Kent County Council Preliminary Flood Risk Assessment

Self-assessment form

January 2017

This self-assessment form is provided to enable each lead local flood authority (LLFA) in England to complete the first review of its preliminary assessment report and identification of flood risk areas (FRAs), as required by the Flood Risk Regulations (2009).

Who should complete this self-assessment?

Every LLFA in England should complete parts A, C and D of the self-assessment form and submit it, with the additional information requested in sections C3 and C4, to the appropriate Environment Agency Partnership and Strategic Overview team **no later than 22 June 2017**.

All LLFAs should **read the guidance document 'Preliminary flood risk assessment review: guidance for lead local flood authorities in England'** before completing the self-assessment form.

Part A - LLFA contact information	
Name of LLFA	Kent County Council
Name of LLFA officer submitting the assessment	Max Tant
Job title	Flood and Water Manager
Telephone number	03000 413466
Email address	Max.tant@kent.gov.uk
Name of LLFA officer approving the assessment	Katie Stewart
Job title	Director of Environment, Planning and Enforcement
Date submitted to Environment Agency	21 June 2017
Link to PFRA report 2011	http://www.kent.gov.uk/about-the-council/strategies-and-policies/environment-waste-and-planning-policies/flooding-and-drainage-policies/preliminary-flood-risk-assesment

Part B - to be completed by the Environment Agency	
Name of Environment Agency officer receiving the completed assessment	
Job title	
Date assessment received from LLFA	
Date assessment agreed with LLFA	

Part C - LLFA self-assessment

PFRA report section	Activity for PFRA/FRA review	Yes/No	Summary description	Actions planned in response
1. Governance and partnership	1.1 Since publication of the PFRA in 2011, have there been any changes to, or creation of new, risk management authorities (RMAs) with responsibilities in the LLFA area?	Yes	The West of Gravesend Commissioners of Sewers (IDB) has been disbanded. The East of Gravesend Commissioners of Sewers (IDB) has been reformed into a new independent IDB called the North Kent Marches IDB. This IDB is administered by Medway Council.	KCC will work with the new IDB as necessary.
	1.2 Are all roles and responsibilities for collecting and recording flood risk data and information clearly defined, including the respective roles and responsibilities of upper and lower tier authorities and other RMAs where relevant?	Yes	KCC keeps records of flood it is made aware of. After large scale events the Kent Resilience Forum coordinates the collection of flooded property data from all emergency responders, which KCC collates and records.	
2. Data systems and management	2.1 Do you have an up to date record of relevant sources of flood risk data and information for the LLFA area, including those held by other organisations?	Yes		
	2.2 Have sources of 'locally agreed surface water information' been established and maintained for the LLFA area and agreed with relevant partners?	Yes	We use the ROFSW maps where there isn't a SWMP map. We have 13 SWMPs which have undertaken hydraulic modelling.	
	2.3 Are systems in place to collect, record and share data and information for the purpose of	Yes	Data and information is shared on an as needs basis. We have completed 24 SWMPs with inputs from all RMAs, data collection has not be	

PFRA report section	Activity for PFRA/FRA review	Yes/No	Summary description	Actions planned in response
	assessing flood risk in the LLFA area?		an issue.	
	2.4 Are systems in place to assure the quality and security of data and information recorded for the purpose of assessing flood risk in the LLFA area?	Yes	We store data on our servers according to guidance for local government.	
	2.5 Do you understand the condition and performance of the public, third party and private assets in your register in terms of flood risk?	No	Thorough surveys of all of the assets in the register have not been undertaken. It is not feasible to routinely assess all these assets in such a large LLFA, especially ones in private ownership. Where KCC is the owner we have an asset management programme, which includes appropriate routine inspection.	
3. Past floods since Dec 2011 only) **Information on past floods since 2011 is required for reporting to the European Commission**	3.1 Have any flood events occurred since publication of the original PFRA report in December 2011 that have added to or changed your understanding of significant flood risk in the LLFA area? See the guidance document on which floods to report.	No	Do not populate this box. Provide details of relevant floods by updating annex 1 Past floods of your original PFRA report to include relevant floods since 2011. Information from your updated annex 1 will be used for reporting to the European Commission.	
	3.2 Has your current understanding of significant flood risk in the LLFA area changed as a result of the consequences of floods that have occurred since 2011? How?	No	If yes, complete this box and copy your statement to the relevant section of the PFRA addendum template at the end of this document.	
4. Future flood information **Information on future floods is required for**	4.1 Have you created or received new information on potential future floods that has added to or changed your understanding of significant flood risk in the LLFA area since publication of your original PFRA	Yes	Do not populate this box. Provide details by updating annex 2 Future floods of your original preliminary assessment report to include relevant new information since 2011.	

PFRA report section	Activity for PFRA/FRA review	Yes/No	Summary description	Actions planned in response
reporting to the European Commission	report in 2011?		Information from your updated annex 2 will be used for reporting to the European Commission.	
	4.2 Have you created or received new information to improve the understanding of the future impact of climate change on flood risk in the LLFA area?	Yes	Where we have undertaken hydraulic modelling in our SWMPs we have included climate change scenarios.	
	4.3 Have you created or received new information on long term developments to improve your understanding of flood risk in the LLFA area?	Yes	Where we have undertaken hydraulic modelling in our SWMPs we have included planned developments in the scenarios.	
	4.4 Has your understanding of flood risk in the LLFA area changed since 2011 as a result of new information on the potential consequences of future floods, the impact of climate change or long term developments? How?	Yes	KCC has undertaken a number of Surface Water Management Plans (SWMPs) to inform our understanding of the risks of local flooding in Kent. Details are provided at the end.	
5. Identification of Flood Risk Areas for 2nd planning cycle **Identified FRAs are required for reporting to the European Commission**	5.1 Are the indicative FRAs an appropriate representation of significant **surface water** flood risk in your LLFA area?	No	We have undertaken SWMPs in all of the indicative FRAs and we have not concluded that any of these areas is significant. There are flood risks that need managing in most of these areas, but none of these is significant.	
	5.2 Do the consequences of flooding from **other local sources,** ie groundwater or ordinary watercourses, or from **combined multiple sources**, indicate any other areas of significant risk?	No	There are ordinary watercourse and groundwater flood risks in Kent, but none of these pose a risk to enough properties to represent a significant flood risk.	
	5.3 Has your PFRA review identified **any other information** which indicates other areas of significant risk?	No		

PFRA report section	Activity for PFRA/FRA review	Yes/No	Summary description	Actions planned in response
	5.4 On the basis of the national evidence provided and your review, do you agree with the indicative FRAs for your area?	No	Do not populate this box. List your FRAs in annex 3 of your original preliminary assessment report. If you do not agree with an indicative FRA, we advise that you engage early with the relevant Environment Agency PSO team to raise questions or concerns ahead of submitting this form (see guidance document).	
	5.5 On the basis of local evidence and your review, are you amending or identifying any additional FRAs for your area?	No	Do not populate this box. List additional FRAs in annex 3 of your original preliminary assessment report. If you are amending, or proposing additional, FRAs, this should first be discussed with the relevant Environment Agency PSO team ahead of submitting this form.	
6. Updating the original preliminary assessment report using the template addendum (see also Part D) **Updates are required for reporting to the European Commission**	6.1 Have you completed an addendum to update your preliminary assessment report?	Yes	Do not populate this box. Complete the addendum template provided below	

Part D Template for addendum to update the original Preliminary Flood Risk Assessment report

ADDENDUM

Update to the preliminary flood risk assessment report for Kent County Council

The preliminary flood risk assessment (PFRA) and flood risk areas (FRAs) for Kent County Council (KCC) were reviewed during 2017, using all relevant current flood risk data and information, and agreed with the Environment Agency on XX December 2017.

Changes to the assessment of risk since the preliminary assessment report was published in 2011 are described in the statements in this addendum. KCC have undertaken extensive investigations of flood risk in the county since the publication of the original preliminary assessment, which has greatly improved our understanding of the risks of flooding, however, this has not led us to identify any significant floods, according to the criteria established by Defra.

The annexes to the preliminary assessment report have been reviewed and updated to show relevant new information since 2011.

Past flood risk

Kent has not experienced any significant floods from surface water, groundwater or ordinary watercourses since 2011. However there have been some significant floods from main rivers, which are reported by the Environment agency.

There have also been some notable floods from surface water, groundwater and ordinary watercourses, these include:

Date of event	Comments
3 Jun 2012	Heavy rainfall caused flooding in west Kent, including parts of Tunbridge Wells.
5/6 Dec 2013	Tidal flooding caused floods to properties in a few areas, including Faversham and Sandwich.
24 Dec 2013	Heavy rainfall caused very high flows on the River Medway (main river), causing flooding to a large number of properties in Tonbridge, East Peckham, Yalding, Collier Street, Laddingford, Maidstone, Edenbridge and surrounding areas, as well as other rivers in Kent.
Winter/Spring 2014	High groundwater levels in the chalk aquifers led to groundwater flooding in parts of Kent, most notably the Nailbourne Valley a number of winterbournes also flowed and caused localised flooding, including the Petham and Alkham Bournes. The Nailbourne and Little Stour (main rivers) experienced high flows for prolonged periods which caused flooding and disruption to properties and the communities in these areas. High flows and groundwater water also experienced along the Darent Valley and the villages along the southwestern edge of the North Downs, between Maidstone and Ashford.
21 May 2014	Heavy rainfall in east Kent, causing flooding in Deal.
18 -20 Jul 2014	Very heavy rainfall in north Kent led to a number of flooded roads and properties in Gravesend, Sittingbourne and the surrounding areas.
13 Oct 2014	Heavy rainfall in west Kent causing flooded roads in Sevenoaks and surrounding areas
24 Aug 2015	Heavy rainfall in west Kent causing flooding including several roads and properties in Tunbridge Wells town.

5 January 2016	Heavy rainfall in south Kent causing flooding to several roads and properties, particularly Dover and Shepway.
25 Jun 2016	Heavy rainfall in many parts of Kent, particularly Ightham, Sevenoaks and Ramsgate.

Future flood risk

KCC has undertaken a number of Surface Water Management Plans (SWMPs) to inform our understanding of the risks of local flooding in Kent. The SWMPs fall into two categories,:

Stage 1 SWMPs - there are simple high-level SWMPs that gather available data on local flood risks, including flood history and national surface water mapping, to identify where the highest risks of local flooding are and where further investigations are needed (or not). Stage 1 SWMPs often cover a large area, we have undertaken them over whole boroughs and districts in Kent.

Stage 2 SWMPs - these are more detailed studies that involve hydraulic modelling of the relevant drainage infrastructure to give a detailed picture of risks of local flooding and to test potential mitigation options.

Some of our SWMPs can be found on our website:

http://www.kent.gov.uk/about-the-council/strategies-and-policies/environment-waste-and-planning-policies/flooding-and-drainage-policies/surface-water-management-plans

The table below provides a summary of the findings of the SWMPs we have undertaken:

SWMP area	Type of SWMP	Year of completion	Summary of findings	Further work
Dover (town)	Stage 2	2011	The SWMP modelled the flood risk from the sewers, main river and its tidal outfall and surface water together. It showed several areas of Dover that are at risk of local flooding from surface water runoff.	KCC worked with DDC to implement property level resilience measures in parts of the town centre that are most at risk of flooding. KCC investigated options to reduce flood risk in Buckland and the Mid-twon area, however the options provided too few benefits at high costs The Environment Agency has undertaken further modelling of the flood risk in Dover, including surface water, in 2015, which has shown that the risks are lower than this SWMP showed as the rainfall characteristics are more refined. KCC continues to monitor flood risk in Dover.
Paddock Wood	Stage 2	2011	This SWMP modelled the risks of flooding from the main river (Paddock Wood Stream), the ordinary watercourses, the sewers and surface water in the town. It showed that the town centre relies on the capacity of several small watercourses for the function of the surface water drainage.	KCC undertook a further study into the risks and options for mitigation in Paddock Wood. Some of these options are not deliverable as the areas they would be implemented are now allocated sites for development. KCC has worked with the developers to incorporate flood risk management measures into their proposals. KCC is investigating the remaining options for Paddock Wood.
Maidstone and Malling (Maidstone town and East and West Malling)	Stage 1	2012	This SWMP showed that the history of flood risks in these towns is relatively small, it is predominantly from surface water runoff in Maidstone and from ordinary watercourses in East and West Malling.	KC has worked with the residents of Frog Lane and Network Rail to manage the flows from the watercourse along Frog Lane. KCC has undertaken works on Boarley Lane to remove a weir to reduce flooding. KCC continues to monitor the flood risk in Maidstone and the Malling towns.

SWMP area	Type of SWMP	Year of completion	Summary of findings	Further work
Swale	Stage 1	2012	This SWMP showed that there are risks in Sittingbourne from surface water runoff and the Isle of Sheppey from surface water runoff and tide locking of the Scrapesgate Drain.	KCC has investigated options on the High Street and Bell Road in Sittingbourne and is progressing plans for these roads. KCC undertook the Isle of Sheppey Integrated Asset Management Plan to further investigate options to manage the flood risk management assets on the isle. KCC is further investigating the issues in the Snipeshill area of Sittingbourne
Thameside (Dartford and Gravesham)	Stage 1	2012	The SWMP showed that the risk sin Gravesend were predominantly associated with sewerage and that there were surface water management issues in Dartford.	KCC undertook a Stage 2 SMWP for Dartford. KCC has gathered further information on the risks in Gravesend and concluded that there are no significant risks that we are planning to investigate further at this time. KCC continues to monitor the flood risk in Gravesend.
Folkestone and Hythe	Stage 1	2012	The SWMP showed that there are significant risks in Folkestone and Hythe from surface water runoff and from ordinary watercourses.	KC has undertaken a Stage 2 SWMP for the northern part of Folkestone. KCC has undertaken a Stage 2 SWMP for Hythe and Horn Street. KCC has undertaken a survey of the Enbrook Stream, an ordinary watercourse that crosses numerous private properties.
Canterbury (whole district)	Stage 1	2012	This SWMP highlighted a number of potential risks in the district. Groundwater flooding poses a risk to the southern part of the district, with problems in the Nailbourne and Petham Bourne valleys. There are flood risks small watercourses in the coastal towns of Whitstable and Herne Bay and the urban areas of Whitstable and Canterbury have surface water flood risks.	KCC worked with the Environment Agency and Southern Water to undertake a flood risk study in Whitstable. KCC undertook a Stage 2 SWMP in the historic city centre of Canterbury. KCC is working with the Environment Agency and Southern Water to manage the join flood risk issues in the Nailbourne and Petham valleys. The Environment Agency is currently leading an investigation into mitigation options for the Nailbourne and Little Stour.
Thanet	Stage 1	2013	This SWMP showed that surface water runoff poses a risk to Margate and Ramsgate.	KCC undertook Stage 2 SWMPs for both Margate and Ramsgate.

SWMP area	Type of SWMP	Year of completion	Summary of findings	Further work
Deal	Stage 2	2013	This SWMP included the sewers and surface water. It showed that there are risks from surface water runoff in Deal, but that each area at risk is discrete and that there isn't a single cause of surface water flooding that can easily be mitigated.	KCC has worked with the River Stour IDB and the River Stour Countryside Management Partnership to improve capacity and maintenance of the ditch that runs from Albert Road behind Mathews Close to reduce the flood risk on Albert Road. KCC has worked with Southern Water to investigate options to reduce the flooding on Church Street, Dover Road and Liverpool Road in Walmer. Unfortunately no options have been identified yet. KCC is still working on an option for Church Street. KCC continues to monitor the flood risk in Deal.
Maidstone (remaining district outside Maidstone town)	Stage 1	2013	This SMWP showed that ordinary watercourses and drainage present a flood risk for the town in the south of the borough.	KCC has worked with the Parish of Boughton-on-Monchelsea to improve the Shaw Stream and worked with the Environment Agency and Maidstone Borough Council to develop and understanding of how to use the flood storage reservoir there. KCC has undertaken Stage 2 SWMPS in Marden, Staplehurst and Headcorn.
Tunbridge Wells (whole district except Paddock Wood)	Stage 1	2013	The SWMP showed that the local flood risks in Tunbridge Wells district are relatively low. It highlighted issues in Five Oak Green. Floods in Tunbridge Wells town in 2015 has revised our assessment of the flood risk in the town.	KCC undertook and Section 19 investigation into the flood event in Tunbridge Wells that caused flooding on 24 August 2015, which has led to investigations in to works in the Pantiles area we are undertaking in partnership with Southern Water. KCC has undertaken surveys, cleansing and improvement works on ordinary watercourses and drainage in Five Oak Green to reduce the risk of flooding. KCC continues to monitor the flood risk in Tunbridge Wells.
Ashford (whole district)	Stage 1	2013	The SWMP showed that the local flood risks in Ashford district are relatively low. Flood risk issues were highlighted in Hamstreet.	KCC further investigated the potential flood risks in Hamstreet with partners and they appear to be historic, works undertaken by the Environment Agency in 2008 appear to have reduced the risks. KCC continues to monitor flood events in Hamstreet.

SWMP area	Type of SWMP	Year of completion	Summary of findings	Further work
Sevenoaks (whole district)	Stage 1	2013	The SWMP showed that the local flood risks in Sevenoaks district are relatively low. However, the flood event in 2013 in Westerham, Sundridge and Brasted has since revised our assessment of the risks in this area.	Heavy rainfall in caused flooding in December 2013, including surface water flooding. Since then KCC has been working with the community and land owners to manage surface water better. We have installed swales to take water away from the road in Sundridge and direct it into the Darent and have installed a by-pass for an old mill race that takes flood flows reducing flooding downstream. We are continuing to work on options for Westerham. KCC continues to monitor the flood risk in Sevenoaks.
Whitstable	Environment Agency led Flood Study	2013	The study was led by the Environment Agency and included KCC and Southern Water. The study investigated the risks from the main river, sewer and surface water and showed that the flooding is largely associated with the performance of the public sewer. Mitigation options that we tested, including upstream storage and downstream storage were not found to be feasible as there is insufficient space for them.	KCC continues to monitor the flood risk in Whitstable.
Margate	Stage 2	2014	The model included the sewers and the tidal effect on their outfalls and the surface water in the town. It showed that the risks of flooding are relatively low, however there is a long-term capacity issue for the sewers in Margate from increased development and climate change, there is also an impact on the quality of bathing waters.	KCC has worked with Southern Water to look at a number of options in Margate to reduce surface water runoff into the sewers to improve capacity. Discussions are ongoing with Southern Water about how work like this could be funded.
Folkestone (north of the railway line)	Stage 2	2014	The model included the surface water, sewers and main river in Folkestone north of the railway line, including the areas of Foord, Cheriton and Morehall. It showed that there are complex risks in some of these areas due to the interaction of the various drainage systems.	KCC has progressed works to reduce the risk of flooding in Downs Road. KCC is working with the Environment Agency and Southern Water to develop a joint strategy to understand and address the long-term issues in Folkestone.
Canterbury (historic city centre)	Stage 2	2014	This study included the sewers and surface water and the effect of the river level on the sewer outfalls and focussed predominantly on the historic city centre. It found that the city centre is at relatively low risk of surface water flooding. However it also shows there are potential local flood risks in the urban areas around the historic city centre.	KCC is planning to further investigate the flood risk issues highlighted in the Canterbury SWMP.

SWMP area	Type of SWMP	Year of completion	Summary of findings	Further work
Ramsgate	Stage 2	2015	This study included the sewers and surface water. It showed that there are areas where Ramsgate is potentially at risk of local flooding, however, the data gathering exercise did not uncover much evidence of reports of flooding in these areas, which would be expected given the risks that are highlighted.	KCC has undertaken further investigations into the history of flooding in Ramsgate and we now have evidence for some of the areas highlighted. We are planning to look into these areas further.
Hythe and Horn Street	Stage 2	2015	This study included the surface water, sewers, main rivers and ordinary watercourses in Hythe. It showed that there is a risk of flooding in Hythe, partly due to the steep topography and fast runoff. However, the density of the town also limits the options to mitigate the risks.	KCC has worked with Public Rights of Way and a local developer to reduce the risks of runoff flowing onto Seabrook Road once the development is complete. KCC is planning to investigate the options to improve the capacity of the Whytenbrook stream culvert. KCC is planning to look into the other options for Hythe further.
Isle of Sheppey (Integrated Asset Management Plan)	Stage 2	2015	This study looked at the flood risk issues in Sheerness and Minster, it included the main rivers, ordinary watercourses, sewers and surface water. The purpose of the study was not to investigate flood risk management mitigations through new interventions, but to see if alternative management practices could reduce the risks. The study helped to improve the understanding of the different assets owned by the various parties and how they managed them.	There are no further actions for KCC from this study, as there are only a few assets we manage. The Environment Agency have undertaken an investigation into an unidentified asset that may help to manage the impact of tide-locking on the Scrapesgate Drain.
Dartford	Stage 2	2016	This study included surface water and sewers flooding and the impact of the river levels in the sewer outfalls. It showed areas of flooding, but these were primarily associated with the highway.	KCC continues to monitor the flood risk in Dartford.
Marden	Stage 2	Draft (expected 2017)	This study included surface water, sewers, ordinary watercourses and the main river. It showed that there are local flood risks in the area associated with the flat topography and impermeable soils. Well functioning drainage is key to managing the flood risk in Marden.	KCC has cleared some drainage and worked with developers of sites in the vicinity to ensure they are aware of the risks and take appropriate design decisions. KCC works with Maidstone Borough Council to manage the local drainage network in Maidstone Borough, including in Marden.

SWMP area	Type of SWMP	Year of completion	Summary of findings	Further work
Staplehurst	Stage 2	Draft (expected 2017)	This study included surface water, sewers, ordinary watercourses and the main river. It showed that there are local flood risks in the area associated with the flat topography and impermeable soils. Well functioning drainage is key to managing the flood risk in Staplehurst.	KCC has investigated the outfall of a surface water storage tank that takes surface water from a development constructed in the 1980s, which appears to be orphaned. We are discussing the ownership with appropriate parties. KCC works with Maidstone Borough Council to manage the local drainage network in Maidstone Borough, including in Staplehurst.
Headcorn	Stage 2	Draft (expected 2017)	This study included surface water, sewers, ordinary watercourses and the main rivers. It showed that there are risks from ordinary watercourses and the main river and also that the drainage network in the village is susceptible to flooding.	KCC are planning to investigate the land drainage network in the village and to work with Maidstone Borough Council to identify opportunities to improve it and keep it maintained.

Flood risk areas (FRAs)

The following FRAs have been identified for the purposes of the Flood Risk Regulations (2009) 2nd planning cycle (if no FRAs are identified, please state this here).

No FRAs have been identified in Kent.

One area has been proposed in the indicative assessment using the Communities at Risk method and six areas have been proposed using the cluster method. These areas are listed below with the reasons why KCC does not consider them to be FRAs.

Area	Comments
Communities at Risk	
Dartford	This area is indicated as it is identified as part of a larger community with Bexley (including Crayford, Sidcup, Erith and Bexley). Dartford has no surface water hydraulic link with Bexley as it sits on the opposite bank of the River Cray, therefore this community is not at risk from the same surface water flood event. Dartford alone does not represent enough properties at risk to meet the Communities at Risk Threshold.
Cluster Method	
Canterbury	KCC has undertaken a Stage 2 SWMP for Canterbury, this shows there is a risk, but the risk is lower than ROFfSW indicates, largely due to the medieval city walls preventing runoff entering the historic city centre, which is accounted for in our modelling. This removes one of the blue squares in Canterbury, which means the threshold of five blue squares is not reached. KCC will include an investigation of the issues in areas outside the city walls in our Local Flood Risk Management Strategy and act upon the findings.
Dartford	KCC has undertaken a SWMP for Dartford that included hydraulic modelling, which found the risks to be relatively low. This is due mainly to Dartford having a separate surface and foul sewerage which means the capacity of the drainage is larger than assumed in the RoFfSW mapping. KCC will continue to review the risks in Dartford through the Local Flood Risk Management Strategy and act upon any new evidence we gather.
Gravesend	KCC has undertaken a Stage 1 SWMP in Gravesend which showed that there were low risks from flooding. Two areas of risk are highlighted in the RoFfSW mapping that appear to follow dry valleys or previously culverted watercourses. Subsequent investigations have shown that the surface water sewerage in these areas follows theses valleys and provides more capacity than is assumed in the RoFfSW mapping. The risk in Gravesend is therefore significantly lower than predicted by the RoFfSW.
Maidstone	KCC has undertaken a high level SWMP of Maidstone that has reviewed the history of flooding in the town, this has shown that there are risks but that the impacts are largely on the highway. The topography of the town means that heavy rainfall is usually able to flow into the River Medway that runs through it without flooding many properties. The RoFfSW shows flooding around the lower end of the River Len, which is a culverted main river at this location. As a consequence the capacity of the watercourse and flow routes into it from the surrounding areas are not modelled, which has led to a higher risk to be predicted in this area. If this was modelled correctly this would eliminate a blue square, which means the threshold of five blue squares is not reached. KCC will continue to review the risks in Maidstone through the Local Flood Risk Management Strategy and act upon any new evidence we gather.
Ramsgate	KCC has undertaken a SWMP for Ramsgate that included hydraulic modelling. This has indicated there are some risks in Ramsgate that we are currently investigating these further, however the overall risks are lower than indicated by the ROFfSW.

	KCC will include an investigation into the options for the areas identified at risk of flooding in Ramsgate in our Local Flood Risk Management Strategy.
Sittingbourne	KCC has undertaken an SWMP in Sittingbourne which showed some areas of risk that we have investigated further. Two areas of risk are highlighted in the RoFfSW mapping that appear to follow dry valleys or previously culverted watercourses. Subsequent investigations have shown that the surface water sewerage in these areas follows theses valleys and provides more capacity than is assumed in the RoFfSW mapping. The risk in Sittingbourne is therefore significantly lower than predicted by the RoFfSW. We currently have plans to deliver works in parts of Sittingbourne and to further investigate the risks identified in other areas. KCC will continue to deliver the planned works for Sittingbourne through the Local Flood Risk Management Strategy and to act upon any new evidence we gather.

Other changes

The West of Gravesend Commissioners of Sewers, formerly an EA administered IDB, has been disbanded following a review and consultation on its role.

The East of Gravesend Commissioners of Sewers, formerly an EA administered IDB, has been reformed into a new independent IDB called the North Kent Marches IDB, following a review and consultation on its role. The new IDB is administered by Medway Council.