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Kingston upon Thames Local Flood Risk Management Strategy

ID	Objective	Measure / Scheme	Actions	Type	Location	Ward	X	Y	CDA	SWMP Action	Delivery		Programme				Indicator	Comments
											Lead	Partners	Start	Finish	Review	Status		
001	1. Educate, encourage and empower local stakeholders to take action on reducing flood risk.	Educate those at risk of flooding to improve their understanding of the potential implications their actions have on flood risk assets.	Identify the best methods to communicate the risk of flooding to residents across the borough	Investigation of Flood Risk							Kingston LLFA - Highways / Emergency Planning / Communications		2015-16	2016-17	Oct-16	In Progress	Oct 2015: Exploration underway of a borough Community Resilience Forum with invited representatives from all community groups.	
			Review Kingston Flood Management webpages to ensure they include all relevant information on flood risk for the borough and links to external websites where guidance is available on managing flood risk, e.g. National Flood Forum							Kingston LLFA - Highways / Emergency Planning		2015-16	2015-16	Oct-16	In Progress	Oct 2015: Initial review begun in August 2015, awaiting Comms to confirm when the webpages can be updated due to busy workload.		
			Set up webpage / web reporting facility to allow the public to report flooding incidents							Kingston LLFA - Highways		2015-16	2015-16	Oct-16	Completed	Ongoing: Facility completed early/mid 2015 with monthly checks on the reports being made. From early 2015 there have been 41 contacts.		
			Utilise enforcement powers to block inappropriate use of the drainage system							Kingston LLFA - Highways		2015-16	18 onwards	Oct-16	In progress	Ongoing: Street Scene Inspectors respond to enforcement request as needed.		
			Consolidate records of flooding to compile a list of local areas at risk so as to provide guidance on managing local flood risks.							Kingston LLFA - Highways / Emergency Planning		2015-16	18 onwards	Oct-16	In Progress	Ongoing: Web-reported flood event records are added in a specialised document.		
002	Ensure that emergency plans and responses to flood incidents are effective and that communities are able to respond properly to flood warnings.		Produce a Flood Risk Management Communications Plan	Communication / Partnerships							Kingston LLFA - Emergency Planning		2014-15	2015-16	Oct-16	In Progress	Oct 2015: A debrief by Local Authority and Borough Resilience Forum took place in late March 2014. The action plan from this and a review of the RBK Multi Agency Plan and a new Severe Weather Plan outline and cover communications (section 6 MAFP & section 3.3/3.6 Severe weather plan) during severe weather incidents.	
			Prepare community specific emergency plans which are regularly reviewed and updated							Kingston LLFA - Emergency Planning		2015-16	2016-17	Oct-16	In Progress	Oct 2015: Emergency planning have reviewed Home emergency plans. Borough Resilience Forum are looking at best model and forums for Community based emergency plans.		
			Identify the demand for having a contact network of key individuals in community groups, to be used in the event of a flooding incident and/or to organise coordination of flood risk management.							Kingston LLFA - Emergency Planning	Kingston Voluntary Action Group, any local community groups	2015-16	2016-17	Oct-16	In Progress	Oct 2015: RBK may look to set up a flood/severe weather warden scheme for areas at risk of flooding. March 2014 Flood alerting group established during flooding. Kingston Voluntary Action also cascade information to all member organisations and community groups.		
			Encourage residents and businesses to register with the Environment Agency to receive flood warnings and flood alerts							Kingston LLFA - Emergency Planning	Environment Agency	2014-15	18 onwards	Oct-16	In Progress	Oct 2015: Ongoing.		
003	Organise community level incident exercises in high risk areas		Contact all community groups to understand their current flood response role, outline Kingston's Lead Local Flood Authority (LLFA) duties and responsibilities and the current flood risk information available	Investigation of Flood Risk							Kingston LLFA - Highways / Emergency Planning	Kingston Voluntary Action Group, any local community groups	2015-16	2016-17	Oct-16	In Progress	Oct 2015: Work has started with Environment Agency (EA) to identify and consult with groups affected by flooding. Exploration underway of a borough Community Resilience Forum with invited representatives from all community groups.	
			Carry out incident exercises in high risk areas. Following the exercises carry out a review and feed back improvements to Lead Local Flood Authorities (LLFAs) and Risk Management Authorities (RMAs).							Kingston LLFA - Emergency Planning	All local Risk Management Authorities (RMAs), Emergency Services	2014-15	18 onwards	Oct-16	In progress	Oct 2015: Multi-Agency Flood Plan was reviewed in September 2015. A three year Borough Resilience Forum multi agency exercise plan agreed detailing three emergency exercises and one live river based exercise.		
004	Where appropriate investigate the use of Individual Property Protection		Carry out a review of flood depths / hazards from all local sources of flooding across Kingston that could benefit from Individual Property Protection								Kingston LLFA - Highways	Neighbouring LLFAs, Environment Agency, Thames Water	2015-16	18 onwards	Oct-16	In Progress	2014/15: Emergency Planning will be inviting a number of partners to walk the riverbank areas of the all RBK Rivers to look at the following: 1. Viewing points 2. Locations for river/water height markers 3. Sandbags drop locations 4. Pinch point locations 5. Properties most at risk. This will enable RBK to identify which locations could benefit from IPP. December 2014 was the first walk. Oct 2015: CDA feasibility studies ongoing to better understand flood risks in local areas. Property Level Protection could be one of the options assessed to manage the risks.	

005	2. Apply an intelligence-led risk based approach to the management of flood risk in the Royal Borough of Kingston upon Thames	Direct resources to areas predicted to be most at risk of flooding as identified by detailed hydraulic modelling	Review the prioritised list of Critical Drainage Areas (CDAs) to pursue opportunities for further investigation and produce a programme for how and when these studies will be taken forward, considering EA, Thames Water, TfL and other stakeholder funding timetables and potential partnership funding opportunities	Policy / Development Control						Kingston LLFA - Highways	All local RMA's	2014-15	18 onwards	Oct-16	In Progress	There are 14 Critical Drainage Areas (CDAs) in Kingston Borough and they have been prioritised according to the number of properties at risk. October 2015: CDA 11 study was undertaken in 2013/14. CDA feasibility studies ongoing in CDA 8 and two more (CDAs 9 and 18) started in October 2015 to better understand flood risks in local areas and find feasible solutions to mitigate the risk. CDA 12 is on EA's 6-year programme. At the current pace all 14 CDAs are planned to be investigated in the next 5 years.
			Continue the investigation of CDAs and build upon the results of previous investigations							Kingston LLFA - Highways	Environment Agency, Thames Water	2014-15	18 onwards	Oct-16	In Progress	Oct 2015: CDA 11 study was undertaken in 2013/14. The output was that there was no feasible cost-effective solution. It has to be recognised that this could be the case. Recommendations have to be put in place.
006		Explore methods of surface water flood forecasting including automated monitoring systems	Investigate the possibility of utilising telemetry systems to monitor water levels around the borough.							Kingston LLFA - Highways	South West Strategic Flood Group LLFAs, Environment Agency	2015-16	2017-18	Oct-16	In Progress	RBK is currently investigating best practice with other London Boroughs.
			Investigate warning systems used in other boroughs								Kingston LLFA - Highways	South West Strategic Flood Group LLFAs	2015-16	2016-17	Oct-16	Completed
007		Prioritise spending on maintenance of flood risk assets through a drainage investigation and maintenance programme	Continue to develop and review an Asset Register. Ensure its fully up to date and fully mapped.							Kingston LLFA - Highways	Neighbouring LLFAs, Environment Agency, Thames Water	2014-15	18 onwards	Oct-16	In Progress	Ongoing: GIS-based asset register publicly available on RBK website plus internally available on FloodStation. The quantity and quality of data can always be improved.
			Continue work on the current drainage investigation and maintenance programme								Kingston LLFA - Highways	Thames Water	2014-15	2016-17	Oct-16	In Progress
008	3. Establish and maintain collaborative partnerships with key organisations, including Thames Water, neighbouring boroughs and the Environment Agency.	Utilise a catchment based approach to address flood risk.	Undertake river catchment wide studies and promote benefit to other Risk Management Authorities (RAMs).	Legal Requirement						Kingston LLFA - Highways	SW Strategic Flood Group LLFAs, Environment Agency, Thames Water	2015-16	18 onwards	Oct-16	In Progress	Oct 2015: EA just began Hogsmill (including Surbiton Stream) Flood Alleviation Scheme project. There is the potential in future months/years for this to lead to a Kingston Flood Defence/Protection Scheme. RBK is part of the EA River Thames Scheme which is awaiting to be approved.
009		Share the funding of mutually beneficial schemes between stakeholders	Hold meetings with RMA's to discuss flood risk management in the borough, including combined risk of flooding.	Management						Kingston LLFA - Highways	All local RMA's	2015-16	18 onwards	Oct-16	In Progress	Oct 2015: Ongoing meetings with the EA and continuing to improve communication and collaboration with Thames Water.
010		Work with neighbouring boroughs to investigate cross boundary issues such as Critical Drainage Areas	Review opportunities for collaborative working through the Kingston Flood Risk Management Team meetings and raise opportunities to South West London Strategic Flood Group, as appropriate.	Communication / Partnerships						Kingston LLFA - Highways	SW Strategic Flood Group LLFAs, Environment Agency, Thames Water	2014-15	18 onwards	Oct-16	In Progress	Oct 2015: Ongoing quarterly meetings with SWL Strategic Flood Group and EA.
			Maintain regular contact with the Flood Risk Managers in neighbouring boroughs to ensure awareness of cross-boundary projects or initiatives								Kingston LLFA - Highways	SW Strategic Flood Group LLFAs	2014-15	18 onwards	Oct-16	In Progress
011		Work together with Thames Water to reduce the risk of flooding	Provide Thames Water with evidence of locations within their infrastructure that require maintenance							Kingston LLFA - Highways	Thames Water	2014-15	18 onwards	Oct-16	In Progress	Oct 2015: Ongoing work in partnership with Thames Water (first begun in summer 2014). Next meeting scheduled on 3/11/2015.
			Continue to work with and request information on Thames Water's current priorities								Kingston LLFA - Highways	Thames Water	2015-16	18 onwards	Oct-16	In Progress
012		Work together with the Environment Agency to reduce the risk of flooding	Maintain regular contact with the Environment Agency to share knowledge and ideas	Communication / Partnerships						Kingston LLFA - Highways	Environment Agency	2014-15	18 onwards	Oct-16	In Progress	Oct 2015: Ongoing meetings with the EA, next one being on 17/11/15.

013	4. Use planning powers to encourage sustainable solutions for the management of local flood risk which take account of the likely effects of climate change.	Ensure that proposed schemes contribute to wider social and economic development	When considering potential capital works an assessment should be made of the socio-economic environment. This will then form part of any future application for Grant in Aid funding for flood and coastal erosion risk management projects.							Kingston LLFA - Highways	Environment Agency, any local stakeholders	2015-16	18 onwards	Oct-16	In Progress		Oct 2015: Currently looking at constraints and opportunities from Critical Drainage Area studies.
014		Ensure that local planning policy clearly sets out the requirements for a sustainable development and reduces flood risk overall where possible	Review existing best practice drainage guidance, generating local drainage standards where necessary, to assist developers in reducing flood risk to and from schemes.							Kingston LLFA - Highways	SW Strategic Flood Group LLFAs	2015-16	2017-18	Oct-16	In Progress		Oct 2015: Ongoing through attendance at SWL Strategic Flood Group, LoDEG (London Drainage Engineering Group) and Drain London meetings. Local drainage standards may be created during a future review of RBK's SFRA (Strategic Flood Risk Assessment). New SuDS (Sustainable Drainage System) Manual, GLA (Greater London Authority) SuDS Action Plan and SuDS Opportunity Mapping due at the end of 2015.
			Develop a check list for both non-technical staff and specialist drainage staff for reviewing major planning applications for Sustainable Drainage System (SuDS).							Kingston LLFA - Highways / Development Management	Environment Agency	2015-16	2015-16	Oct-16	In Progress		Oct 2015: Drainage Assessment Form (DAF) and associated guidance and LLFA response form created. Awaiting addition of DAF to validation checklist.
			Review local planning policy to ensure the relevant content of RBK flood risk documents (SWMP, PFRA, SFRA, LFRMS) is included and the policy is up to date							Kingston LLFA - Highways / Planning Policy		2015-16	2016-17	Oct-16	In Progress		Oct 2015: Update of SFRA (Strategic Flood Risk Assessment) in development, aligned to Local Plan update (due 2016/17). Should link to 2016/17 update of LFRMS (Local Flood Risk Management Strategy).
015	Ensure that proposed schemes contribute to the enhancement of the natural environment	Work with developers to maximise green space and biodiversity benefits.	Investigation of Flood Risk						Kingston LLFA - Development Management	Local developers	2015-16	18 onwards	Oct-16	In Progress		Oct 2015: Initial work begun to advertise benefits of using SuDS (Highways and Development & Public Realm teams).	
		Ensure and encourage early pre-application dialogue between Kingston and developers.							Kingston LLFA - Development Management / Planning Policy	Local developers	2015-16	18 onwards	Oct-16	In Progress		Oct 2015: Initial work begun to advertise benefits of using SuDS (Highways and Development Management teams). Pre-application engagement with LLFA is critical to ensure developers consider SuDS at an early stage.	
016	Build upon existing planning requirements to encourage the use of SuDS as an integral part of development	Implement a procedure for the assessment of planning applications for SuDS in line with new statutory consultee duty from 15 April 2015	Management						Kingston LLFA - Highways / Development Management / Building Control	Local developers	2015-16	2015-16	Oct-16	In Progress		Oct 2015: Review of statutory consultee process due after 12 months of April 2015 implementation date.	
		Develop a procedure for how to inspect and promote SuDS features which best suit local ground conditions							Kingston LLFA - Highways / Development Management		2015-16	2016-17	Oct-16	In Progress		Oct 2015 - promotion of SuDS: Future work will build upon SuDS suggestions for CDAs (in SWMP, page 59) and use the GLA's SuDS Opportunity Mapping due for release later in 2015.	
		The LLFA should work with and share knowledge across departments, including building control, highways and planning.							Kingston LLFA - Highways / Development Management / Planning Policy / Building Control		2014-15	18 onwards	Oct-16	In Progress		Oct 2015: Ongoing. Re-establishment of internal flood group due soon.	
		Where appropriate work towards providing training for individuals or departments							Kingston LLFA - Highways / Development Management / Planning Policy / Building Control		2015-16	18 onwards	Oct-16	In Progress		Ongoing: Attended CIRIA Capacity Building Workshops and London wide presentations.	