviation scheme, Uckinghall	EA		2015	£40K	FDGiA	Done	Done
2.2 Develop flood alleviation schemes	Implement flood alleviation measures Kemerton	WCC	SWLDP	TBC ASAP	TBC	TBC		
2.2 Develop flood alleviation schemes	Install by-pass culvert at Broadway Culvert	WCC Highways	SWLDP	31/07/2016	£130k	WCC,FDGi a,SWLDP, STW, Levy	Done	Done
2.3 Work with partners, residents and businesses to install appropriate Property-Level Resilience (PLR) measures	Identify floodspots where Property-Level Resilience (PLR) is likely to form a part of the solution and form a clustered funding package(s)	WCC	NWWM, SWLDP, EA, STWL	01/04/17	N/A	N/A		
2.3 Work with partners, residents and businesses to install appropriate Property-Level Resilience	Install Property-Level Resilience (PLR) at Himbleton	EA		2020/2021	£140k	FDGiA		

(PLR) measures								
2.3 Work with partners, residents and businesses to install appropriate Property-Level Resilience (PLR) measures	Implement Property-Level Resilience (PLR) scheme at Wribbenhall, Bewdley	EA	WCC, NWWM, STW	31/10/17	£566k	Levy, FDGiA, STW		
2.3 Work with partners, residents and businesses to install appropriate Property-Level Resilience (PLR) measures	Implement Property-Level Resilience (PLR) scheme at Severnside, Stourport	NWWM	EA	June 2015	£33,000	RRG £25K WFDC £8K	Done	Done
2.3 Work with partners, residents and businesses to install appropriate Property-Level Resilience (PLR) measures	Implement Property-Level Resilience (PLR) scheme at East Waterside, Upton	MHDC	EA	November 2015	£61k	RRG MHDC Property Owners	Done	Done
2.3 Work with partners, residents and businesses to install appropriate Property-Level Resilience (PLR) measures	Implement Property-Level Resilience (PLR) scheme at Wick	SWLDP	EA	2016/2017	tbc	RFCC	Done	Done
2.3 Work with partners, residents and businesses to install appropriate Property-Level Resilience	Implement Property-Level Resilience (PLR) scheme at Hunters Way,	EA		2017/2018	£176K	RFCC		

(PLR) measures	Droitwich							
2.3 Work with partners, residents and businesses to install appropriate Property-Level Resilience (PLR) measures	Implement Property-Level Resilience (PLR) scheme at Evesham	EA	SWLDP, WCC	2018/2019	£850k	RFCC		
2.3 Work with partners, residents and businesses to install appropriate Property-Level Resilience (PLR) measures	Implement Property-Level Resilience (PLR) scheme at Waterworks Road & Diglis Terrace, Worcester	EA	SWLDP	2018/2019	TBC	RFCC		
2.4 Work with landowners, NGOs and other public bodies to reduce surface water run-off	Implement a project to fully co-ordinate and embed upstream catchment management techniques and efforts into the management of surface water	WCC	NWWM, SWLDP, EA, STWL, NFU	2021	£30,000	WCC		
2.5 Monitor ordinary watercourses and encourage appropriate maintenance	Carry out appropriate OWC section 25 enforcement	NWWM, SWLDP	WCC	Ongoing	Delegation to NWWM/ SWLDP	WCC		

2.5 Monitor ordinary watercourses and encourage appropriate maintenance	Administer the section 23 OWC consent process	NWWM, SWLDP	WCC	Ongoing	Delegation to NWWM/ SWLDP	WCC		
2.5 Monitor ordinary watercourses and encourage appropriate maintenance	Inspect and maintain OWCs	NWWM, SWLDP	WCC, riparian owners	Ongoing	Delegation to NWWM/ SWLDP	WCC		
2.5 Monitor ordinary watercourses and encourage appropriate maintenance	Produce a leaflet and press releases on riparian ownership responsibilities	WCC	RMA's	01/04/17	£500	WCC		

Aim 3 - Develop and manage effective partnerships								
Objective	Action	Lead	Partners	By when	Cost (est)	Potential funding sources	Previous Status	Current Status
3.1 Identify and communicate FRM roles and responsibilities to stakeholders	Produce refreshed FRM Communication Plan and feed actions into LFRMS	WCC	RMA's	31/05/17	N/A	N/A		
3.1 Identify and communicate FRM roles and responsibilities to stakeholders	Ensure appropriate communication and engagement with local communities before, during and after development of any schemes	Scheme Leaders	RMA's	Ongoing	N/A	N/A		
3.1 Identify and communicate FRM roles and responsibilities to stakeholders	Publish and make as widely available as possible / appropriate SWMP data	WCC	RMA's	30/04/17	N/A	N/A		
3.2 Work in partnership with the other RMA's in Worcestershire	Organise and administer the Worcs FRM Strategic Co-	WCC	RMA's	6 monthly	N/A	N/A		

	ordinating Group							
3.2 Work in partnership with the other RMAs in Worcestershire	Organise and administer the Worcs Land Drainage Group	WCC	RMAs	6 monthly	N/A	N/A		
3.3 Work in partnership with neighbouring and other LLFAs	Attend EA West Area LLFA networking group meetings	RMAs		Quarterly	N/A	N/A		
3.4 Engage and work in partnership with Worcestershire's communities	Develop an annual community forum	WCC	RMAs, community flood groups	31/10/17	N/A	WCC		
3.4 Engage and work in partnership with Worcestershire's communities	Develop a community FRM liaison group	WCC	RMAs, community reps	31/01/18	N/A	WCC		
3.4 Engage and work in partnership with Worcestershire's communities	Establish new flood groups	WCC	RMAs, parish councils, community groups	Ongoing	N/A	N/A		
3.4 Engage and work in partnership with Worcestershire's	Support existing community groups and communities	WCC	RMAs	Ongoing	N/A	N/A		

communities								
3.4 Engage and work in partnership with Worcestershire's communities	Commence a three year Community Engagement project via the NFF	WCC	NFF, RMAs, community groups	2015/2016	£60k	WCC	Done	Done

Aim 4 - Inform, develop and implement relevant plans, policies and strategies								
Objective	Action	Lead	Partners	By when	Cost (est)	Potential funding sources	Previous Status	Current Status
4.3 Influence other plans, policies and strategies, through partnership working where appropriate, to ensure the consideration of FRM	Ensure that surface water flooding is properly taken into account by other emerging plans, policies and strategies	WCC	RMA's	Ongoing	N/A	N/A		
4.3 Influence other plans, policies and strategies, through partnership working where appropriate, to ensure the consideration of FRM	Represent FRM within the Worcestershire Green Infrastructure Partnership, Local Nature Partnership, Worcestershire Infrastructure Group, Worcestershire Middle Severn CaBA Group.	WCC	RMA's	Ongoing	N/A	N/A		

Aim 5 - Secure, maximise and prioritise the appropriate allocation of funding and other resources								
Objective	Action	Lead	Partners	By when	Cost (est)	Potential funding sources	Previous Status	Current Status
5.1 Identify and maintain awareness of potential sources of FRM funding	Increase understanding of and engagement with local match funding sources	WCC	RMAs	Ongoing	N/A	N/A		
5.2 Maximise opportunities for funding	Develop and implement a FRM Fundraising Plan	WCC	RMAs, LPAs, LEP	30/04/17	N/A	N/A		
5.2 Maximise opportunities for funding	Increase FDGiA funding application capacity	WCC	RMAs	Ongoing	N/A	N/A		
5.3 Utilise the Defra capacity grant to deliver the LFRMS and other statutory responsibilities	Regularly review the likely future availability and allocation of the Defra capacity grant funding	WCC	NWWM, SWLDP, Defra	December 2016	N/A	N/A	Done No longer any grant available	Done
5.4 Undertake a review of the structure and	Identify and undertake a review of RMA capacity	WCC	RMAs	31/10/17	N/A	N/A		

deployment of FRM resources and identify potential efficiencies								
5.4 Undertake a review of the structure and deployment of FRM resources and identify potential efficiencies	Review and develop the District Service Level Agreements	WCC	NWWM, SWLDP	30/04/17	N/A	N/A		
5.5 Review and appropriately develop skills and knowledge amongst FRM staff	Ensure that planners and land drainage officers are fully aware of and able to utilise SWMP data / web mapping	WCC	RMAs, LPAs	31/07/17	N/A	N/A		

Aim 6 - Deliver sustainable environmental and economic benefits and contribute to the wellbeing of Worcestershire's communities and residents

Objective	Action	Lead	Partners	By when	Cost (est)	Potential funding sources	Previous Status	Current Status
6.1 Protect, enhance and conserve Worcestershire's built and natural environment.	Develop and roll out a standard simplified environmental impact process and checklist	WCC	RMAs	31/10/17	N/A	N/A		
6.1 Protect, enhance and conserve Worcestershire's built and natural environment.	Develop and apply environmental impact criteria to the prioritisation process	WCC	RMAs	31/07/17	N/A	N/A		
6.1 Protect, enhance and conserve Worcestershire's built and natural environment.	Embed any lessons learned from the Heritage Asset Disaster Planning project	WCC	RMAs	31/07/17	N/A	N/A		
6.1 Protect, enhance and conserve Worcestershire's built and natural environment.	Contribute to with the Worcestershire Woods for Water project (Water quality improvement and flood risk	WCC	RMAs, LEP, LNP, FC, Heartwoods	Ongoing	tbc			

	reduction)							
6.1 Protect, enhance and conserve Worcestershire's built and natural environment.	Contribute to the Vale of Evesham Landscape Partnership Project	WCC	RMAs, LEP, LNP, NE, WWT, EA	2023 – project end date	£30k £60k	WCC FRM WCC		
6.2 Adapt to future projected climate change	Ensure that investigations and schemes appropriately take climate change projections into account	WCC	RMAs	Ongoing	N/A	N/A		
6.2 Adapt to future projected climate change	Review and ensure compliance with the Worcestershire Climate Change Strategy	WCC	RMAs	March 2017	N/A	N/A	Done	Done
6.4 Reduce the negative impact of flooding on health and wellbeing	Develop and implement the Worcestershire Recovery Plan	WCC	RMAs, LRF, Communities	Ongoing	N/A	N/A		

Aim 7 - Develop, maintain and implement the LFRMS action plan								
Objective	Action	Lead	Partners	By when	Cost (est)	Potential funding sources	Previous Status	Current Status
7.1 Ensure that all owners of actions within the plan and listed partners are aware of their role in delivery of the LFRMS	Confirm awareness and acknowledgement of roles and responsibilities via the WLDG and FRMSCG, Overview and Scrutiny Panel	WCC	RMAs	Ongoing	N/A	N/A		
7.2 Regularly monitor progress with delivery of the action plan and update the status column accordingly	Report to each WLDG and FRMSCG on any amber and red status actions	WCC	RMAs	Ongoing	N/A	N/A		
7.3 Review and update the action plan every 12 months	Review and publish the results of action plan delivery every November as part of the FRM Annual Report	WCC	RMAs	Every November	N/A	N/A		