

London Borough of Croydon Local Flood Risk Management Strategy Action Plan

Version: 5.0
Revision Date: 01 September 2015
Next Review Date: 01 December 2015

ID	Objective	Measure / Scheme		Delivery		Programme				Funding			Priority	Comments
		Measure	Actions	Lead	Partners	Start	Finish	Review	Status	Est. Cost (£)	Source	Status		
1.1	1 Continue to build our evidence base on flood mechanisms, incidents and assets and improve how it is communicated internally and externally.	1.1 Improving in-house information management	1.1.1 Map all of Croydon's ordinary watercourses in GIS	Highways	Environment Agency	2014-2015	2015-2016	Sep-15	Implementation	£5001 - £25,000	Area Based Grant	Allocated	Moderate	
			1.1.2 Create inventory of what asset information is held in house and in what format.	Highways	All Croydon teams	2015-2016	2015-2016	Dec-15	Not yet commenced	<£5000	Internal (Maintenance)	To be confirmed	Moderate	
			1.1.3 Collate asset information into one system	ICT	All Croydon teams	2015-2016	2015-2016	Mar-16	In Progress	<£5000	Area Based Grant	To be confirmed	Moderate	
			1.1.4 Mapping of all flood assets in GIS	Highways & ICT		2015-2016	2016-2017	Sep-15	In Progress	<£5000	Area Based Grant	To be confirmed	Low	
			1.1.5 Meet with the comms team to develop 'report it' for better recording of different flood types	Highways & BC		2014-2015	2015-2016	Dec-15	In Progress	<£5000	Internal (Other)	To be confirmed	Low	
			1.1.6 Meet with Contact Centre to make changes where the right information is not being received	Highways	All Croydon teams	2014-2015	2015-2016	Sep-15	In Progress	<£5000	Internal (Other)	To be confirmed	Low	
			1.1.7 Download monthly reports from CRM of flood reports coming into contact centre for high level discussion at quarterly flood group	Highways		2015-2016	2015-2016	Dec-15	Not yet commenced	<£5000	Internal (Other)	To be confirmed	Moderate	
			1.1.8 Ensure most up to date flood mapping is accessible to all teams in the flood group including surface water	ICT services		2014-2015	2014-2015	Sep-15	In Progress	<£5000	Internal (Other)	Allocated	High	
			1.1.9 Establish understanding of costs of fitting of highways SuDS and maintenance compared to conventional drainage	Highways		2014-2015	2015-2016	Sep-15	In Progress	£5001 - £25,000	Defra SuDS funding	To be confirmed	Moderate	
1.2	2 Establish ways to keep the evidence base up to date and feeding into policy	1.2	1.2.1 Regular reports on study outcomes or new data to the flood group	All Croydon teams	Environment Agency, Thames Water	2013-2014	2020 onwards	Dec-15	In Progress	<£5000	Internal (Other)	Allocated	Low	
			1.2.2 Maintain regular communication with members and RFCC representative through the South West Flood Group	Highways		2011-2012	2020 onwards	Dec-15	In Progress	<£5000	Internal (Other)	Allocated	Moderate	
			1.2.3 Complete Flood group area on SharePoint where all flood management documents can be viewed.	Highways		2014-2015	2014-2015	Dec-15	In Progress	<£5000	Internal (Other)	Secured	High	
1.3	3 Raise profile and understanding of groundwater as a flood risk	1.3	1.3.1 Ensure emergency planning procedures consider response to groundwater events	Emergency Planning		2014-2015	2015-2016	Mar-15	Implementation	<£5000	Internal (Other)	Allocated	Moderate	
			1.3.2 Investigate strategy for cross borough groundwater management through 5 borough 'solution cell'	Highways		2014-2015	2020 onwards	Jun-15	In Progress	<£5000	Area Based Grant	Allocated	Moderate	
			1.3.3 Carry out detailed study of groundwater presence and flood mechanisms in Croydon	Highways		2015-2016	2017-2018	Dec-15	Not yet commenced	£5001 - £25,000	To be confirmed	To be confirmed	Moderate	
			1.3.4 Improve groundwater information on council website and develop a leaflet/flyer for residents	Highways & Em. Planning		2014-2015	2015-2016	Dec-15	In Progress	<£5000	Area Based Grant	To be confirmed	Moderate	
2.1	2 Maximise use of resources in targeted flood management.	2.1 Upskilling and training for existing staff on new areas of responsibility	2.1.1 Identify ways to increase awareness of SuDS in more teams across the council and roll out technical guidance on implementing the right SuDS	Dev Mgmt, Highways, Building Control		2014-2015	2015-2016	Sep-15	In Progress	<£5000	Internal (Other)	To be confirmed	High	
			2.1.2 Provide training needed for existing staff to assess SuDS applications	Dev Mgmt, Highways, Building Control		2014-2015	2014-2015	Sep-15	In Progress	<£5000	Area Based Grant	To be confirmed	High	
2.2	2.2 Communication about targets and objectives between teams	2.2	2.2.1 Report on team targets through quarterly flood group	All Croydon teams		2013-2014	2020 onwards	Dec-15	In Progress	<£5000	Internal (Other)	Secured	Moderate	
			2.2.2 Identify where regular maintenance of highways / footways / open spaces could have flood management or SuDS incorporated	Highways & Parks		2014-2015	2016-2017	Sep-15	In Progress	<£5000	Area Based Grant	To be confirmed	Moderate	
2.3	2.3 Monitoring funding streams available for flood remediation measures	2.3	2.3.1 Develop list of flood alleviation schemes of differing scales using priority / hotspot list to enable easy population of funding applications	Highways & Parks	Environment Agency	2014-2015	2020 onwards	Dec-15	In Progress	<£5000	Area Based Grant	To be confirmed	Moderate	
			2.3.2 develop list of funding streams, types of applications required and dates for submission of applications	Highways	Environment Agency	2015-2016	2015-2016	Sep-15	Not yet commenced	<£5000	Area Based Grant	To be confirmed	Moderate	
2.4	2.4 Use best current understanding and available funding to prioritise flood alleviation work	2.4	2.4.1 Commence first stage of Kenley flood alleviation scheme in CDA Group8_037	Highways		2014-2015	2014-2015	Sep-15	Planning	£25,001 - £50,000	FDGiA	Secured	High	
			2.4.2 Develop flood alleviation scheme for Caterham Bourne	Highways	Environment Agency, Surrey CC, Tandridge DC	2013-2014	2017-2018	Dec-15	Investigation	>£1m	FDGiA	Secured	Very High	
			2.4.3 Continue to review and improve gully maintenance based on reported problem areas & communicate changes to the public	Highways		2012-2013	2020 onwards	Sep-15	In Progress	£25,001 - £50,000	Internal (Other)	To be confirmed	High	
			2.4.4 Investigate localised flood problems around the Chaffinch Brook in Ashburton	Highways	Parks, Environment Agency	2015-2016	2016-2017	Dec-15	In Progress	£5001 - £25,000	Area Based Grant	To be confirmed	Moderate	
			2.4.5 Investigate influences of regular flooding hotspots	Highways & Parks		2015-2016	2020 onwards	Sep-16	Not yet commenced	>£50,000	Multiple	To be confirmed	Moderate	
2.5	2.5 Review effectiveness of emergency procedures and ensure our capabilities are known throughout the council and our commissioned services	2.5	2.5.1 Review emergency procedures following flooding in early 2014	Emergency Planning		2014-2015	2014-2015	-	Completed	<£5000	Internal (Other)	To be confirmed	High	
			2.5.2 Share findings of review with other council teams at flood group	Emergency Planning		2014-2015	2014-2015	-	Completed	<£5000	Not Applicable	Secured	Moderate	
			2.5.3 Identify actions to take forward following review	Flood Group		2014-2015	2014-2015	Sep-15	In Progress	<£5000	Internal (Other)	To be confirmed	Moderate	
3.1	3 Ensure evidence of historic floods and ongoing studies effectively feed into planning policy and decision-making	3.1 Maintain regular communication between highways and planning	3.1.1 Continue to attend quarterly flood group meetings	Flood Group		2013-2014	2020 onwards	Dec-15	In Progress	<£5000	Internal (Other)	To be confirmed	Moderate	
			3.1.2 Ensure flooding documents on the website correspond between planning and highways	Highways, Spat. Planning & Em. Planning		2015-2016	2015-2016	Sep-15	Not yet commenced	<£5000	Internal (Other)	To be confirmed	Low	
			3.1.3 Investigate how climate change is predicted to affect flood risk to inform long-term planning	Spatial Planning		2015-2016	2015-2016	Dec-15	Not yet commenced	<£5000	Internal (Other)	To be confirmed	Moderate	
3.2	3.2 Establish a borough-wide understanding of the future flood risk, including the likelihood of future flood events.	3.2	3.2.2 Update SFRA to ensure planned growth areas are informed by known hotspots and CDAs.	Spat. Planning, Em. Planning		2014-2015	2016-2017	Sep-15	Implementation	£5001 - £25,000	Internal (Other)	Secured	Moderate	
			3.2.3 Use updated SFRA to inform production of 'Croydon Local Plan: Detailed Policies and Proposals' using understanding of future flood risk to inform site allocations	Spatial Planning		2015-2016	2016-2017	Sep-15	In Progress	<£5000	Internal (Other)	To be confirmed	Moderate	
			3.2.1 Create 'living list' of high priority CDAs and smaller hotspots	Highways		2014-2015	2014-2015	Sep-15	In Progress	<£5000	Area Based Grant	To be confirmed	Moderate	
3.3	3.3 Establish the impact of planned growth on flooding hotspots/CDAs in collaboration with development plans	3.3	3.3.2 Include a layer of living list hotspots on internal GIS	Highways		2015-2016	2015-2016	Sep-15	Not yet commenced	<£5000	Internal (Other)	To be confirmed	Low	
			3.3.1 Quantify additional resource time needed to process SuDS applications as part of planning applications	Dev Mgmt	Highways, Building Control, Parks	2014-2015	2015-2016	Sep-15	In Progress	<£5000	Defra SuDS funding	To be confirmed	High	
4.1	4.1 Support sustainable growth and development by understanding the needs of all parties	4.1 Prepare for carrying out SuDS approvals in house	4.1.2 Review employment or procurement to meet SuDS obligations	Dev Mgmt	Highways	2014-2015	2015-2016	Dec-15	In Progress	<£5000	Defra SuDS funding	To be confirmed	Moderate	
			4.1.3 Develop a data submission criteria for developers submitting applications	Dev Mgmt	Highways, Building Control, Parks	2014-2015	2015-2016	Sep-15	In Progress	<£5000	Defra SuDS funding	To be confirmed	High	
			4.1.4 Create stronger ties between known surface water flood hotspots and planning decisions by evolving local policy	Dev Mgmt & Highways		2015-2016	2015-2016	Mar-16	Planning	<£5000	Internal (Other)	Allocated	Moderate	
			4.1.5 Investigate how processes can be shared with neighbouring boroughs	Highways	Dev Mgmt,	2014-2015	2015-2016	Sep-15	In Progress	<£5000	Area Based Grant	To be confirmed	Moderate	
			4.1.1	4.1.1	4.1.1	4.1.1	4.1.1	4.1.1	4.1.1	4.1.1	4.1.1	4.1.1	4.1.1	4.1.1

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4.2		4.2 Create tools / guidance for developers to help them to easily consider the most appropriate types of drainage	4.2.1 Create a hierarchy of preferred mitigation specific to Croydon or areas of Croydon - as part of SFRA update	Highways & Dev Mgmt		2014-2015	2015-2016	Dec-15	In Progress	<£5000	Internal (Other)	Secured	Moderate	
			4.2.2 Develop or collate guidance on costs of installing and maintaining different SuDS types	Highways & Dev Mgmt		2014-2015	2015-2016	Sep-15	In Progress	£5001 - £25,000	Defra SuDS funding	To be confirmed	High	
4.3		4.3 Review how we consider flood risk to and from minor developments and ways to encourage more sustainable design	4.3.1 Produce standing advice on consideration of local flood risk for smaller minor developments such as driveways and extensions	Development management, highways		2015-2016	2015-2016	Dec-14	Not yet commenced	<£5000	Defra SuDS funding	To be confirmed	Moderate	
			4.3.2 Review Local Plan to identify how to give stronger weight to consideration of flood risk in all development.	Spatial Planning	Highways & Dev Mgmt	2015-2016	2016-2017	Dec-14	In Progress	£5001 - £25,000	Internal (Other)	Allocated	Moderate	
			4.3.3 Review stance on allowing non-permeable paving	Development management,		2015-2016	2016-2017	Dec-15	Not yet commenced	<£5000	Internal (Other)	To be confirmed	Moderate	
5.1	5	Work effectively with Risk Management Authorities in and around Croydon to jointly manage the risks.	5.1.1 Collate evidence of problem areas relating to other RMA's infrastructure	Highways & Parks		2014-2015	2015-2016	Dec-15	In Progress	<£5000	Area Based Grant	To be confirmed	Moderate	
			5.1.2 Timetable meetings to discuss prioritisation and management responsibilities with Thames Water or engage them within internal flood group	Highways		2015-2016	2015-2016	Sep-15	In Progress	<£5000	Internal (Other)	To be confirmed	Moderate	
			5.1.3 Engage with Network Rail regarding planned maintenance to their assets along route of the Caterham Bourne	Highways		2014-2015	2020 onwards	Dec-15	In Progress	<£5000	Internal (Other)	To be confirmed	Moderate	CM investigating
			5.1.4 Engage with Sutton & East Surrey Water regarding their Flood Action Plan for Kenley Water Treatment works.	Highways		2014-2015	2020 onwards	Dec-14	In Progress	<£5000	Internal (Other)	To be confirmed	Moderate	
5.2		5.2 Work with multi-agency partners to enhance local arrangements for flood planning and response.	5.2.1 Formalise and / or record successful partnership approaches, applied in February 2014	Em. Planning & Highways		2014-2015	2015-2016	-	Completed	<£5000	Internal (Other)	To be confirmed	High	
			5.2.2 Clarify lines of communication between agencies	Em. Planning & Highways		2014-2015	2015-2016	Sep-15	In Progress	<£5000	Internal (Other)	To be confirmed	High	
			5.2.3 Pursue collaborations through LoDEG to develop ways of anticipating and managing flooding in London.	Highways		2015-2016	2020 onwards	Dec-15	In Progress	<£5000	Internal (Other)	To be confirmed	Low	
5.3		5.3 Continue to meet regularly and work with the other five South West London Boroughs	5.3.1 Continue to attend SW Flood Group meetings	Highways		2012-2013	2020 onwards	Sep-15	In Progress	<£5000	Internal (Other)	Allocated	Low	
			5.3.2 Monitor opportunities to jointly address cross-border flood management	Flood Group	Neighbouring LLFAs, Thames Water	2013-2014	2020 onwards	Sep-15	In Progress	<£5000	Not Applicable	Allocated	Moderate	
6.1	6	Improve awareness of the causes of flooding with the general public and encourage proactive management	6.1.1 Expand information available on the council website	Flood Group		2013-2014	2016-2017	Dec-15	In Progress	<£5000	Internal (Other)	To be confirmed	Moderate	
			6.1.2 Encouraging sign up to EA flood warning service	Em. Planning & Highways		2013-2014	2020 onwards	Dec-15	In Progress	<£5000	Not Applicable	Secured	Moderate	
			6.1.3 explore initiatives from other local authorities/districts for promoting resilience work in schools	Em. Planning		2015-2016	2020 onwards	Dec-15	Not yet commenced	<£5000	To be confirmed	To be confirmed	Low	
			6.1.4 Promote available advice and guidance documents e.g. Thames Water, Environment Agency, Water UK	Em. Planning & Highways	Environment Agency	2013-2014	2020 onwards	Dec-15	In Progress	<£5000	Internal (Other)	To be confirmed	Moderate	
6.2		6.2 Encourage residents to help themselves with small-scale initiatives	6.2.1 Work together with insurers on community resilience activities to promote flood risk awareness and flood property mitigation measures	Em. Planning & Highways	Zurich	2015-2016	2020 onwards	Dec-15	Not yet commenced	<£5000	To be confirmed	To be confirmed	Moderate	
			6.2.2 Encouraging sign up to contents insurance	Em. Planning & Highways		2013-2014	2020 onwards	Sep-15	In Progress	<£5000	Not Applicable	Secured	Moderate	
			6.2.3 Investigating part-funding options to help residents and communicate these more widely with groups such as neighbourhood watch	Highways		2015-2016	2017-2018	Dec-15	In Progress	<£5000	To be confirmed	To be confirmed	Low	
			6.2.4 Support formation of community groups and volunteering initiatives	Em. Planning & Highways		2013-2014	2020 onwards	Dec-15	In Progress	<£5000	Multiple	To be confirmed	Low	
6.3		6.3 Targeting riparian owners and educating on responsibilities	6.3.1 Producing a local 'riparian owner' guidance	Highways	Parks	2015-2016	2015-2016	Dec-15	In Progress	<£5000	Area Based Grant	To be confirmed	Low	
			6.3.2 Targeted engagement with residents living near watercourses	Highways	Environment Agency	2015-2016	2020 onwards	Mar-16	Not yet commenced	<£5000	Area Based Grant	To be confirmed	Moderate	
			6.3.3 Undertake regular surveys of watercourses to identify riparian owners and ensure they are maintaining their channels and assets as required.	Highways		2015-2016	2020 onwards	Dec-15	Not yet commenced	<£5000	Internal (Maintenance)	To be confirmed	Moderate	
6.4		6.4 Develop our capability to warn and to provide information and advice to the public with partner organisations	6.4.1 Increase number of groundwater & rainfall monitoring points	Highways	Environment Agency	2015-2016	2020 onwards	Mar-16	In Progress	£6000 - £25,000	To be confirmed	To be confirmed	Low	
			6.4.2 Explore how Croydon can build on findings of Rain Gain project	Em. Planning & Highways		2015-2016	2016-2017	Dec-15	Not yet commenced	<£5000	Internal (Other)	To be confirmed	Low	
7.1	7	Take a more holistic view of asset management in Croydon, improving priorities and addressing source control more effectively.	7.1.1 Generate list of potential locations	Parks	Environment Agency	2014-2015	2016-2017	Dec-15	In Progress	<£5000	Internal (Other)	To be confirmed	Low	
			7.1.2 Assess potential for multiple benefits of de-culverting in identified locations	Parks	Environment Agency, Natural England	2015-2016	2017-2018	Dec-15	Not yet commenced	£5001 - £25,000	To be confirmed	To be confirmed	Moderate	
7.2		7.2 Seek to achieve multiple benefits in water management schemes	7.2.1 Communicate with Environment Agency about pollution problem areas	Parks & Highways	Environment Agency	2015-2016	2015-2016	Dec-15	Not yet commenced	<£5000	Internal (Other)	To be confirmed	Low	
			7.2.2 Identify opportunities where highways can work with green space and climate change officers to combine targets	Highways, Parks & Climate Change		2015-2016	2020 onwards	Mar-16	Not yet commenced	<£5000	To be confirmed	To be confirmed	Moderate	
			7.2.3 Review Planning policy to enhance the importance of environmental considerations in planning decisions.	Spatial Planning		2015-2016	2016-2017	Dec-15	Not yet commenced	<£5000	Internal (Other)	To be confirmed	Low	
8.1	8	Maximise opportunities to learn, improve and review flood management procedures based on lessons learnt	8.1.1 Review flood recovery in summer 2014 & determine any changes required	Em. Planning & Highways		2014-2015	2014-2015	-	Completed	<£5000	Internal (Other)	Secured	High	
			8.1.2 Generate new actions following review if required	Em. Planning		2014-2015	2015-2016	-	Completed	<£5000	Internal (Other)	Allocated	Moderate	
			8.1.3 Investigate the options for future management in Dale Road including clarification of asset ownership and downstream implications of changing the culvert size.	Highways	Thames Water, TfL, SESW	2014-2015	2015-2016	Dec-15	Planning	£5001 - £25,000	Internal (Maintenance)	Allocated	High	
			8.1.4 Develop a management approach for future protection of the Kenley WTW, which does not increase risk to other parts of the catchment.	Highways & Em. Planning	Environment Agency, TfL, SESW	2014-2015	2015-2016	Dec-15	In Progress		Internal (Other)	To be confirmed	High	
8.2		8.2 Establish Lessons Learnt review procedure	8.2.1 Nominated responsibility for leading review procedure	Highways		2014-2015	2014-2015	-	Completed	<£5000	Not Applicable	To be confirmed	High	
			8.2.2 Produce detailed report of emergency response to 2014 floods	Highways & Em. Planning		2014-2015	2014-2015	-	Completed	<£5000	Internal (Other)	Secured	High	
			8.2.3 Highlight areas where improvements could be made and review with internal flood group or sub-group of responders	Highways & Em. Planning	LFB, Environment Agency, TW, SESW	2014-2015	2015-2016	-	Completed	<£5000	Internal (Other)	To be confirmed	Moderate	