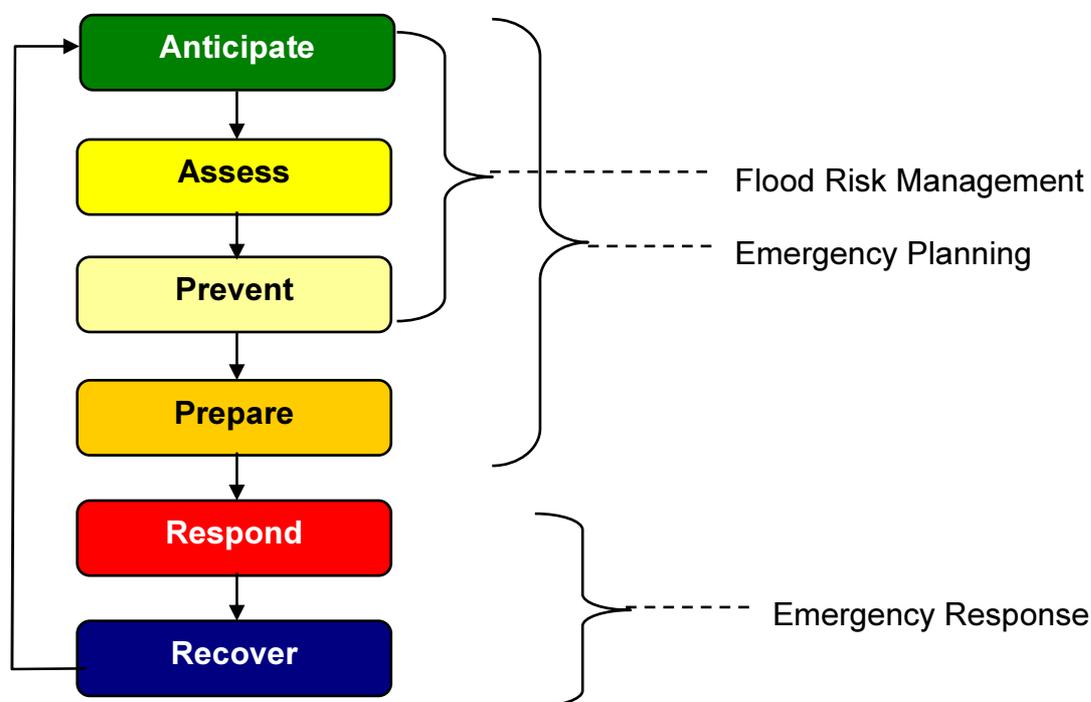


Appendix 1. Flood Risk Management, Emergency Planning & Response

A1.1 Relationship between Flood Risk Management, Emergency Planning & Response



A1.2 Roles & Responsibilities of Key Partner Organisations

Authority	Flood Risk Management Role	Emergency Planning & Response Roles
Environment Agency	The Environment Agency is responsible for taking a strategic overview of the management of all sources of flooding and coastal erosion. The Agency also has operational responsibility for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea, as well as being a coastal erosion risk management authority.	As a Category 1 Responder, prepare plans to respond to a range of emergencies, including flooding. In the event of a flood: <ul style="list-style-type: none"> • Monitor weather, river & coastal conditions; • Maintain & operate flood defences • Issue Flood Alerts, Flood Warnings & Severe Flood Warnings • Advise & coordinate emergency response with other partners, including chairing Severe Weather Advisory Groups in lead-up to flood emergencies.

Authority	Flood Risk Management Role	Emergency Planning & Response Roles
<p>Kent County Council</p> <p>Highway Authority</p> <p>Lead Local Flood Authority</p> <p>Emergency Planning</p>	<p>Highway Authorities are responsible for providing and managing highway drainage and must ensure that road projects do not increase flood risk.</p> <p>Lead Local Flood Authorities are responsible for developing, maintaining and applying a strategy for local flood risk management in their areas. They also have lead responsibility for managing the risk of flooding from surface water, groundwater and ordinary watercourses.</p> <p>To work with key internal & external partners to advise on flood Emergency Planning & Response issues in the planning for, and management of, flooding.</p>	<p>Prepare plans, equipment etc. to respond to incidents on the highway, including flooding. Monitor & respond to weather forecasts & Work with other highways authorities & partners to respond to incidents.</p> <p>No statutory role, but will work with key internal / external partners to provide advice to assist in the preparing & responding to flooding.</p> <p>As a Category 1 Responder, prepare plans to respond to a range of emergencies, including flooding.</p> <p>In the event of a flood:</p> <ul style="list-style-type: none"> • Monitor weather, river & coastal conditions; • Warn & inform key internal & external partners & the public. • Advise & co-ordinate emergency response with other partners, including chairing Severe Weather Advisory Groups in the lead-up to flood • Coordinate the welfare response to emergencies. • Coordinate the activities of Local Authorities & the Voluntary Sector • Lead the Recovery phase of the emergency.

Authority	Flood Risk Management Role	Emergency Planning & Response Roles
District / Borough Councils	District / Boroughs Councils are responsible for ensuring that flood risks are effectively managed in developments in their area. They can carry out flood risk management works on minor watercourses. District and unitary councils in coastal areas also act as coastal erosion risk management authorities.	As a Category 1 Responder, prepare plans to respond to a range of emergencies, including flooding. Deliver homelessness duties for individuals affected or threatened by 'fire, flood or other disaster' under the Housing Act
Water and Sewerage Companies	Water and Sewerage Companies are responsible for managing the risks of flooding from water and foul or combined sewer systems providing drainage from buildings and yards.	As a Category 2 Responder, prepare plans to respond to a range of emergencies, including flooding (incorporating rest centres and longer term accommodation).
Internal Drainage Boards	Internal Drainage Boards are responsible for managing land drainage and ordinary watercourses in their areas.	No statutory role, but will be informed & consulted in the planning for & management of flood emergencies.
Kent Police		As a Category 1 Responder, prepare plans to respond to a range of emergencies, including flooding. Key command and control, warning and informing and evacuation responsibilities.
Kent Fire & Rescue		As a Category 1 Responder, prepare plans to respond to a range of emergencies, including flooding. Key role in search and rescue.

Appendix 2. Review of 2007 Flood Risk Management Select Committee Recommendations

Recommendation	Progress & Comments
1. That KCC look into setting up and resourcing a permanent Flood Risk Committee, in partnership with District Councils	Established in 2010.
2. That there should be adequate, ring-fenced, direct government funding for flood risk management to provide a more transparent system which will reassure the public that vital plans, strategies and flood defence work will not be compromised by competing demands within DEFRA or elsewhere.	<p>Since the inception of the Lead Local Flood Authority role KCC has received funding through the area-based grant. This funding is to further understanding of flood risk resulting from surface water, groundwater and ordinary watercourses and identify/put in place measures to assist in its management. This work is now steered by the KCC prepared Local Flood Risk Management Strategy. This allocation is not ring-fenced but to date KCC has been able to allocate the entire funding to flood risk management. It is important to note that there is no guarantee of this funding from Defra in future years.</p> <p>Defra's overall budget has been cut by £500m since 2010 and must find a further £300m in savings by 2016. This has had an impact on delivery of flood defence projects although the extent of which is unclear. Funding for flood defence works has also changed and now requires a local contribution in all but exceptional circumstances.</p>
3. That KCC should lobby the government to consider re-designating the flood management arm of the Environment Agency as a dedicated flood risk agency as well as giving the EA a strategic overview of all types of flood risk.	Whilst there isn't a designate flood risk agency, the Flood and Water Management Act 2010 gave the Environment Agency a strategic overview role for flood risk.
4. That KCC promotes the further development of an Engineering Consultancy led by Canterbury City Council Engineers to disseminate good practice and offer training/apprenticeships to build a practical skills-base and retain local	East Kent Engineering brings together the five East Kent Coastal Local Authorities of Canterbury, Dover, Shepway, Swale and Thanet pooling local knowledge and expertise and ensuring a robust joined-up approach to flood and coastal erosion risk

<p>knowledge/expertise in flood risk management.</p>	<p>management. Similar groupings do not exist for other authorities.</p>
<p>5. That KCC supports development in brownfield and other areas subject to the rigorous application of site specific sequential and exception tests of Planning Policy Statement 25.</p>	<p>Agreed in 2009 that no further action was required on this recommendation.</p>
<p>6. That KCC oversee the development of further sub-regional flood risk assessments, based on river catchments, and undertakes to monitor this development.</p>	<p>The Environment Agency has produced Catchment Flood Management Plans for each river catchment in England. In Kent these were largely produced in 2008. These plans give an overview of the flood risk across each river catchment and recommend ways of managing those risks now and over the next 50-100 years. Part of the recommendations in the CFMPs is to identify and address the flood risk in catchment where a need is identified.</p> <p>In terms of KCC work, the Flood Risk Regulations 2009 and Flood and Water Management Act 2010 placed a responsibility for flood risk management on KCC in relation to surface water, ordinary watercourses and ground water. In response KCC has prepared a Preliminary Flood Risk Assessment (PFRA), a county wide Local Flood Risk Management Strategy and 13 surface water management plans (informed by the PFRA).</p>
<p>7. That KCC ensures that its Environment and Waste Team are sufficiently resourced to enable them to: develop a county-wide coastal policy; maintain their oversight of Shoreline Management Plans (SMPs) to promote consistency across the county; and raise public awareness of plans.</p>	<p>Planning and Environment now has dedicated Flood Risk Management staff (within the Flood Risk and Natural Environment Team), comprising Flood Risk Manager, Flood Risk Project Officer, Sustainable Drainage Engineer and Land Drainage Engineer. This is further enhanced by an Environment Agency secondment to support the land drainage work one day a week.</p>
<p>8. That KCC should lead on the co-ordination of work with landowners and other agencies to identify options for the funding of changed land-use or buy-out to ensure that plans to achieve more naturally functioning flood plains and</p>	<p>Agreed in 2009 that this should defer to national work looking at issues of blight as a result of flooding.</p>

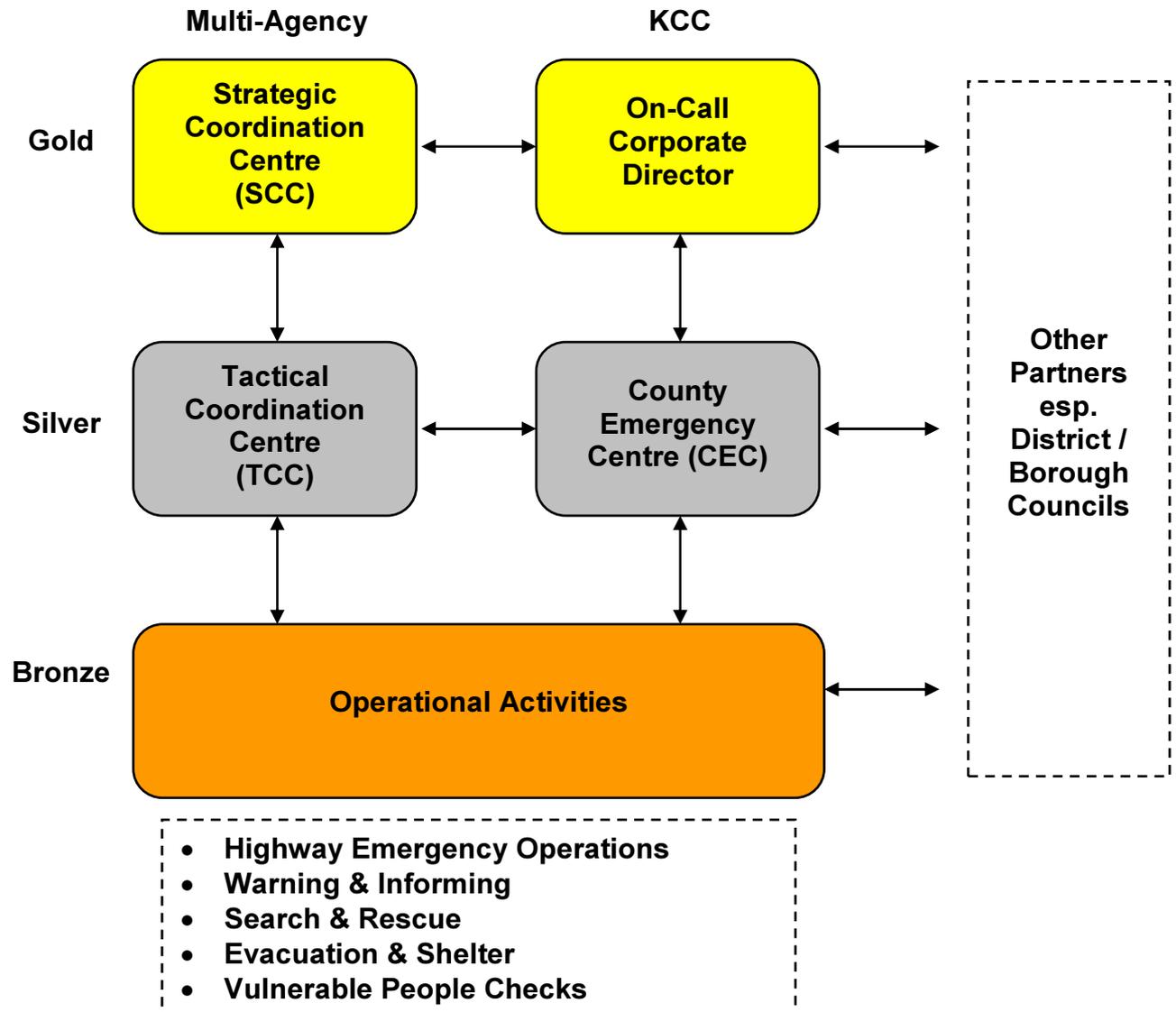
coastline in Kent are arrived at equitably.	
9. That KCC works in partnership with the EA to ensure that River Basin Management planning is fully integrated with existing Catchment Flood Management Plans (CFMPs) and with regard to SMPs.	Agreed in 2009 that no further action was required on this recommendation.
10. That Kent Highway Services (KHS) and the EA seek to reconstitute Flood Liaison Advice Groups (FLAGS) in Kent (ideally catchment based), with representation from the insurance industry and local communities.	Local Multi-agency Flood Plans and community-based training exercises include participation by KCC Highways and Transportation, EA, KCC EP and other key partners.
11. That KCC instigates discussions between local planning authorities, Southern Water and others on the feasibility, benefit and cost implications of using non-return valves/sealed sewage systems in all new developments and existing developments where sewage flooding is proven to be a problem and requiring it to be a condition of planning consent.	Non-return valves are a standard response from Southern Water for sewer flooding problems where they are feasible. There is currently no standard requirement for such valves/systems to be conditioned for planning consent.
12. That KCC promotes the use of sustainable drainage systems (SUDS) throughout Kent with over-attenuation of surface runoff, guided by best practice adopted by Canterbury and Ashford councils and findings of the integrated urban drainage pilots.	The Flood and Water Management Act 2010 places a responsibility on KCC to act as an approval and adoption body for SUDS. Although this to date this part of the Act has not been commenced, KCC has been proactive in preparing for this role and promoting the inclusion of SUDS in new developments, including the development of SUDS master-planning guidance. The authority has also revised its drainage adoption regime so it can already adopt some SUDS that are contained within the highway boundary.
13. That Kent planning authorities adopt the requirement for Drainage Impact Assessments for all new developments, following the Canterbury model.	This recommendation has not been taken up by Kent's planning authorities. Most planning authorities do not have the resources to assess a drainage impact assessment and there is no one to support them in that. Once the Drainage Approval Role is commenced (which has been delayed by Defra several times now) we will be required to approve drainage for all major developments. Further to this, as part of

	the surface water management plans KCC are undertaking, we are exploring with local authorities and the EA the option of designating some areas as Critical Drainage Areas.
14. That the Fire & Rescue Service are included as an active partner in the planning process for new developments.	Agreed in 2009 that no further action was required on this recommendation.
15. That the Kent Design guide is revised to include information on mitigating flood damage and makes reference to innovative designs for the future, such as floating homes.	This revision has not been undertaken.
16. That KCC lobbies government to produce a set of Building Regulations for use in flood risk areas so that planners are supported by increased but nationally consistent obligations to assist developers with a high level of flood proofing/mitigation.	The Flood and Water Management Act provided an amendment to Building Act to enable the Building Regulations to require flood resilient repair but this has not been taken forward. Guidance does exist – for instance, CIRIA produced guidance on the repair and restoration of buildings following floods to improve future flood resistance; and RIBA have produced guidance on designing for flood risk.
17. For KCC to work in partnership with the EA to publicise actions householders can take to increase the flood resilience of their homes.	KCC have worked alongside EA on flood fair events and public information.
18. That KCC specifically allocate funding to enable road gully cleansing work. That the KHS winter maintenance budget is readjusted to become an extreme weather budget.	The budget for gully cleansing has been increased to £2.765m (from £1.8m at the time of the recommendations). There has been significant modernisation and investment into road gully cleansing and winter maintenance. The winter maintenance budget has remained; emergency funding is sought for extreme weather events.
19. That KCC works in partnership with local authorities, the police and traffic wardens to inform the public about road drainage cleansing activities to address the issue of vehicles obstructing gullies and delaying vital works.	Ongoing
20. That the government should urgently consider the EA's request for funding to enable vital works to proceed at Jury's	Funding was secured in 2013 for the Broomhill Sands Coastal Defence scheme (which this recommendation

Gap, Cambers.	relates to), increasing the level of protection from 1 in 20 years to 1 in 200 years.
21. That the EA should encourage the input of local authority and Internal Drainage Board (IDB) experts on local strategies and schemes and that IDBs gain representation on the Southern Regional Flood Defence Committee (RFDC) in order to optimise the benefit to be gained from local knowledge.	Agreed by Committees that IDBs are represented through the local authority representative.
22. That the EA develop and implement a phased rolling programme of maintenance to include 'low risk' areas (in collaboration with the Kent Internal Drainage Boards).	The Environment Agency publishes an annual river and coastal maintenance programme available on their website
23. That the EA prioritise clearance of waterways in the Romney Marsh Area.	Maintenance work for all main rivers is carried out on a priority basis – most of Romney Marsh is classed as medium or high risk.
24. That the Kent Resilience Forum (KRF) Severe Weather Group (SWG) audit and promote the development of emergency plans/specific flood plans for at risk areas in liaison with the Environment Agency and develop and generic flood plan for Kent.	KCC have published a flood response plan, which govern the council's response to a significant flood in Kent. Local multi agency flood plans have also been prepared at the local, district level.
25. That the government consider placing a duty (with funding) on the Fire & Rescue Service to respond to a flood emergency and further considers designating FRS as the lead body in charge of a flood incident.	This was a recommendation of the Pitt Review (2008). Despite the introduction of the Flood and Water Management Act, which was intended to take forward the Pitt Review recommendations, there is still no duty on the Fire & Rescue Service to respond to a flood emergency.
26. That the Kent Resilience Forum Severe Weather Group formulate and publicise an action plan in relation to flooding to raise public confidence in Kent's preparedness for flood events and consideration should be given to merging the SWG with the Flood Warning Planning Liaison Group to reduce duplication and avoid confusion as part of a wider streamlining of the group structure within the Resilience Forum.	Kent and Local Multi-agency Flood Plans, alongside locally delivered training and exercising, have done much to enhance flood preparedness.

<p>27. That KHS should send officers to work alongside local district colleagues in an emergency situation.</p>	<p>Agreed in 2009 that no further action was required on this recommendation as arrangements already exist.</p>
<p>28. That the Environment Agency, through its chairmanship of the KRF Severe Weather Group, should ensure there is a systematic survey of critical infrastructure (location and flood defences) and through the SWG promote work with utility companies to ensure supplies can be protected and maintained during flood emergency situations.</p>	<p>Critical Infra-structure work delivered as element of Kent and Local Multi-agency Flood Plan work.</p>
<p>29. That the Severe Weather Group liaise with partners in the Kent Resilience Forum and east coast authorities to formulate an emergency response plan for an extreme coastal event, including warning systems, communication processes and education of residents.</p>	<p>East Coast Flooding has been the focus of significant investment by EA on improved risk mapping. Multi-agency partners have enhanced planning and response contingencies for this risk. A major multi-agency East Coast Flooding seminar and exercise was delivered at Ashford in April 2013.</p>
<p>30. That KCC support the Environment Agency in raising flood risk awareness (including the appointment and training of flood wardens and to ensure that vulnerable people are identified and supported in emergency situations) via town and parish councils and similar community groups.</p>	<p>Significant community resilience work, including plan production and locally delivered training and exercising has taken place within flood vulnerable Kent communities. Kent Association of Local Councils (KALC) are key partners, alongside EA and KCC EP.</p>

Appendix 3. Emergency Command, Control & Coordination Structures



Appendix 4. Timeline of Key Events

Friday 20th December

- First warning of high winds from Met Office received by KCC Emergency Planning (EP) at 11:00.
- Multi-agency conference call set up and chaired by KCC EP at 16:30.

Sunday 22nd December

- Met Office issue 'Amber' warning for high winds & heavy rain.
- EA issue 8 x Flood Alerts ('Flooding is Possible: Be Prepared) for rivers, mainly in west Kent.
- Second multi-agency conference call, chaired by KCC EP at 15:00.
- Joint press statement agreed & issued to 'warn & inform' the public.

Monday 23rd December

- Third multi-agency conference call, chaired by KCC EP at 09:30.
- Morning focus – preparations, build on warning & informing messages, including working with KCC Gypsy & Traveller Unit and District / Borough Councils to contact all coastal caravan & camping sites re risk of high winds.
- Storm hits Kent – widespread damage, many trees down and heavy rain leads to surface water flooding across the County, causing significant travel disruptions.
- Approximately 28,500 without power in Kent (highest in the country).
- Mid morning Kent Police open the multi-agency Tactical Co-ordination Centre (TCC) to help manage the response. KCC EP and Highways send liaison officers.
- EA issues 'Flood Warnings' (Flooding is Expected: Immediate Action Required) for 5 x rivers in west Kent.
- County Emergency Centre (CEC) operational 07:00 to around 22:00, with liaison officer at TCC 24 / 7.

Tuesday 24th December

- Morning focus – vulnerable people without power, plus risk of flooding in west Kent from Rivers Eden and Darent.
- Kent Police chair 1st multi-agency Strategic Coordinating Group (SCG) meeting.
- Edenbridge isolated by surface water flooding & fallen trees. Edenbridge Town Council invokes its Community Emergency Plan. Contact established via Sevenoaks District Council. KCC Highways & Transportation & South-East England 4x4 Response deploy to Edenbridge to clear roads.
- Midday – advised that surface water flood risk managed and reducing.

- UK Power Networks advise that c28,500 properties in Kent without power.
- Approx 15:30 – Environment Agency warn that water levels in the Medway downstream of Tonbridge will cause flooding in Tonbridge, East Peckham and Yalding.
- CEC works with multi-agency partners to coordinate door-knocking, evacuations & search & rescue operations. South-East England 4x4 Response, Coastguard Rescue Team, Kent Search & Rescue (KSAR) & St John Ambulance (SJA) deployed to Yalding.
- Rescue operation at Little Venice caravan park in Yalding, many residents evacuated by voluntary sector crews deployed by CEC.
- Three rest centres established by Maidstone Borough Council (MBC) and Tonbridge & Malling Borough Council (TMBC) and transport for evacuees arranged. Around 50 evacuees in the three rest centres by mid-evening.
- Late evening decision taken to house remaining evacuees in hotels rather than operate rest centres overnight. CEC coordinates these arrangements with MBC and TMBC.
- Around midnight Maidstone begins to flood.
- CEC operational 06:00 to 03:30.

Christmas Day & Boxing Day

- Over 10,000 still without power.
- Flood waters remain high all day, evacuees remain in hotels.
- Flooding also affected Hildenborough.
- Emergency response continued all day.
- No use of CEC, EP team works remotely, co-ordinating activity via mobile, email & teleconference.

Friday 27th December

- Flood waters begin to drop.
- Start of initial early recovery actions across the whole County. Kent Police stand-down SCG and handover responsibility for co-ordination to KCC.
- PM visits Yalding.
- Mobile Police Stations & Gateways deployed to affected communities to act as bases for multi-agency 'task forces', comprising KCC Community Wardens, St John Ambulance, District / Borough Councils, Environment Agency & Kent Police to work alongside UKPN staff and Parish Councils to provide on-scene information & assistance.
- On scene presence supported by 'Storms & Flooding' helpline operating in CEC over the weekend, for those affected to have a further source of advice and support, alongside KCC website.
- CEC operational 07:00 to around 20:00.

Saturday 28th December

- Cleanup in Tonbridge, East Peckham, Hildenborough, Yalding and Maidstone, plus other areas affected by runoff flooding begins.
- Paul Carter visits Yalding and reports lack of co-ordination & visible presence from KCC and partners on the ground, plus complex social care, clean-up & restoration issues.
- Additional resources (SJA, KFRS, EA, H&T and electricians) deployed to Yalding, to support with welfare checks, electrical safety checks, pumping out of water.
- CEC operational 07:00 to around 00:00

Sunday 29th December

- Yalding task force on scene from early morning & throughout day, assisting with a range of welfare & clean-up issues.
- By midday, reports of many people being able to return to their houses, with power safe to restore.
- CEC operational 07:00 to around 20:00.

Monday 30th December to Friday 3rd January

- Recovery operations, including significant support to vulnerable people, continue.
- Multi-agency Strategic Recovery Co-ordinating Group (RCG) meeting held at Sessions House, chaired by Amanda Honey, attended by Paul Carter, Michael Hill and senior representatives from a range of partner agencies.
- Some additional people provided with alternative accommodation to reduce immediate risks.
- Some evacuees remain in Local Authority care, receiving support from MBC, Kent Support & Assistance Service (KSAS) and Voluntary Sector.
- CEC operational extended daytime hours, except New Year's Day when staff worked remotely.
- Continued heavy rain maintained the risk of river and runoff flooding.
- Met Office / EA issue 'Amber' warning for heavy rain with 'Flood Warnings' expected for multiple rivers across the County, both in already affected areas, but also in east of the County too.
- Kent Police agree to re-establish Strategic & Tactical Coordination Centre arrangements.
- 16:00 KCC EP chair a teleconference of Local Authority partners. Joint agreement to invoke Mutual Aid arrangements with neighbouring counties & request Military Assistance to replenish stocks of sandbags as matter of urgency.
- 18:00 discussions with Military to broker assistance.

- 00:00 go-ahead received from MOD (via DCLG) to invoke Military Assistance. Logistical coordination undertaken through the night.

Saturday 4th & Sunday 5th January

- CEC operational from 07:00 to 00:30 (Sat to Sun) and 07:00 to 18:30 (Sun).
- SCG and TCG meetings continue, with a range of issues addressed throughout day, including a number of vulnerable individuals with complex welfare needs.
- Weather / flooding forecast markedly improves compared to original forecast.
- Recovery operations, including significant support to vulnerable people, continue.

Monday 6th to Friday 10th January

- 'Emergency' phase officially declared over at 12:30. Kent Police had lead responsibility to KCC to chair recovery operations.
- Daily tactical recovery co-ordination conference calls continue, co-ordinated through CEC.
- Risk of potential property flooding arising from water escaping from Brishing Dam, Maidstone. KCC EP supports Boughton Monchelsea Parish Council, working with FSC, H&T, NHS, EA, MBC, Kent Police & KFRS, to develop contingency plans, including H&T contractors to pump away water.
- Dartford Borough Council (DBC) alert partner to risk of potential building collapse in Greenhithe as a result of landslip, believed to be caused by saturated ground. Immediate risk confined to 6 x flats in 3-storey block, but potential to impact on surrounding properties. Contingency plans in place with partners in case evacuations needed.
- Friday 10th Jan - 2nd Strategic Recovery Coordinating Group meeting chaired by Amanda Honey. Recovery Strategy agreed. EP team to coordinate with partners to implement Recovery Plan to deliver the Strategy.

Summary

- The CEC was operational every day from Monday 23rd December to date (Friday 10th January), with the exception of Christmas Day, Boxing Day and New Years Day, when staff worked remotely.
- 9 x EP staff worked throughout Christmas Day and 12 x staff worked Boxing Day.
- Between Sunday 22nd December and Sunday 5th January (15 days) the 14 x EP staff members worked a total of 995 hours.

Appendix 5. Submissions from Individual KCC Services & Partners

A5.1 KCC Highways & Transportation (H&T)

- Events for H&T started Friday 20th when we declared 'Amber' alert. On Sunday 22nd we moved to 'Red' and prepared back up staff from Kent & Enterprise for the impending weather. Overnight of 23rd we had 30 x out-of-hours officers out on the road (usual staffing is 12 x officers), many of whom were out all night dealing with fallen trees.
- Enterprise were due to pack up for Christmas shutdown at midday 24th. However they remained in depots throughout the day. For the remainder of the week, H&T and Enterprise were operating at out-of-hours capacity due to the Christmas break. We increased out-of-hours resource for both H&T and Enterprise.
- Flooding then became major problem and we had out-of-hours team and crews out in Maidstone Boxing Day to get Fairmeadow open for Friday 27th. Over weekend of 28th-29th we arranged crews to assist UK Power Networks (UKPN) to clear trees in power line, working with the Duty Emergency Planning Officer (DEPO).
- Lessons learnt – As the worst of the weather happened over the Christmas break, we struggled getting sub-contractors, in particular tree surgeons. In future we must have more of our own contractor trained up for tree work.

A5.2 KCC Kent Support & Assistance Service (KSAS)

- KSAS has assisted the following groups affected by flooding in Kent since 30th December 2013:
 - 57 individuals;
 - 57 emergency awards of a cash voucher;
 - 10 awards of furniture; and
 - 8 awards of clothing vouchers;
- The above figure for assistance includes repeat awards where applicants were awarded a continuance award where the circumstances might have changed.
- Additionally, 2 applicants declined assistance from the Service and with 3 applicants outstanding, owing to a lack of contact or the applicant being admitted to hospital. These are being monitored.
- We have assisted 6 households with housing-related support through the Floating Support programme.

A5.3 Kent Fire & Rescue Service (KFRS)

Preparations

- 20th – 23rd December – Working with response partners to monitor developing weather patterns and prepare for heavy rain and strong wind.

Multi-agency co-ordination

- From 07:00 24th December – KFRS worked with Kent Police and other responder organisations at Tactical Control Point to review reports about developing situation (rain fall, predicted flooding and areas likely to be affected) and co-ordinate response. Local Authority, EA and Police worked to inform those communities likely to be affected locally and offer evacuation.
- From 12:00 25th December – KFRS worked with key partners as part of the Gold Strategic Co-ordination Group (SCG) which oversaw and co-ordinated the work of all agencies responding to the ‘major incident’.

Operational response

- Where people were unable to leave affected properties, KFRS water safety and rescue crews worked alongside HM Coastguard and Kent Police to rescue people from their homes. Whilst the majority of this work focussed on Little Venice Caravan Park on Christmas Eve and Yalding on Christmas day, KFRS attended other local areas to rescue people including a man who had climbed a tree to escape flood water in Leigh and a man trapped in his vehicle by flood water a Teston Bridge.
- During the rescue and evacuation operation at Yalding on Christmas day KFRS provided a senior operational manager, command unit and support crew to manage and co-ordinate water rescue work.

Recovery

- Once the incident moved into the recovery phase, KFRS supported locally affected communities in a number of ways. We started providing community safety advice to help people avoid any additional risk, particularly from fire, on 28th December with operational fire crews. We were also able to pump out cellars and other parts of buildings in the worst affected areas (including Yalding, East Peckham and Tonbridge).
- This work continued into the early part of the New Year, although the majority of support was from KFRS Community Safety and Vulnerable Persons teams who were able to work as part of a wider local community response to check on welfare, confirm that electricity had been reconnected, advise on home safety and the need to have appliances which had been exposed to flood water checked before they were used.

Operational response – Summary and highlights

- The vast majority of weather related operational activity is concentrated on 23rd, 24th and 25th December and 1st January 2014.
- Between 23rd December 2013 and 7th January 2014 KFRS received 1,659 calls, 60% of which were received between 23rd and 25th December. Of these total calls, 816 were weather related (82% between 23rd and 25th)

- Throughout the whole period, 770 incidents were attended, 331 of which were weather related. Of the 331, 78% were between 23rd and 25th December, with another slight increase on New Year's Day. Additionally:
 - A - 37% lasted less than 1 hour
 - B - 25% lasted between 1 and 2 hours
 - C - 14% lasted between 2 and 3 hours
 - D - 6 incidents lasted in excess of 10 hours (one of which was the incident 68R1 attended and became stranded)
- Where lasted longer than 3 hours, 81% were on the 23rd and 24th December
- Throughout the whole period 1,476 mobilisations were made, 650 of which were to weather related incidents. Of these 650 mobilisations:
 - A - 355 were mobilisations of pumps (which including support pumps for the specials)
 - B - 98 were mobilisations of specialist vehicles i.e Water rescue equipment
 - C - 197 were mobilisations of officers
- The maximum number of resources (pumps, specials and officers) in use at one time was 38 which happened on Christmas Eve. The average number for the whole period was 4 resources.
- The maximum number of pumps in use at one time was 24 (which will include support pumps for specials) which happened on Christmas Eve. The average number for the whole period was 2 pumps
- The maximum number of specials in use at one time was 11 which happened on Christmas Eve. On both Christmas Day and Boxing Day, the maximum number of specials in use was 10. The average number for the whole period was 1 special
- The maximum number of officers in use at one time was 15 which happened on Christmas Eve. On the 23rd December, the maximum number of officers in use was also high with 12 personnel. The average number for the whole period was 1 officer
- Over the whole period, there is a record of 134 rescues at weather related incidents, 127 of which happened on Christmas Eve or Christmas Day.

Post New Year Community Safety Support

- There was also a Community Safety presence in Yalding offering safety advice and support on 2nd (4 CS staff) and 3rd January (2 CS staff);
 - A - On the 2nd January staff door knocked all the properties in Lees Road (approx. 50 properties), supported by St John Ambulance crews
 - B - On the 3rd January staff door knocked properties in Lings Close, Little Venice Caravan Park amongst others.

A5.4 Kent Police

- Kent Police fully engaged with KRF partners throughout participating in all Severe Weather Advisory Groups (SWAGs), Strategic and Tactical Coordinating Groups (SCGs & TCGs) and Strategic & Tactical Recovery Coordinating Groups (RCG) between 20.12.13 at 1600 and present.
- Designated Command & Control structure put in place from 20.12.13 onwards.
- Strategic Coordination and Tactical Coordination facilities activated and resourced at Police Headquarters and Medway and made available as required.
- Proactive coordination of Media and Public Information shared between KCC as status of incident dictated.
- Police presence increased as appropriate in affected communities to provide visibility and reassurance to public.
- The Force Control Room (FCR) experienced significant increase in call volumes during the weather event.
- Liaison with Parish Councils, Council officers, Emergency Service partners and voluntary sector within affected communities.
- Assisted partners with evacuation of residents as required.

A5.4. Environment Agency

Stats and Facts for Kent

- 30mm rainfall over 21/22 December
- 60mm of rainfall over 23/24 December
- AIR opened at 06.00 Monday 23 December
- 17 locations had flood warnings at a time during the two week period
- 597 households and 51 commercial properties flooded (648 total)
- 38,144 properties protected by flood defences.
- VIP visits:
 - 27 December, Prime Minister, David Cameron
 - 30th December, Secretary of State for the Environment and Rural Affairs, Owen Paterson

Headline narrative of the event

- During 23 and 24 December 2013 a deep low pressure system tracked across the UK and over 60mm of rainfall fell across Kent and South London. The ground was already saturated and river levels rose quickly following 30mm rainfall the previous weekend of the 21 and 22 December.
- We opened our Area Incident Room at 06.00 Monday 23 December 2013 to manage flood risk and co ordinate our response. It remained open until 14.00 on 9 January 2014.

- Our teams worked tirelessly checking that flood defences and barriers are in good working order, clearing trash screens and removing blockages in watercourses. Our flood ambassadors were in areas at risk, talking to people and giving practical advice. They returned to areas affected to establish what happened, confirm which properties flooded and continue to offer support and guidance.
- We worked closely with our professional partners throughout this incident through meetings of the Severe Weather Advisory Group, Kent Resilience Forum and Tactical Co ordination Group and Strategic Co ordination Group.
- We provided up-to-the-minute information for the public, local authorities and emergency services throughout. Over the two week period we issued 17 flood warnings in Kent, and a total of 28 Warnings across our area including Surrey and East Sussex.
- Our key operational structures that reduced the number of properties affected in Kent included the Leigh FSA, Aldington and Hothfield FSA, Lamorbey Park FSA, Mill Leese FSA, Stoner Cu and Coult Stream Dam. We also deployed sandbags to bolster a damaged flood bank in Edenbridge.
- We have now confirmed that 597 households and 51 commercial properties flooded in Kent over the two-week period from 23 December. Yalding, Hildenborough, Tonbridge and Maidstone were just some of our villages and towns affected. *(Across Mole and South London an additional 40 households and 4 commercial were affected)*
- 38,144 properties in Kent were protected by flood defences. *(Across Mole and South London an additional 29,222 properties protected)*
- The Thames barrier was closed for eleven successive high tides to protect people and property along the Thames.
- Prime Minister David Cameron visited Yalding with us on Friday 27 December and the Secretary of State for the Environment and Rural Affairs, Owen Paterson, visited our incident room on 30 December. He praised our work on flooding over the last few weeks in the House of Commons. Gregory Barker MP, Minister of State at the Department of Energy & Climate Change praised, our teams when he met with them in Robertsbridge on 3 January.
- There is a continuing risk of flooding from groundwater in Kent and South London. We are supporting local authorities who will respond to any reports of groundwater flooding.