Medway Flood Action Plan

Plan Together - Deliver in Partnership



Working with the Medway Flood Partnership

November 2017



The Medway Flood Partnership

The Medway Flood Partnership was established in January 2017 and is bringing together local partners, national agencies, non-governmental organisations and community representatives to reduce flood risk within the Medway catchment and create better places for people, properties and businesses. The Partnership involves senior representatives and officers from all the partner organisations.

The Partnership members are:

- Country Land and Business Association
- Forestry Commission
- Kent Association of Local Councils
- Maidstone Borough Council
- Natural England
- South East Rivers Trust
- Tonbridge and Malling Borough Council

- Environment Agency
- Joint Parish Flood Group
- Kent County Council
- National Farmers Union
- Sevenoaks District Council
- Southern Water
- Tunbridge Wells Borough Council
- Upper Medway Internal Drainage Board

Reducing the risk of flooding in the Medway catchment is a complex problem that can only be solved by working in partnership. During the December 2013 flood event, approximately 965 homes were flooded across the Medway catchment, devastating people and livelihoods. Over 9,000 properties across the Medway catchment are at risk of river flooding with more at risk from other sources such as surface water or sewer flooding.

This action plan sets out what organisations will do to reduce flood risk in the short term. But there is more to do. While this flood action plan is a significant milestone in addressing flood risk in the Medway catchment, it is part of a longer journey with the partnership, communities and with individuals to build awareness and preparedness for flooding, and identify and develop more actions which can help to reduce flood levels.

Over the coming years, the partnership will continue to work with communities to develop this plan further and consider the 25 year vision and the pathway to getting there.

This action plan is a 'living document' that will be regularly monitored and reviewed by the Medway Flood Partnership to make sure that actions are delivered and new information and ideas are incorporated. All members are committed to its delivery and embedding an integrated approach to flood risk management into our organisations.

A summary document of this action plan has also been produced and can be found on www.gov.uk if you search for 'Medway Flood Action Plan'.

For further information and if you have any comments on the Medway Flood Action Plan please email kslenquiries@environment-agency.gov.uk

Capital investment and maintenance



Actions in this theme of work include traditional, engineered flood defence projects which help to reduce the risk of flooding to people, property and businesses.

It also includes maintenance of flood risk assets, such as sluices, to ensure they are in good operational condition and the maintenance of river channels which includes ditch and highway gully clearance, weed cutting, tree and debris removal and desilting of river beds.

Action	What we're going to do	Where will this work take place?	When will this work happen?	Owner	Who else will support this work?
1	Carry out works to enable the Coult Stream Flood Storage Area to be used more frequently to reduce the risk of flooding to homes in smaller events.	Coult Stream	March 2018	Environment Agency	
2	Carry out feasibility and funding investigations to develop and deliver (if applicable) a scheme to reduce risk to homes and businesses in East Peckham.	East Peckham	2017-2022	Environment Agency	Tonbridge and Malling Borough Council, Kent County Council, South East Local Enterprise Partnership
3	Reduce flood risk to 1,475 homes in Tonbridge and Hildenborough by carrying out construction works to enlarge the capacity of the Leigh Flood Storage Area and build embankments in Hildenborough.	River Medway at Leigh and Hildenborough	2019-2022	Environment Agency	Kent County Council, South East Local Enterprise Partnership, Tonbridge and Malling Borough Council
4	Carry out a 3-year programme of engineering works to keep the Leigh Flood Storage Area in good operational condition.	Leigh	Ongoing to 2019	Environment Agency	
5	Carry out scoping surveys to understand which homes at greatest risk of flooding in the Middle Medway Flood Resilience Scheme area are suitable for property resistance measures. Where homeowners agree, install property resistance measures in suitable homes in the Middle Medway Flood Resilience Scheme area.	Yalding, Collier Street, Hunton, Marden, West Farleigh, East Farleigh, Wateringbury and Nettlestead	2017-2019	Environment Agency	Kent County Council, Maidstone Borough Council, Joint Parish Flood Group, Southern Regional Flood and Coastal Committee

Action	What we're going to do	Where will this work take place?	When will this work happen?	Owner	Who else will support this work?
6	With funding from Kent County Council, Maidstone Borough Council and the Southern Regional Flood and Coastal Committee investigate and implement community level resilience measures to reduce the impact of flooding in the Middle Medway Flood Resilience Scheme area. This includes localised flood defences to reduce risk to homes at greatest risk of flooding.	Yalding, Collier Street, Hunton, Marden, West Farleigh, East Farleigh, Wateringbury and Nettlestead	2018-2020	Environment Agency, Kent County Council, Maidstone Borough Council	Joint Parish Flood Group, Southern Regional Flood and Coastal Committee
7	Continue to carry out the Environment Agency's annual programme of maintenance work on Main Rivers across the catchment to maintain the flow of water and ensure flood risk assets are in good condition.	Catchment wide	Ongoing	Environment Agency	
8	Collate the flood maintenance activities of risk management authorities across the catchment. Make this information available to communities to raise awareness of the work that is being done to manage flood risk in the catchment and use it to encourage riparian landowners to carry out their own maintenance.	Catchment wide	2018/19 onwards	Environment Agency	Kent County Council, Upper Medway Internal Drainage Board, Tonbridge and Malling Borough Council, Tunbridge Wells Borough Council, Sevenoaks District Council, Maidstone Borough Council
9	Set up a Medway Maintenance Group to discuss and review the planned maintenance work of the Environment Agency, Upper Medway Internal Drainage Board, local councils, Kent County Council Highways and Southern Water. Involve local community representatives to promote a joined up approach and increase community involvement.	Catchment wide	Annually	Environment Agency	Kent County Council, Upper Medway Internal Drainage Board, Southern Water, Tonbridge and Malling Borough Council, Tunbridge Wells Borough Council, Sevenoaks District Council, Kent Association of Local Councils, Joint Parish Flood Group, Maidstone Borough Council

Action	What we're going to do	Where will this work take place?	When will this work happen?	Owner	Who else will support this work?
10	Carry out a rolling programme of work to inspect Environment Agency owned culverts across the catchment to ensure they continue to convey flows.	Catchment wide	Annually	Environment Agency	
11	Work with partners and communities to consider where removal of old structures, such as retention weirs and automatic sluices, may help to lower water levels and reduce flood risk. Where appropriate, work with partners and the community to carry out these works.	Rivers Teise, Beult and Eden	2018-2022	Environment Agency	South East Rivers Trust
12	Carry out drainage works and maintenance works to Ordinary Watercourses on behalf of Maidstone Borough Council to maintain flow of water.	Maidstone Borough	2017-2020	Kent County Council	Maidstone Borough Council
13	Improve the trash screen on the River Grom culvert entrance to prevent flooding due to blockage.	Tunbridge Wells	2017/18	Kent County Council	
14	Investigate ways to reduce risk of flooding at Neville Gardens and in the Warwick Park area of Tunbridge Wells. If feasible, develop funding plans and deliver flood risk management measures.	Neville Gardens / Warwick Park, Tunbridge Wells	2017/18	Kent County Council and Southern Water	

Action	What we're going to do	Where will this work take place?	When will this work happen?	Owner	Who else will support this work?
15	Continue to carry out Southern Water's proactive programme of maintenance work to maintain an effective system, include regular reviews to ensure appropriate maintenance is carried out.	Catchment wide	Rolling programme	Southern Water	
16	Carry out a targeted programme of surveys of Southern Water assets to improve our understanding of their condition and inform our future Capital Maintenance plan.	Catchment wide	Rolling programme	Southern Water	
17	Update Drainage Area Plans for: Headcorn, Horsmonden, Staplehurst, Ashford, Redgate Mill Crowborough, Aylesford, Ham Hill, Tonbridge, Bidborough, Biddenden, Coxheath, Edenbridge, Luxfords Lane East Grinstead, Eden Vale East Grinstead, Felbridge, Forest Row, Godstone, Hawkhurst South, Leeds, Lingfield, Paddock Wood, Tunbridge Wells North & South, Copthorne, Wateringbury. Use these to understand the impact of weather/climate change and growth on waste water systems and identify how this impact can be managed to reduce flood risk from sewers to homes.	Catchment wide	By March 2020	Southern Water	Kent County Council, Environment Agency, Borough and District Councils as required
18	Carry out annual maintenance work within Upper Medway Internal Drainage Board district to maintain flow of water.	Catchment wide	Annually	Upper Medway Internal Drainage Board	
19	Support infrastructure projects which will reduce flood risk by considering valid bids for Community Infrastructure Levy (CIL) funding.	Sevenoaks District	Ongoing	Sevenoaks District Council	

Natural Flood Management



Actions in this theme of work look at how natural flood management techniques could work in combination with engineered solutions to help to slow the flow of water and reduce the impacts of flooding.

There are a wide range of techniques including measures to help slow and/or reduce flows including re-meandering rivers, targeted woodland planting, and techniques to hold water temporarily on the land. As well as helping to reduce flood risk, natural flood management techniques can also provide wider social and environmental benefits by improving our environment for people and wildlife to enjoy.

Action	What we're going to do	Where will this work take place?	When will this work happen?	Owner	Who else will support this work?
20	Work with partners to consider how our annual maintenance work can support natural flood management measures where they help to reduce flood risk.	Catchment wide	Annually	Environment Agency	South East Rivers Trust, Natural England, Upper Medway Internal Drainage Board, Kent County Council, Southern Water, Tonbridge and Malling Borough Council, Tunbridge Wells Borough Council, Sevenoaks District Council, Joint Parish Flood Group, Kent Association of Local Councils, Maidstone Borough Council
21	Identify, investigate and agree options to improve the River Beult SSSI for people and wildlife by working with landowners, local partners and groups. This will include options to slow flood flows and use unoccupied areas of the floodplain to temporarily accept flood water.	River Beult between Hadmans Bridge near Smarden and its confluence with the River Medway at Yalding	2017/18	Environment Agency	Natural England
22	Provide 12,500m³ of flood storage at Mill Farm, Marden and use this site to demonstrate the technique to build support for natural flood management measures.	Mill Farm, Marden	2017	Kent County Council	Environment Agency, Peter Hall (Mill Farm)

Action	What we're going to do	Where will this work take place?	When will this work happen?	Owner	Who else will support this work?
23	Investigate opportunities to use natural flood management techniques to reduce flood risk in Paddock Wood.	Paddock Wood	2017/18	Kent County Council	Upper Medway Internal Drainage Board
24	Investigate opportunities to use natural flood management techniques to reduce flood risk around Ightham.	lghtham	2017/18	Kent County Council	Environment Agency
25	Explore how we can use the Catchment Sensitive Farming approach to provide advice to farmers about managing water on-farm that promotes natural flood management measures.	River Teise and River Beult catchments	2016-2020	Natural England	Southern Water (Beult) & South East Water (Teise)
26	Investigate the potential to hold floodwater in the upper catchment by restoring areas of wet heathland in Ashdown Forest through the Countryside Stewardship Higher Tier Scheme.	Ashdown Forest / River Medway headwaters	2016-2021	Natural England	Ashdown Forest Conservators
27	Explore the potential for natural flood management techniques in the West Kent Woods ecological network around Sevenoaks-Hildenborough-Hadlow-Kings Hill including the use of attenuation methods to slow the flow.	River Bourne	2017-2020	Natural England	Kent County Council
28	Invest in Countryside Stewardship agreements in the catchment, including creation/ restoration/ maintenance of diverse habitats to improve water quality and reduce run-off / erosion.	Catchment wide	Next 3 years	Natural England / Forestry Commission	Southern Water, Landowners and farmers

Action	What we're going to do	Where will this work take place?	When will this work happen?	Owner	Who else will support this work?
29	Through the FRAMES project, identify priority sub-catchments where natural flood management techniques will achieve greatest benefit in reducing flood risk in the catchment. Carry out modelling and identify the techniques to achieve this.	Catchment wide	2017/18	South East Rivers Trust	Environment Agency, Natural England, Forestry Commission, Kent County Council
30	Through the FRAMES project, work with local communities and landowners in priority sub catchments to design and deliver natural flood management schemes which will test land-management techniques.	Catchment wide	2018-2021	South East Rivers Trust	Environment Agency, Natural England, Forestry Commission, Kent County Council
31	Develop a funding strategy to identify and secure additional resources for natural flood management measures across the catchment. This will be a live document and reviewed regularly.	Catchment wide	2017/18 and reviewed regularly	South East Rivers Trust	Environment Agency, Natural England, Forestry Commission, Kent County Council, Southern Water
32	Through the FRAMES project, coordinate the use of existing mechanisms and networks across the partnership to build understanding of the wider benefits of natural flood management techniques and encourage landowners and tenants to consider implementing them within their current practices.	Catchment wide	2018-2021	South East Rivers Trust	Natural England, National Farmers Union, Country Land and Business Association, Environment Agency, Kent County Council
33	Identify and develop natural flood management case studies from across the country. Build a database of more local demonstration projects and sites suitable for potential walkovers / visits. Use these to build landowner support for the techniques to slow the flow of flood water and other natural flood management techniques, through targeted discussions with landowners in priority sub-catchments.	Catchment wide	2018-2021	South East Rivers Trust	Environment Agency, Natural England, Forestry Commission, Kent County Council

Community resilience



Actions in this theme consider a broad range of activities to improve community resilience, which not only aims to reduce the impact of flooding on communities, but also helps them to continue to function during a flood. This might be by ensuring that the power supply is uninterrupted or by managing traffic to prevent properties flooding from road wash.

The Medway Flood Partnership brings together a wide variety of organisations to work on raising awareness of flood risk, building individual preparedness, emergency planning activities to ensure local communities are ready to respond, and identifying community measures to reduce the impact of flooding.

Action	What we're going to do	Where will this work take place?	When will this work happen?	Owner	Who else will support this work?
34	Run community drop in sessions and workshops to raise awareness of the Medway Flood Action Plan and develop it further to build flood resilience across the catchment and identify next steps for the action plan.	Catchment wide	2018/19	Environment Agency and Kent County Council	Medway Flood Partnership
35	Support local communities to help build residents' awareness of their individual flood risk and what they can do to prepare and respond.	Catchment wide	Ongoing	Kent Association of Local Councils	Kent County Council, Tonbridge and Malling Borough Council, Tunbridge Wells Borough Council, Sevenoaks District Council, Environment Agency, Kent Resilience Team, Maidstone Borough Council
36	Raise awareness of the Extended Floodline Service and work with local councils to encourage them to register for this free service.	Catchment wide	Ongoing	Environment Agency	Kent Resilience Team

Action	What we're going to do	Where will this work take place?	When will this work happen?	Owner	Who else will support this work?
37	Working with communities and partners, build community understanding about how flood risk management assets are operated to reduce flood risk to homes and businesses without increasing risk to others.	Catchment wide	Ongoing	Environment Agency	Kent County Council, Tonbridge and Malling Borough Council, Tunbridge Wells Borough Council, Sevenoaks District Council, Kent Association of Local Councils, Joint Parish Flood Group, Kent Resilience Team, Maidstone Borough Council
38	Continue to promote flood awareness and preparedness and encourage Parish Councils and community groups to complete and test their own flood plans.	Catchment wide	Ongoing	Kent Resilience Team and Environment Agency	Kent Association of Local Councils
39	Support communities to establish local flood forums in Headcorn, Ightham and Hildenborough and develop local resilience plans.	Headcorn, Ightham, Hildenborough. Further communities may be added as the project progresses	2017-2019	Kent County Council	National Flood Forum, Environment Agency
40	Work with partners to develop a jointly owned flood incident plan, to include road closures, to support communities during flood events in Yalding and Collier Street. If this pilot is successful, develop similar plans for other key communities in the catchment.	Yalding and Collier Street	2017 onwards	Environment Agency	Kent County Council, Kent Resilience Team, Maidstone Borough Council, Yalding and Collier Street Parish Councils
41	Run training for Parish Councillors and Clerks in at risk communities to build understanding of all aspects of flooding.	County wide	Ongoing	Kent Association of Local Councils	Environment Agency, Kent Resilience Team

Action	What we're going to do	Where will this work take place?	When will this work happen?	Owner	Who else will support this work?
42	Recruit, train and maintain engagement with new and existing volunteer flood wardens.	Ongoing - Tonbridge, Hildenborough, Edenbridge, Yalding, Little Venice Country Park and Marina, Paddock Wood, East Peckham, East Farleigh, Collier Street. New communities on demand	Ongoing, as required	Environment Agency	Kent Resilience Team, Tonbridge and Malling Borough Council, Tunbridge Wells Borough Council, Sevenoaks District Council, Kent Association of Local Councils, Joint Parish Flood Group, Maidstone Borough Council
43	Develop an emergency flood plan template for rural businesses to ensure they know what action to take in the event of a flood. Use existing mechanisms to work with businesses and landowners to promote flood awareness and preparedness and encourage them to complete their own the plans.	Catchment wide	Ongoing	National Farmers Union	Environment Agency, Kent Resilience Team, Country Land and Business Association
44	Use Kent Prepared website to raise awareness of flood risk to the business community.	Catchment wide	Ongoing	Kent Resilience Team	Environment Agency, Tonbridge and Malling Borough Council, Tunbridge Wells Borough Council, Sevenoaks District Council, Maidstone Borough Council
45	Investigate and install traffic management measures as part of the Middle Medway Flood Resilience Scheme to reduce the risk of flooding to homes from road wash.	Yalding, Collier Street and Hunton	2017-2022	Kent County Council	Yalding, Collier Street and Hunton Parish Councils, Maidstone Borough Council, Kent Resilience Team

Action	What we're going to do	Where will this work take place?	When will this work happen?	Owner	Who else will support this work?
46	Use learning from Middle Medway Flood Resilience Scheme to consider other areas in the catchment where traffic management may help to increase resilience to flooding. Work with local businesses to raise their awareness of how they can help to reduce flood risk.	Catchment wide	2019-2021	Kent County Council	Kent Resilience Team, relevant Borough and District Councils
47	Understand which Southern Water assets are key to community resilience during flood events. Work with partners to consider how to make these sites more resilient so that they can continue to support communities during flooding.	Catchment wide	Ongoing	Southern Water	Kent County Council, Environment Agency
48	Develop and deliver a rolling exercise programme to test community flood plans within the Middle Medway Flood Resilience Scheme area, including any action needed for homes with property level resilience measures.	Yalding, Collier Street, Hunton, Marden, West Farleigh, East Farleigh, Wateringbury and Nettlestead	Rolling programme from 2018	Environment Agency	Maidstone Borough Council, Kent County Council, Kent Resilience Team, Joint Parish Flood Group
49	Develop and deliver a rolling exercise programme to test community flood plans.	Catchment wide	Ongoing	Environment Agency	Kent Resilience Team, relevant Borough and District Councils
50	Compile a register of flood risk assets in Kent, including high risk culverts, watercourses and other drainage assets, structures and locations. Share this flood risk management asset information so that local communities understand where local assets are and who is responsible for them.	County of Kent	2017	Kent County Council	All Risk Management Authorities

Action	What we're going to do	Where will this work take place?	When will this work happen?	Owner	Who else will support this work?
51	Develop and publish Flood Risk to Communities documents for all Kent districts and boroughs to explain all sources of flood risk in an area, who is responsible for managing different flood risks, who will do what in an emergency and what is currently planned to manage flood risk in the area.	In each borough and district of Kent, including: Maidstone, Tonbridge and Malling, Tunbridge Wells, Sevenoaks	2017	Kent County Council	All Risk Management Authorities
52	Continue to apply national planning policy and local approaches to the practical design of development and sustainable drainage systems to ensure that planning for new development reduces the risk of flooding.	Catchment wide	Ongoing	Maidstone Borough Council, Tonbridge and Malling Borough Council, Tunbridge Wells Borough Council, Sevenoaks District Council	Kent County Council, Environment Agency
53	Continue to encourage developers to have pre-application discussions to ensure new development incorporates flood risk management best practice.	Catchment wide	Ongoing	Kent County Council and Environment Agency	
54	Encourage Town and Parish Councils who are preparing Neighbourhood Plans to consider sustainable drainage and flooding mitigation measures in their Plans where appropriate.	Catchment wide	Ongoing	Kent Association of Local Councils	Tonbridge and Malling Borough Council, Tunbridge Wells Borough Council, Sevenoaks District Council, Maidstone Borough Council, Kent County Council, Environment Agency

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