SCRUTINY COMMITTEE

Tuesday, 15th July, 2014 2.00 pm

Council Chamber, Sessions House, County Hall, Maidstone





AGENDA

SCRUTINY COMMITTEE

Tuesday, 15th July, 2014, at 2.00 pm Ask for: Anna Taylor Council Chamber, Sessions House, County Telephone: 01622 694764

Hall, Maidstone

Membership

Conservative (6): Mr R J Parry (Chairman), Mr J E Scholes (Vice-Chairman),

Mr E E C Hotson, Mr A J King, MBE, Mr L B Ridings, MBE and

Mrs P A V Stockell

UKIP (2) Mr H Birkby and Mr R A Latchford, OBE

Labour (2) Mr G Cowan and Mr R Truelove

Liberal Democrat (1): Mr R H Bird (Substitute) and Mrs T Dean, MBE

Church Mr D Brunning, Mr Q Roper and Mr A Tear

Representatives (3):

Parent Governor (2): Mr P Garten and Mr G Lawrie

Refreshments will be available 15 minutes before the start of the meeting Timing of items as shown below is approximate and subject to change.

County Councillors who are not Members of the Committee but who wish to ask questions at the meeting are asked to notify the Chairman of their questions in advance.

Webcasting Notice

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UNRESTRICTED ITEMS

(During these items the meeting is likely to be open to the public)

A - Committee Business

- A1 Introduction/Webcast Announcement
- A2 Substitutes
- A3 Declarations of Interests by Members in items on the Agenda for this Meeting
- A4 Minutes of the meeting held on 12 June 2014 (Pages 5 12)
 - B Any items called-in
 - C Any items placed on the agenda by any Member of the Council for discussion
 - D Items for Discussion
- D1 St Dunstan's and Westgate Towers Canterbury Traffic Management Scheme (Pages 13 54)
- D2 Capacity of Highways Drainage System and its impact on Flood Risk Management (Pages 55 114)

EXEMPT ITEMS

(At the time of preparing the agenda there were no exempt items. During any such items which may arise the meeting is likely NOT to be open to the public)

Peter Sass Head of Democratic Services (01622) 694002

Monday, 7 July 2014

Please note that any background documents referred to in the accompanying papers maybe inspected by arrangement with the officer responsible for preparing the relevant report.

KENT COUNTY COUNCIL

SCRUTINY COMMITTEE

MINUTES of a meeting of the Scrutiny Committee held in the Darent Room, Sessions House, County Hall, Maidstone on Thursday, 12 June 2014.

PRESENT: Mr R J Parry (Chairman), Mr H Birkby, Mr G Cowan, Mrs T Dean, MBE, Mr P Garten, Mr E E C Hotson, Mr A J King, MBE, Mr R A Latchford, OBE, Mr L B Ridings, MBE, Mr D Smyth (Substitute for Mr R Truelove) and Mrs P A V Stockell

ALSO PRESENT: Mr M C Dance and Mr M J Harrison

IN ATTENDANCE: Mr T Harwood (Senior Resilience Officer), Mr M Tant (Flood Risk Manager), Mr A Tait (Democratic Services Officer), Mr R Moys (Head of International Affairs), Mr D Whittle (Head of Policy and Strategic Relationships), Ms D Fitch (Democratic Services Manager (Council)), Mrs A Taylor (Scrutiny Research Officer) and Mr J Cook (Scrutiny Research Officer)

UNRESTRICTED ITEMS

43. Minutes of the meeting held on 3 April 2014 (Item A4)

1. RESOLVED that the minutes of the meeting held on 3 April 2014 be approved as a correct record and that they be signed by the Chairman.

44. The Annual report from the Flood Risk Management Committee (Item C1)

- 1. Mr Harrison, Chairman of the Kent Flood Risk Management Committee, introduced the Annual Report of the Committee. Paragraph 9 contained the conclusions of the Committee which stated that it had carried out its scrutiny function with diligence and enthusiasm. Its Members had participated fully and their views, as set out in the Minutes, were conveyed to the relevant agencies for their information. Efforts had been made to involve the 12 Kent Districts in the Kent Flood Risk Management Committee.
- 2. Mr Harwood, Senior Resilience Officer with the KCC Resilience and Emergencies Unit, explained that the Committee took its oversight duties very seriously, a further report addressing the winter floods was due to be submitted to Corporate Board on 23 June and to Cabinet on 7 July. KCCs emergency response through the Autumn/Winter 2013/14 did not only deal with the impact of flooding, but also significant storm damage including disruption to transport systems and the loss of utilities to tens of thousands of households. On January 15th the Flood Risk Management Committee held an extra-ordinary meeting to receive key agency updates and capture any major issues while they were still fresh in the minds of elected Members from KCC and Kent Districts.

- 3. Mr Tant, Flood Risk Manager, explained that he was involved in the strategic planning for flood risk management, including preparation for winter 2014.
- 4. Mr Harrison explained that an extraordinary meeting of the Kent Flood Risk Management Committee had been held after the floods of winter 2013, concerns had been raised that there was no mention of the welfare of livestock, vacating premises etc.
- 5. The Chairman explained that in Sevenoaks West there had been no overall authority on the ground, there was a need for authority to be able to co-ordinate the next steps in the recovery process following the flooding.
- 6. Mr Harwood commented that in some areas there had been difficulties with drivers removing temporary highway signage and creating damaging bow waves when driving their vehicles through flooded residential areas. The Council had worked closely with the police and used the resources available to ensure any problems were resolved as quickly as possible. Mobilisation and response during the early stages of the winter storms had undoubtedly been a challenge but responding agencies soon ensured an ordered and structured approach. This included better communication with affected communities and farmers / livestock managers.
- 7. A Member commented that there had been very good feedback on KCC's response to the flooding problems of winter 2013/14, issues to focus on for the future included long-term maintenance and management of watercourse and flood-plains, and interventions to protect livestock from flooding. Mr Harrison would take these comments on board but referred Scrutiny Committee Members to the Flood Risk Management Committees Terms of Reference contained within the report which set out what the Committee was and was not responsible for.
- 8. A Member explained that it was possible for KCC to use its influence in holding to account and expressing views. It was considered that there was a lack of capacity in surface water drainage pipes and it was hoped that the Cabinet report would deal with issues such as the clearing and replacement of pipes. The Member asked whether there was a plan to produce an information pack for the public to explain who should be contacted in particular circumstances, for example Parish Councils were willing to assist in disseminating information if it was required. Mr Harrison explained that ground water flooding occurred when the aquifers were full, it was important to look at the overall picture with differing problems depending on local circumstances.
- 9. Mr Harwood explained that the Environment Agency used an effective flood alert system in areas threatened by fluvial and coastal flooding but that warning systems in areas vulnerable to the far less predictable phenomenon of ground water/surface water flooding were far less developed. It was confirmed that the Cabinet report would seek to address community resilience and the role of parish councils to ensure a more resilient county. A template existed for a Parish Community Resilience Plan which was available from the KCC Resilience and Emergencies Unit. Mr Tant explained that KCC had limited powers, in response to an earlier question he confirmed that it was possible to ensure the pipes were maintained but not always that their size was increased, different situations required different strategies. In response to a comment from Mr. Harrison, Mr.

Harwood gave a practical example of sustainable urban drainage technology at a new retail development in Maidstone, at Eclipse Park near J7 of the M20, which had incorporated sustainable urban drainage. This technology had not only prevented flooding on site all through a very wet winter construction phase, but had also prevented historic problems with off-site flooding on the adjacent Bearsted Road dual carriageway re-occurring.

- 10.A number of Members praised the report from the Flood Risk Management Committee, and suggested areas where additional risks might be found. It was felt that ensuring that the Flood Risk Management Committee took on board the comments made might help alleviate future problems. Mr Harrison explained that as well as the Flood Risk Management Committee, there was also a Regional Flood Defence Committee. Through the suggestions of the Scrutiny Committee the Flood Risk Management Committee would invite representatives from Kent Highways Services to a future meeting.
- 11.A Member referred to experiences in Holland, most of which was under sea level, where flood risk management was clearly very well managed. Members asked whether the Flood Risk Management Committee had received an update or feedback from the discussions between the Environment Agency and representatives from Holland, this had not been received. Another Member commented on the funding put into flood defences in the Netherlands, which was considered to be significantly higher than in the United Kingdom.
- 12. In response to a question about de-silting vs dredging Mr Tant explained that desilting was the removal of silt without engineering implications and dredging applied to navigable rivers and harbours to ensure that a channel was maintained.
- 13. Mr Harrison explained to Members that he had recently undertaken a trip up the River Great Stour, there was a lack of maintenance on the river which was locally perceived as resulting in slow flows and a greater potential for tide-locking and surface water events in surrounding areas. Mr. Harrison stated that he believed that some de-silting would allow the local catchments to drain more efficiently.
- 14. Referring to the limited powers of the Committee a Member commented that KCC had powers of persuasion; the recommendations put forward by the Flooding Select Committee addressed future planning.

RESOLVED that the Scrutiny Committee:

- 15. Thank Mr Harrison, Mr Harwood, Mr Tant and Mr Tait for attending the meeting and answering Members' questions and for their excellent report.
- 16. Look forward to a report back from the Kent Flood Risk Management Committee in 12 months' time.

45. Three month report back on the European Select Committee report (Item C2)

1. Mr Dance, Cabinet Member for Economic Development introduced the report, good work had previously been undertaken by the Council and the Select Committee, which had held numerous interviews and findings had provided a

good basis on which to move forward. The main aim was to repatriate as much money as possible back from European funds relevant to the people and businesses of Kent. Other vital activities included developing partnerships in Europe and with Essex and East Sussex in the case of the Local Enterprise Partnership's EU programme.

- 2. A Member commented on the areas not yet complete, there was a discussion about the appropriate timing of a report back to the Committee; Ms Fitch confirmed that the usual monitoring process for Select Committee reports was that one year on (March 2015) the Select Committee would meet to look at progress and report back to the Scrutiny Committee.
- 3. Mr Dance explained that it might be a good time to review the progress during January/February when the guidance would be clearer, and this would be a good time to monitor bids.
- 4. A Member commended the report and any money that could be repatriated back was welcomed particularly bearing in mind the money put into the European Union. The Member looked forward to the progress report but was not happy with the way the issue had been handled.
- 5. Mr Dance explained that an options paper regarding Hardelot would be submitted to Cabinet Members on 14 July, in recent times circumstances had changed in favour of running Hardelot but this would be set out in the options paper. The Economic Directorate was asked to save 20-25% and they had looked at options including the Brussels Office, there was an opportunity for a new office with a simple arrangement, this would produce savings of around 25%. There was a need to work with other regions to access some funds, and this would be reviewed annually but currently it was considered the right decision to make.
- 6. A Member supported the review of progress earlier than one year on. He then went on to ask whether, regarding Ashford Spur, phase one and two, did the Government make any contribution to either? Mr Dance explained that for Ashford the International Station was crucial, it was a growth town, 37minutes to London. A joint meeting had been held on the 'Rock project' recently and Rail track and Eurostar needed to agree a clear outcome. A design had been proposed resulting in more trains stopping at Ashford, with better efficiency for Eurostar and this was a high priority. Whether the Government financed phase one or two of the Ashford Spur was not known but would be investigated and reported back.
- 7. Referring to the £100million that it was possible to get from Europe, what was the likelihood of getting the full amount? Mr Dance explained that Mr Moys' team was very small in relation to other teams working towards European funding, so it was necessary to bear in mind that funding would be needed, if the capacity was not there, to enable the team to write bids to enable further funding. It was the intention of the team to be proactive and access as much of the funding as possible and the £100million was well within limits.
- 8. In response to a query Mr Dance explained that a letter was written, from KCC to Government, in relation to the EU Solidarity Fund for flood damage, but this had not been pursued by Government.

9. Referring to Hardelot, a Scrutiny Committee Member asked whether the options paper would include an option to close the building. Mr Dance explained that there was not an option to close the building, there was an option to work with the private sector. There was a view from the Scrutiny Committee Member that all options should be available within the options paper.

RESOLVED that the Scrutiny Committee:

- 10. Thank Mr Dance and Mr Ron Moys for their attendance at the Scrutiny Committee meeting, for answering Members' questions and for the excellent report submitted to the Committee:
- 11. Ask that the Select Committee be reconvened at the most appropriate time to receive feedback on progress with their recommendations even if this was before the normal 1 year monitoring period and report back to the Scrutiny Committee via their minutes.

46. The Role of Scrutiny report (Item C3)

- Ms Fitch explained that the paper had been produced following the last discussion had by the Scrutiny Committee and was to support the formal discussion looking at ways of working and improvements to ways of working. Members' views were sought on a draft work programme for the Committee and for further new Select Committee Topics from Members.
- 2. The Chairman, along with other members thanked Mr Sass for producing the excellent report.
- 3. A Member was pleased with the emphasis on the Scrutiny Committee being politically impartial and it was requested that any Select Committee agendas did not have any political agenda.
- 4. A Member agreed with the work programme for the Committee and this should include budget and performance, crime and disorder and flood risk management issues. It was considered more sensible to discuss the work of the Flood Risk Management Committee before next winter to ensure preparedness. In relation to briefings for Members it was considered that the Chairman and Spokespeople briefings had been used in a more interactive way and if it was the intention to continue in this way then they should be expanded to include all Committee Members, however they should not be referred to as briefings, but rather exploratory or preparatory meetings.
- 5. It was considered that Members needed to be involved before decisions were made. Directors should report to Scrutiny with their plans for the future for scrutiny by the Committee. If the authority was to become a commissioning authority there would have to be major changes in the way the Council worked. The Member was supportive of the paper and particularly para 4.6 but there was a need to go a stage further and be involved earlier in the process.

- 6. Mr Garten, the Parent Governor Representative, was asked for his view and he considered that more public involvement was needed, perhaps with the co-option of other members from outside the authority.
- 7. A Member commented that the Scrutiny Committee was a highly political committee, it would be necessary to look at the role of Members in the transformed authority, and the role of Scrutiny and the Cabinet perhaps with the use of a workshop. There was a view that Cabinet Committees were not working in relation to pre scrutiny of decisions, the discussion of the paper was the start of a dialogue and should continue.
- 8. A Member concurred that the Scrutiny Committee should be scrutinising before the decisions were taken, there was also a view that the Scrutiny Committee should be chaired by a member of the opposition, it was considered that this would improve the perception of the Committee, there were also concerns over the frequency of 'urgent decisions'. The Chairman confirmed that the frequency of urgent decisions would be looked at, with regards to the Chairmanship this was contained within the constitution and it was suggested that this be the subject of a discussion with the Group Leaders.
- 9. Another Member supported the work programme for the Committee. Referring to public involvement this had been done in the past and this opportunity should be given to the public and managed correctly.
- 10. The Parent Governor representative reiterated his view that the Scrutiny Committee ought to be non-political and this should be strengthened particularly as the public were disenchanted and this would help bring decision making back to the public.
- 11.A Member commented that when members of the public had been present at meetings, Members had accused witness of being politically motivated. Guests and witnesses should be welcomed and not treated as a threat. The Member explained that following a meeting with the Leader and Group spokespeople that the next Select Committee might focus on the Troubled Families Programme.
- 12. Referring to public involvement and questions at Committee meetings this had not been discarded, meetings were webcast; it was considered that the public would be more engaged if there was real debate and grilling at an earlier stage.
- 13. A Member expressed the view that all Members held their own philosophy. It was not possible to deny that those views were held and that members would be influenced. In relation to pre-decision scrutiny, Members were informed of decisions to be made, and this provided members with the opportunity to make comments. The ideal situation was a parity of esteem between the Executive and Scrutiny, pre-decision scrutinywas a good way of moving forward.
- 14. The Chairman reminded members of the Cabinet Committee system which was an excellent way of pre-decision scrutiny.

RESOLVED that the Scrutiny Committee

15. Thank the officers for the report,

16. Request a report back on the way forward for the Scrutiny Committee via the Chairman and Spokespeople.

47. Scrutiny Committee input into the Commissioning Select Committee action plan

(Item C4)

- The Chairman explained that this report had been brought to the Committee earlier than usual at the request of Members. A team had not yet been appointed to put together the implementation plan and Mr Whittle was present to listen to the debate and take Members comments and views away to the relevant officer.
- 2. A Member suggested a detailed discussion on this issue was premature and should be part of a larger debate.
- 3. One Member explained that at the Leaders' meeting the previous day the Commissioning Programme had been discussed, there was a proposal for an all Members' briefing on the afternoon of the County Council meeting on 17 July to look at the whole Commissioning process.

RESOLVED that the Scrutiny Committee:

4. Agreed that bearing in mind the Leaders' commitment earlier in the day to an all Members' briefing following the County Council meeting on 17 July the Scrutiny Committee defer any further discussion until their scheduled report back in September 2014.



By: Peter Sass - Head of Democratic Services

To: Scrutiny Committee – Tuesday 15 July 2014

Subject: St Dunstan's and Westgate Towers - Canterbury - Traffic Management

Scheme

1. Background

(1) The Chairman and Spokesmen of the Scrutiny Committee agreed that the Committee should consider the following aspects of the St Dunstan's/Westgate Towers Regeneration Scheme specifically:

- a) Why the implementation of one or more of the St Dunstan's Regeneration Scheme Steering Group's conclusions had not yet been considered by the Canterbury Joint Transportation Board. It is noted that the Steering Group's deliberations were informed by a wide consultation exercise.
- b) How and when was the decision taken to implement the post consultation proposals.
- (2) Attached at **Appendix A** is the consultation document on the St Dunstan's regeneration scheme to give the Committee a brief background to the options considered. The consultation ran from 16 September to 9 December 2013 and the Steering Group considered the results of this consultation at a meeting on 15 January 2014.
- (3) The St Dunstan's Regeneration Scheme Steering Group formed by the Canterbury Joint Transportation Board, recommended option E and to adopt minor alterations such as a weight limit, pathway expansion and a 20mph limit. Minutes of three meetings of the Steering Group's minutes are attached at Appendix B.
- (4) Mr D Brazier, Cabinet Member for Environment and Transport and Mr T Read, Head of Transportation, Growth, Environment and Transport Directorate, will be attending the meeting to answer the above questions relating to the process for the implementation of the post consultation proposals.

RECOMMENDED

2. The Scrutiny Committee is invited to consider the response from the Cabinet Member and Officer and make comments/recommendations accordingly.

Contact: Denise Fitch Tel: 01622 694269; E-mail:

denise.fitch@kent.gov.uk



Introduction

During 2012, an experimental traffic layout was implemented in the St Dunstan's area of Canterbury. During the trial vehicles were unable to travel through the Westgate Towers. Only buses and taxis were allowed in Lower St Dunstan's Street and any normal traffic in North Lane had to turn right by the towers back into Lower St Dunstan's Street. As the Westgate Towers were closed, traffic signals were installed to the southwest of the Westgate Towers to control single file traffic in both directions. St Peters Place was open to all traffic through the traffic signals and Pound Lane was closed for the duration of the trial.

Alongside the restrictions, an area wide weight limit, 20mph zone and widened footway in Lower St Dunstan's were introduced.

The scheme improved air quality and provided local businesses with opportunities to use the widened footway and improved pedestrian routes. However, there was significant queuing and delays in Station Road West and London Road. The trial changes have since been returned to the original traffic layout.

Kent County Council is now consulting with the community to determine what they would like to see happen to improve the St Dunstan's area.

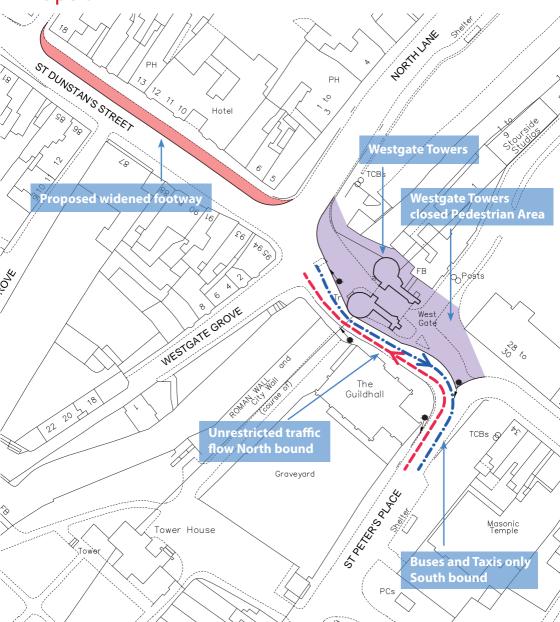
This scheme's aim is to regenerate the St Dunstan's area of Canterbury by consulting fully with the community to identify a scheme that will deliver benefits to residents, local business, the wider community and visitors.

Scheme objectives:

- positive economic impact for the community
- improve walking and cycling routes between Canterbury West Station and the city centre
- improve public transport (both buses and taxis)
- enhance the street scene
- improve air quality
- preserve and promote the historic Westgate Towers
- to maintain the quality of life, mitigate any changes in congestion and gain community support by engaging in a full consultation

Kent County Council has had meetings with key stakeholders, where a choice of options have been drafted and illustrated in this booklet.

Option A



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Traffic signals were installed to the southwest of the Westgate Towers to control single file traffic in both directions. Traffic restrictions were introduced on Lower St Dunstan's Street where buses and taxis only were allowed southbound, all other traffic coming from North Lane had to turn right. In this option, Pound Lane would be closed. This was the trial layout which was installed from April 2012 until April 2013.

3	3
Protects the Westgate Towers	Traffic congestion on Station Road West
Improved pedestrian links from Canterbury West station	Increased congestion on Military Road and Sturry Road
Buses can use Lower St Dunstan's	Prohibited traffic could ignore the

Reduced traffic on North Lane and St Peters Place

the St Peters Place bus stop

Street and go around the towers to

Advantages

Businesses could use the widened footways for tables and chairs for customers

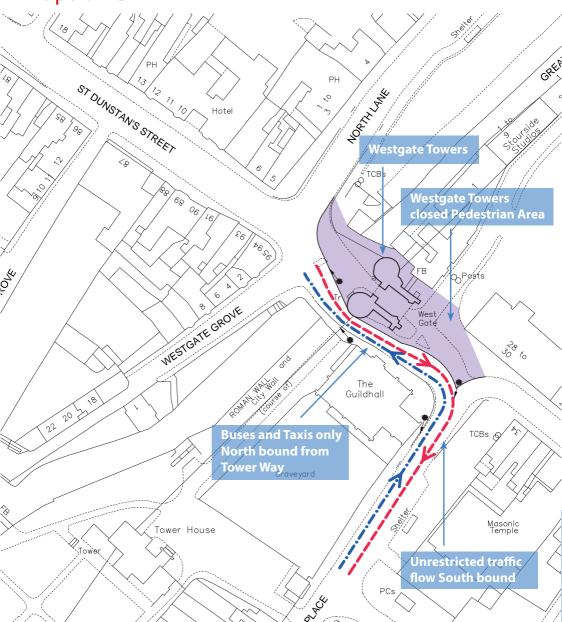
Prohibited traffic could ignore the traffic signs and travel through the restricted areas

Disadvantages

Summary

This was the trial layout that resulted in congestion on Station Road West and London Road, but improved air pollution on North lane and St Peters Place and protected the towers.

Option B



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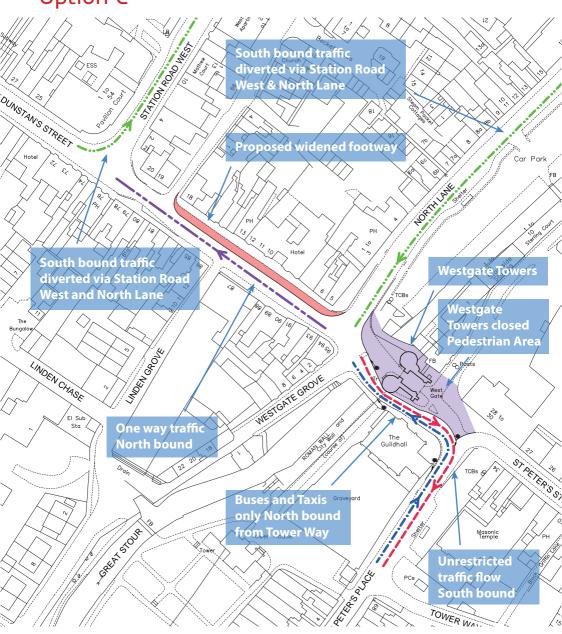
Traffic signals would be installed to the southwest of Westgate Towers to control single file traffic in both directions. Traffic would be restricted on St Peters Place with buses and taxis only being able to travel northbound round the Towers. All traffic would be able to use St Dunstan's Street and North Lane. In this option Pound Lane would be closed.

Advantages	Disadvantages
Protects the Westgate Towers	Perceived to be similar to the trial
Improved pedestrian links from Canterbury West station	Increased traffic demand on Rheims way and London Road with the restriction on St Peters Place
Buses are able to use St Dunstan's Street	Prohibited traffic could ignore the traffic signs and travel through the restricted areas
Improved links between the city and St Dunstan's to help improve the appearance of the streets	The location of traffic signals could be confusing to drivers and pedestrians
All traffic still able to use North Lane and Lower St Dunstan's Street	
Unlikely to increase congestion	

Summary

This option will reduce air pollution in St Peters Place, allow buses into the St Dunstan's Street, will not cause the congestion that occurred in the trial and protects the towers.

Option C



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Traffic signals would be installed to the southwest of Westgate Towers to control single file traffic in both directions. St Dunstan's Street would be closed for south bound buses (one way traffic northbound). Southbound traffic (including buses) must turn left into Station Road West and use North Lane to access St Peters Place. In this option Pound Lane would be closed.

Advantages

Protects the Westgate Towers

Improved pedestrian links from Canterbury West station

Buses can use St Dunstan's Street, but the number of buses will be reduced as they are diverted along Station Road west and North Lane

Improved links between the city and St Dunstan's to help improve the appearance of the streets. This will also enable widening of both sides of St. Dunstan's Street

Businesses could use the widened footways for tables and chairs for customers

Traffic still able to use North Lane

Unlikely to increase congestion

Disadvantages

Perceived to be similar to the trial

Increased traffic demand on Rheims way and London Road with the restriction on St Peters Place

Prohibited traffic could ignore the traffic signs and travel through the restricted areas

Longer route for southbound buses

Summary

This option will reduce air pollution in St Peters Place, allow buses into the St Dunstan's Street, will not cause the congestion that occurred in the trial, improves public transport connections to the railway station, allows more pedestrianisation of Lower St Dunstan's and protects the towers.

Option D 91 20 79 ST DUNSTAN'S STREET WA THOOM 12 11 10/ χO LINDEN BOVE Westgate Towers 6 Posts **Pedestrian Zone** WESTGATE GROVE 10:00 to 16:00 El Sub Sta Westgate Towers The Guildhall 20 718 Orain TCBs 🔗 closed Pedestrian Area GREAT STOUR Graveyard A IT SON ACE Traffic controlled at Westgate Towers wer House outside traffic restrictions

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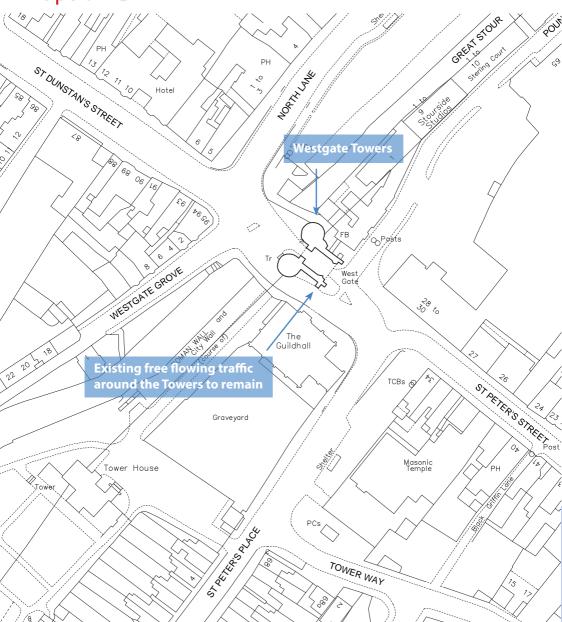
Traffic signals would be installed to the southwest of Westgate Towers to control single file traffic in both directions. St Dunstan's Street would be pedestrianised between 10.00am and 4.00pm and through the Westgate Towers (24hour closure). In this option Pound Lane would be closed.

Advantages	Disadvantages
Protects the Westgate Towers	Diversion for buses at restricted times
Buses are able to use area at non restricted times	Increased traffic on Station Road West
Improved links between the city and St Dunstan's to help improve the appearance of the roads.	Possible delays at traffic signals
Businesses could use the widened footways for tables and chairs for customers	Affects may be similar to the trial scheme with wider congestion around Canterbury
Pedestrians are given priority	Confusing for the community

Summary

This option removes traffic during restricted times, but will increase congestion on Station Road West, reduces public transport provision for St Dunstan's area, protects the towers and will increase queuing on North Lane and St Dunstan's during the peak periods.

Option E



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Option E is to leave the St Dunstan's area traffic movements as they are at present. A width restriction would be implemented through the Westgate Towers.

Advantages	Disadvantages
No changes required	Westgate Towers not fully protected
No funding needed	No improved links between the city and St Dunstan's Street to help
No restrictions on traffic movement	improve the appearance of the streets
	Poor pedestrian links from Canterbury West station
	Buses unable to use the St Dunstan's area
	No cycling improvements
	No improvement for businesses

Summary

This option is the existing layout, but does not protect the towers, has poor pedestrian links, traffic levels will increase and buses are unable to access the St Dunstan's area.

All options – suggested proposals

Please note that with all of the above outlined options, further suggested proposals can be applied. You are asked for your opinion on all of the proposals as part of the response questionnaire:

Weight limit

A weight restriction was introduced within the trial and feedback with key stakeholders showed general support.

20mph zone

A 20mph speed limit was also popular with the stakeholders and could be introduced with any of the options.

Pound Lane closure

Some residents have asked for this feature to be retained within any scheme. Pound Lane was closed by the Westgate Towers during the experimental scheme.

Widened footways

The widening of the footway in Lower St Dunstan's Street was popular with business who want to keep this feature. It was installed during the trial and there have been some issues with blocking of footways. A permanent scheme will be fully controlled and licensed that should prevent this from happening.

Pedestrian crossing on Station Road West

A large amount of feedback received from the community supported a formal crossing across Station Road West at its junction with St Dunstan's Street.

Remove the level crossing

Concern was raised about the impact of the level crossing on traffic moving around the city. Investigation into the possibility of removing the crossing by lowering the railway line could be carried out, but this would require significant financial investment.

More Information

For a more detailed view of the consultation drawings, please go to **kent.gov.uk/stdunstans**

There will be a public exhibition at Canterbury Library from 14 October to 11 November 2013 between 10am and 4pm showcasing the plans. There will also be a post box to drop your completed form if you would prefer not to do it online.

This exhibition will have KCC representatives in attendance on the following days if you wish to discuss the proposals further:

Thursday 24 October, 9am-8pm Saturday 2 November, 10am-2pm Thursday 7 November, 9am-8pm

What happens next?

Following the close of the consultation on 9 December 2013, responses will be collated and analysed. The results will be taken to the St Dunstan's Regeneration Scheme Steering Group for discussion. A final decision on which option and proposals (if any) should be implemented will be taken to Cabinet by the Member for Transport and Environment.

Consultation questionnaire

Please let us know your thoughts on the St Dunstan's scheme by either:

- Visiting kent.gov.uk/stdunstans to fill in the online form
- Post your response in the comments box at Canterbury Library
- Return the form to the freepost address:
 Kent County Council, Highways and Transport, 1st Floor,
 Invicta House, County Hall, Maidstone, ME14 1BR

The deadline for responses is 9 December 2013 age 29



St. Dunstan's Regeneration Steering Group 7th June 2013 1130 to 1330 Marion Attwood Room, Canterbury City Council Offices

Military Road, Canterbury, Kent, CT1 1YW

MINUTES

Attendance List	Apologies for Absence	Distribution
Chair: David Brazier (Cabinet	Paul Barrett (Canterbury for	All Steering
Member for Transport &	Business)	Group
Environment)	Colin Carmichael (Canterbury City	members
Deputy Chair: Peter Vickery Jones	Council , Chief Executive)	
(Canterbury Councillor)	Martin Vye (Ward Councillor)	
Graham Gibbens (Ward Councillor)		
Richard Moore (Transportation		
Manager, Canterbury City Council)		
Tim Read (Kent County Council,		
Head of Transportation)		
Andrew Westwood (Kent County		
Council , Traffic Manager)		
Katie Clarke (Kent County Council)		
John Gilbey (Canterbury City		
Council, Leader)		
Bob Jones (Canterbury City Centre		
Partnership)		
Paul Southgate (Managing Director,		
Stagecoach)		
John Todd (Kent County Council,		
Communications)		
Nick Churchill (Representative for		
Paul Barrett)		

Item	Details	Action
	Apologies for absence and opening of group by Chair	
1	Steering Croup towns of reference	
1	Steering Group terms of reference	
	The proposed terms of reference (ToR) for the group were presented by the KCC Officer	
1.1	It was queried whether the ToR should be widened to cover the whole of the city centre due to the likelihood that any proposed schemes in this area would have an effect on the surrounding road network and economy. However, the group decided that, as Canterbury has a Transport Strategy which is currently being reviewed, the focus should continue to be St Dunstan's	
Decision	The ToR was accepted and the Chair noted that the document can be	

	evolving and can be amended by the group if necessary.	
2	Objectives	
	A draft list of objectives was presented to form the starting point for discussion (see below).	
2.1	Stonewest have completed a structural survey on the Westgate Towers concluding that protection of the Towers is important. The report highlighted the impact damage caused by large vehicles and smaller cars by spray eroding the stone surface.	
2.2	The Chair suggested that all objectives were of equal value and that there was no need to number or prioritise them. This was agreed upon by the group.	
2.3	The group discussed the last consultation and the lack of buy in by local businesses and residents. The business opportunities of the scheme were not fully understood and therefore support was limited. It was agreed that that going forward we would need to consider the local residents, business and road users and to "take them with us" on this process.	
Decision	The objectives (below) were agreed by the group, without any numbering and an additional overarching objective added encapsulating the idea of congestion, residents, quality of life and consultation process.	KCC Officer to amend
	Aim: To regenerate the St Dunstan's area of Canterbury by consulting fully with the community to identify a scheme that will deliver real benefits to local business, the wider community and visitors.	
	Scheme Objectives	
	Positive Economic Impact for the community	
	 Improve walking and cycling routes between the West Station and City Centre 	
	 Improve Public Transport (both Buses and Taxis) 	
	■ Enhance the Public Realm	
	■ Improve air quality	
	 Preserve and Promote the Historic West Gate Towers 	All to
	 To maintain the quality of life, mitigate any changes in congestion and gain community support by engaging in a full consultation 	note
3	Review of group membership	
	Requests have been made prior to the Steering Group meeting that Westgate and St Stephens Ward Cllrs and representatives from Get Canterbury Moving (GCM) should be included. It was also requested that the meetings be held in public in the evenings.	

5.2		ı
5.1	Reasonable timescales proposed, but there are some ground issues which need addressing ahead of the implementation of any agreed scheme (see Next Steps)	
	The KCC Officer presented a proposed program of key milestones with an outline of the approach to be taken at each.	
5/7	Agreed approach/Draft program	
Decision	The group were asked to review the key stakeholder list and email The KCC Officer with any additional key stakeholders that had been missed.	All
4.2	A general discussion took place as to how to communicate with the press. The group should take a proactive approach and go to the press when we have things to share and when there is something to say. The group can use the press to demonstrate that we are achieving objectives. The KCC press officer suggested that the group could invite the press in to share information.	
4.1	For clarification, a key stakeholder is a group identified to help generate options to go forward to public consultation. Taking a proactive approach to gather information from relevant parties.	
	The KCC Officer presented a list of key stakeholders who will be contacted on a one to one basis or via a questionnaire to discuss the St Dunstan's regeneration scheme before going out to a full public consultation.	
4	Identification of key stakeholders	
Decision	Group membership will remain as it is, and meetings will remain private. Summary minutes from meetings will be made available.	
3.4	The KCC Communications Officer raised the issue of the local press and their potential involvement in the process. The press were considered important in the success of the project and will be brought in to the process.	
3.3	Occasionally commercially sensitive information will be discussed at the meetings, it was agreed that for this to be discussed in public would not be appropriate.	
3.2	GCM is also a key stakeholder so will be included in the first set of one to one consultation meetings. Involvement will be required when there is something to which they can contribute.	
3.1	Ward Cllrs will be consulted as a key stakeholder, KCC City Councillors are part of the Steering Group and can consult the Wards Cllrs and represent the views of residents.	

		1
5.3	A question was raised on where and who by the final decision on the scheme would be made. Due considerations will be made following the consultation process, but it should be noted that the consultation is not a referendum. The Steering Group will only make recommendations and the final decision will remain with the Cabinet Member for Transport and Environment.	
Decision	Informal agreement on timescales and approach	
6	Next steps	
6.1	The Stagecoach representative raised the fact that, currently, buses have been rerouted to avoid travelling through the Westgate Towers. They stated that during the Westgate experiment, buses ran reliably and on time, despite the view that the area was more congested. Following the end of the scheme and the re-opening of the Towers, the company took the decision to re-route services. The new route has led to more buses travelling along London Road, and there is now a petition from local residents here asking Stagecoach to stop the	
	increased use. In autumn the university students will return and on the run up to Christmas the current rerouting will not be viable as the routes would be too busy, and the lack of buses down through St Dunstan's would impact the busiest student route therefore potentially reducing footfall in the St Dunstan's area.	
6.2	Stagecoach, therefore requested that an interim measure should be considered that will enable Stagecoach buses to negotiate the Towers. The KCC Officer responded that an initial assessment considered that this is not viable within the site constraints and would lead to similar issues experienced during the experimental scheme. It was agreed that a separate meeting will be held between KCC and Stagecoach to demonstrate the problems and discuss the implications for bus services during the consultation.	KCC Officer
8	Date for next meeting	
	To be set following completion of stakeholder consultations at the end of July	

St. Dunstan's Regeneration Steering Group 7th August 2013 1030 to 1300 Marion Attwood Room, Canterbury City Council Offices

Military Road, Canterbury, Kent, CT1 1YW

MINUTES

Attendance List	Apologies for Absence	Distribution
Chair: David Brazier (Cabinet Member for Transport & Environment) Deputy Chair: Peter Vickery Jones (Canterbury Councillor)	Paul Barrett (Canterbury for Business) Colin Carmichael (Canterbury City Council, Chief Executive) Graham Gibbens (KCC Member)	All Steering Group members
Richard Moore (Transportation Manager, Canterbury City Council) Tim Read (Kent County Council, Head of Transportation) Andrew Westwood (Kent County Council, Traffic Manager) Katie Clarke (Kent County Council) Martin Vye (KCC Member)		
John Gilbey (Canterbury City Council, Leader) Bob Jones (Canterbury City Centre Partnership) Paul Southgate (Managing Director, Stagecoach) Philip Norwell (Stagecoach) John Todd (Kent County Council, Communications)		

Item	Details	Action
1	Apologies for absence and opening of group by Chair and acceptance of minutes from last meeting	
2	Feedback from Key Stakeholders The KCC Officer (AW) presented the results from the Key Stakeholder engagement. KCC approached 23 groups for responses, of which 17 replied. Please see Appendix A to the minutes for a copy of the questions and a review of the responses.	
	AW stated that 2 Key Stakeholder meetings were held late with 2 City Councillors James Flanagan and Ida Linfield. Their views were similar to a large number of other key Stakeholders. Their comments will be taken into account.	
	The CCC Officer (RM) commented that the dual use of North Lane car park as a green space and parking area has been suggested before. The Leader of CCC (JG) reported that there was Heritage Lottery Funding for the improvements in Westgate Gardens, but no funding at the moment for links through to North Lane. KCC Officer suggested	

that, dependent on the Option selected, pedestrian link improvements could be included in a final scheme.

The KCC Member (MV) commented that there were residents at either end of Canterbury who access the city centre and stated that it is important that their views are taken into account.

3/4 Options discussion and workshop

Following the review of the Key Stakeholder Engagement information, a working group met to draw up options to take to the Steering Group for review. There were 9 options in total and no additional options were put forward by members of the Steering Group.

Below is an outline of each option, the initial considered advantages/disadvantages, with comments made and the decision on each;

Common issues applicable to all options

- Weight limit
- 20mph zone
- Pound Lane closure
- Widened footways on St. Dunstan's Street
- Width restriction on Towers
- Pedestrian improvements on Station Road West
- Lower railway track (action taken to reduce the waiting time for the level crossing or track alterations so that traffic is not delayed)

KCC Member (MV) requested that the consultation document makes it clear that consultees can have these additions as well as an option, including "do nothing".

Option A – The Existing Layout

Advantages

- No changes required
- No funding needed
- No restrictions on traffic movement

Disadvantages

- Towers not protected
- Does not improve street scene
- Poor pedestrian links
- Buses unable to use Towers
- No cycling improvements
- No improvement for businesses

Decision on Option A: To be put in to consultation

Option B – Remove or modify the Westgate Towers Advantages

- Buses can use St Dunstan's
- No restrictions on traffic movement

Disadvantages

- Expensive
- Objections from English Heritage
- Loss of tourist attraction

- No cycling improvements
- No improvement for businesses
- Does not improve street scene

Additional comments from Group

Loss of the only one of its kind in the country. The Towers are an ancient scheduled monument.

Canterbury City Centre Partnership (BJ) commented that in a recent visitor survey, 83% of visitors came to see historic buildings in Canterbury.

There is a meeting with English Heritage at the end of August to discuss the protection of the Towers. It is likely that they will not agree to any movement or alteration as it would contravene the Scheduled Monuments Act.

KCC to report back EH meeting to group

Decision on Option B: Exclude from consultation.

Canterbury City Council will not allow modification and it is expected that English Heritage will be of the same opinion.

Option C – Build a replacement road behind the Guildhall Advantages

- Buses are able to use St Dunstan's
- Improve traffic movements around St Dunstan's
- Enable pedestrianisation of the Towers
- Protects the Towers

Disadvantages

- Very expensive
- Requires removal of a graveyard
- Objections from English Heritage due to route
- Encourages use of North Lane and St Peters Place as a through route
- Requires new bridge over River Stour

Additional comments from Group

There are listed buildings on the proposed route and a Roman City Wall which is a scheduled monument. This would be highly unlikely to gain planning consent and would be extremely expensive.

Decision on Option C: Exclude from consultation.

Canterbury City Council will not consent and it is expected that English Heritage will be of the same opinion.

Option D – Hopper Buses

This option has been promoted locally within Canterbury as a viable alternative to allow buses to travel through the Towers. The commercial bus operator always seeks to maximise revenue. Advantages

- No restriction on traffic movement
- Buses can pass through the Towers

Disadvantages

- Extra drivers required
- Passengers would have to change buses
- Difficult to assess the demand
- Buses would only be slightly smaller in width and may still have problems negotiating the Towers
- Increased costs would fall to the County Council

Towers not protected

Additional comments from Group

Stagecoach has investigated the use of Hopper buses, identifying the Bluebird Orion a 20 seat vehicle with disabled access. Using existing bus capacity, costs and timing it would cost Stagecoach approximately 3 to 4 times more to run a Hopper service in the area (if the frequency of buses and passenger figures were to be maintained).

It would be possible to convert some aspects of the route to shuttle service, this would require passengers to alight the buses and board a shuttle, adding time to the journey. This would need considerable financial support from the local authority and could risk losing passengers to cars due to asking passengers to change buses midway through the journey.

CCC Officer (RM) asked how the transition would work between the shuttle and the bus. Stagecoach proposed that this would be outside the Church on London Road. However there are practicality issues here and some investment would need to be made to make this feasible. The interchange needs to be quick so using the North Lane car park (for example) would add to the length of the journey.

Canterbury City Centre Partnership have spoken to businesses along St Dunstan's – who have benefited from the widened footways with outdoor dining. They noted that the road is less noisy and dirty due to the buses not using the route. Stagecoach plan to use Eco buses on this route in the future.

KCC Officer (TR) suggested that KCC market test Hopper buses so that the costs can be assessed fully and to establish whether it is a commercial viable option.

Decision on Option D: Go to tender to establish whether this is viable. Option D will be excluded from the consultation at this stage, but the results of the tender will be released by the press when the consultation begins.

Option E – Closure of St Dunstan's Street between Station Road West and North Lane, with 3 options

- 24 hour closure
- Times closure between 1000 to 1600
- Closure of south bound carriageway (one way heading north)

Advantages

- Pedestrian link improvements
- Street scene improvements
- Links High Street with St Dunstan's Street
- Times closure no change during peak times

Disadvantages

- Buses unable to access Westgate Tower area
- Increased traffic in Station Road West
- Increased traffic in North Lane
- Towers not protected

Additional comments from Group

If this was a continuous pedestrian zone through the Tower then this would fit objectives, but it does not create the link.

KCC Officer to start market testing process Access to Linden Grove would be difficult – there is a narrow single lane bridge at the back of Linden Grove, but this is not a feasible alternative route.

Canterbury City Centre Partnership (BJ) mentioned that pedestrianising the route comes up with traders, the sort of businesses that are along this route now would benefit from this.

Decision on Option E: Do not include in consultation This option does not create the link with and protection of the Westgate Towers

Option F – Trial Layout – Shuttle working traffic signals around the Westgate Towers. Traffic restrictions on North Lane and St Dunstan's Street, buses and taxis only.

Advantages

- Protects the Towers
- Improved pedestrian links
- Buses are able to go around the Towers
- Reduced traffic on North Lane and St Peter's Place
- Business benefit with widened footways

Disadvantages

- Traffic congestion on Station Road West
- Affects on wider Canterbury congestion
- Abuse of restriction

Additional comments from Group

The evidence from the Key Stakeholder engagement showed that there were groups who were in favour of this scheme.

There was significant resistance from 50% of stakeholders who had major concerns about congestion.

Decision on Option F: Include in consultation This option will be included to ensure that it is considered as it was introduced on a temporary basis.

Option G - Shuttle traffic signals at the Towers. Traffic restriction on St Peter's Place only and all traffic able to use Westgate Tower Area and North Lane

Advantages

- Protects the Towers
- Improved pedestrian links
- Buses are able to use Westgate Tower Area
- Business benefit with widened footways
- Street scene improvements

Disadvantages

- Perceived similar to Option F
- Increased demand on Rheims Way and London Road with restriction on St Peters Place
- Abuse of restriction

Additional comments from Group

Traffic is restricted on St Peters Place only, this is an improvement on the Trial as traffic will still be able to use North Lane. This is a scheme which CCCP submitted before the trial.

Decision on Option G: Include in consultation

Option G1 – Shuttle signals around the Towers with St Dunstan's Street closed to south bound buses (one way north bound). Buses must turn left into Station Road West and use North Lane.

Advantages

- Protects the Towers
- Improved pedestrian links
- Buses are able to use Westgate Tower Area
- Business benefit from widened footways
- Street scene improvements
- Reduced buses in the area

Disadvantages

- Perceived similar to Option F
- Increased demand for Rheims Way and London Road with restriction on St Peters Place
- Abuse of restriction

Additional comments from Group

KCC Officer was asked whether it would be possible to drive buses around the Towers – swept paths would need to be looked at.

Stagecoach were asked if they would review their bus services in the area, if the number was reduced then this option would be viable.

Decision on Option G1: Include in consultation

Option H – Advanced stop line traffic signals with separate bus lane in St Dunstan's Street and North Lane to allow buses to go around the Towers and width restricted traffic through the Towers.

Advantages

- Protects the Towers from larger vehicles
- Buses are able to service the area
- Street scene improvements
- Traffic movements remain the same

Disadvantages

- Complex arrangement
- Confusing for pedestrians
- No improvement for businesses on St Dunstan's Street

Additional comments from Group

3 lanes of traffic on St Dunstan's Street may not be possible due to the existing width of the carriageway.

This does not fully protect the Towers from damage.

Decision on Option H: Do not include in consultation

Option I – Shuttle traffic signals with pedestrianisation of St Dunstan's Street (between 1000 and 1600) and Westgate Tower (permanent). Advantages

- Protects the Towers
- Buses are able to use the area outside of restricted times
- Street scene improvements
- Business benefits with closure

Against

Diversion of buses

KCC to review swept path

Increased traffic on Station Road West Possible delays at the traffic signals Affects will be similar to trial scheme Additional comments from Group Concerns raised over shutting off too much and causing congestion. KCC Officer (AW) presented it as a vision – tourists and visitors to Canterbury leaving the train station and entering an open environment to take them through into the city. The Chair noted that the democratic principle that just because it was a radical option should not preclude it from the process. The CCC Chair (JG) commented that it was a vision for the future **Decision on Option I: Include in consultation** 5 **Publicity** The KCC Press Officer (JT) outlined the publicity program A press release has already gone out in the Chair's name Press conference 19th September to open consultation at the Beaney Institute Dedicated page on the KCC website - with a link on the CCC website to this Leaflets to be distributed advertising the consultation and how to access information Advertising on bus backs/shelters • Wraparounds on the newspapers - most likely the Extra and The Canterbury Times Advertising on radio • Community Engagement Officer will work with parishes to share information Social Media will be analysed – "get involved" messages will be issued 6 **Next Steps** The Consultation Document A draft consultation document (with no options outlined) was presented to the group – a copy will be circulated to the Group for comments now ΑII that the Options have been selected. Please feedback any comments. Joint Transportation Board KCC Officer (TR) raised involvement of the JTB in this process. Decision: To submit a paper on the consultation to the JTB for their KCC information only. Officer Note: Next Canterbury JTB - 24th September Flint Wall The Flint Wall is scheduled to be replaced in the autumn. Widened Footways The Group have requested that the Chair ask the Leader of the Council for a decision on the widened footways. The footpaths have Chair to received support and there is a petition from the local businesses for action them to be retained at present until the consultation has been completed.

	To remove them and then put them back if the consultation shows support would be counterproductive.	
7	Program KCC Officer (AW) presented a general time line of events – the Chair has requested that this be circulated in tabular form. Please see Appendix B.	
8	Next Meeting The next meeting has been set following the completion of the consultation process - 15 th January 2014 at 10.30am	

Appendix A Key Stakeholder Engagement Questions and responses

Stakeholder engagement questionnaire

Sta	keho	lder	group:	
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Stakeholder contact name:

Stakeholder contact details:

Who do you represent?

How many members do you represent?

The experimental scheme

A twelve month trial was implemented in March 2012 that aimed to enhance the whole area of St Dunstan's by tackling the growing problem of traffic congestion, Improving air quality, protecting the Westgate Towers, improving walking and cycling links between St Peter's Street and the Canterbury West Railway Station and creating better pedestrian links between St Dunstan's and the city centre.

What were the objectives of the experimental scheme?

Were you in favour of the experimental scheme objectives?

Yes No

Were you in favour of the experimental scheme?

Yes No

Which elements of the experimental scheme do you think worked well?

Pedestrianising the Westgate Towers
Widened footways
Traffic restrictions
Pedestrian access
Public transport changes
Pound Lane closure
20mph zone
HGV weight restriction

Going Forward – St Dunstan's Regeneration

Aim: To regenerate the St Dunstan's area of Canterbury by consulting fully with the community to identify a scheme that will deliver real benefits to local business, the wider community and visitors.

Scheme Objectives

- Positive Economic Impact for the community
- Improve walking and cycling routes between the West Station and City Centre
- Improve Public Transport (both Buses and Taxis)
- Enhance the Public Realm
- Improve air quality
- Preserve and Promote the Historic West Gate Towers
- To maintain the quality of life, mitigate any changes in congestion and gain community support by engaging in a full consultation

Do you agree with the objectives? Yes No

If not why?

How would you rank from 1 to 8 the importance of the following issues:-

Issues	Ranking
Congestion	
Public transport provision	
Economic benefits	
Air quality	
Improved street appearance	
Pedestrian crossings/corridors	
Protecting the historical and Grade 1 listed monument	
Improved Cycling	

Note: 1 being the most important

Would you support changes in the area? What changes would you make? Any other comments

Stakeholder engagement summary of responses

Responses were received from 17 groups:

Councillor for St Stephens Ward

Councillor for St Stephens Ward

Councillor for St Stephens Ward

Taxi Association

Southeastern Railway

Canterbury Archaeological Trust

Spokes East Kent Cycle Campaign

Harbledown and Rough Common Parish Council

St Peter's Residents Association

Canterbury Independent Traders Association

Get Canterbury Moving

Canterbury Society

St Dunstan's Residents' Association

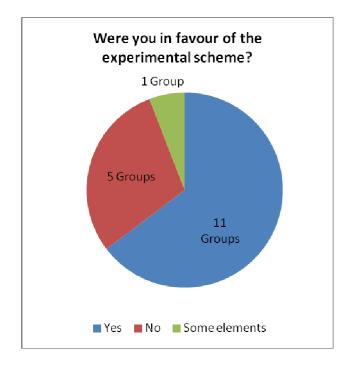
Canterbury Alliance for Sustainable Transport

Canterbury Conservation Advisory Committee

Kent Union

North Lane Residents Association

The experimental Scheme



6 groups did not respond:

Canterbury for Clean Air

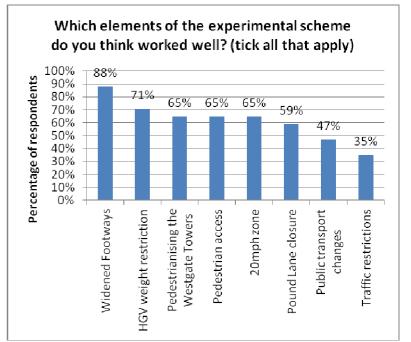
Visit Kent

Christchurch University

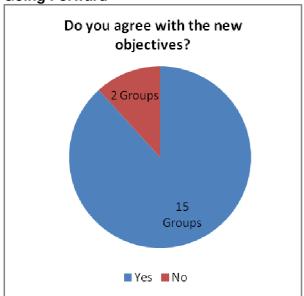
Visit Canterbury

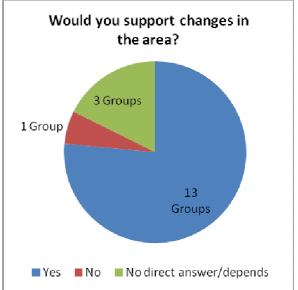
St Peters Primary School

English Heritage



Going Forward

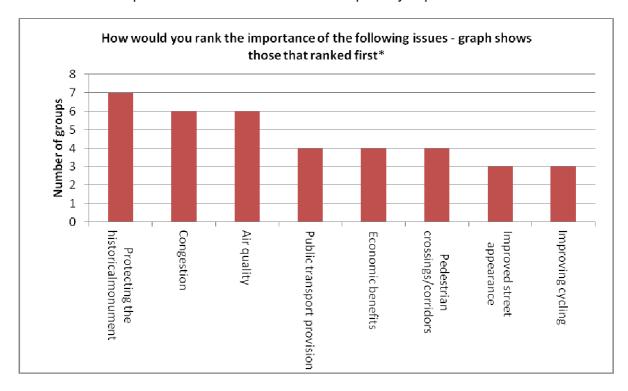




2 responders stated that the current situation (with the removal of widened footways and reinstatement of flint wall) is the ideal solution for the objectives.

It is the buses which are causing the issue – keep them as they currently are or change them to smaller buses

*Caveat: each responder was asked to rank the issues from 1 to 8, however some ranked all 1's and some did not use all 8. 2 responders did not complete the ranking. "Ranked 1" are the number of responders who ranked those issues primary importance.



What changes would you make?

Listed in order by number of responders who commented similar issues – the number in brackets is the number of responders – if no number = 1 responder

Buses	Pedestrian/Cyclists	Other transport	Parking	Visual appeal
Reintroduce buses at Westgate (2)	Crossing on Station Road West (5)	Discourage heavy goods vehicles from using the area (4)	Parking opposite Sainsbury's, outside Dry Cleaners, pavement parking, double yellow lines	Improve the visual aspects of the area, tree line St Dunstan's and erect traditional style street lighting (3)
Use smaller buses	Widened footways (4)	Reduce the length of time the level crossing is down (3)	Short stay parking on St Dunstan's	Plants in planters need to be maintained (2)
Stop buses going through Towers	Pelican crossing on North Lane – reinstate railings (ornamental) (2)	Loading bays for shops in widened footways	Congestion charge or work place parking levy	Re-open The Gaol café (2)
Bring buses to the Station	Crossing improvements at the Tower	Restore the "no lorries" signs on Rough Common Road	Pinch Points, parking laybys	Attractive for tourists and visitors and the local community would get on board
Put in bus priority measures around the city	Improve walking and cycling links between Station and City	New taxi rank works at night but not in the day		Introduce cycle paths, gardens and green picnic areas
Implement a no left turn at the Coach Station	Provide cycle racks/secure parking			
Put in bus layby at St Dunstan's Church	Introduce extensive cycle lanes and give cyclists and pedestrians priority over cars and car drivers			

Westgate	Road Closures	Traffic movements	Other
Public open/pedestrian space on either side of the gateway – a market space (4)	Close Orchard Street (2)	Improve the Junction of London Road and Rheims Way – introduce a slip road and/or traffic lights to ease flow and allow a constant filter of traffic onto Rheims Way (2)	(3) 20mph throughout
Shut the towers (2)	Close Pound Lane (2)	Redirect all through traffic along Station Road West (as designed) and London Road	Shared space (2)
Current format is best compromise with a width restriction on the Towers (2)	Close St Dunstan's Street (2)	Change the traffic flow priority at the junction of North Lane and Station Road West and the junction of Station Road West and St Dunstan's Street. Remove the mini roundabouts at both of these junctions and create the primary route between St Dunstan's to St Stephens via Station Road West. This would relieve some of the through traffic away from St Dunstan's and The Westgate	15mph limit
Extend the Westgate Gardens through and into North Lane car park. Landscape North Lane car park and continue this theme along the riverside walk and into Millers Field.	Close North Lane (2)		
Remove the internal arch	Close St Peter's Place (2)		
	Pound Lane to remain open	Page 47	

Appendix B Timeline for consultation

NB. Subject to change

Date	Action
August	Consultation planning
19 th September	Press launch for the start of the consultation at The Beaney Institute
14 th October to 11 th	Public exhibition in Canterbury Library with 2 dates for
November	KCC representatives to attend for questions (dates TBC)
9 th December (TBC)	Consultation closes
December to early	Review of consultation responses
January	
15 th January 2014	Steering Group Meeting

St. Dunstan's Regeneration Steering Group 15th January 2014 1030 to 1300 Tower House, West gate Canterbury

MINUTES

Attendance List	Apologies for Absence	Distribution
Chair: David Brazier (Cabinet Member for	Colin Carmichael (Canterbury	All Steering
Transport & Environment) DB	City Council, Chief Executive)	Group members
Deputy Chair: Peter Vickery Jones		
(Canterbury Councillor) PVJ		Public
Richard Moore (Transportation Manager,		
Canterbury City Council) RM		
Tim Read (Kent County Council, Head of		
Transportation) TR		
Andrew Westwood (Kent County Council,		
Traffic Manager) AW		
Katie Clarke (Kent County Council) KC		
Martin Vye (KCC Member) MV		
Graham Gibbens (KCC Member) GG		
John Gilbey (Canterbury City Council,		
Leader) JG		
Bob Jones (Canterbury City Centre		
Partnership) BJ		
Jonathan Watts (for Paul Barrett)		
(Canterbury for Business) JW		
Philip Norwell (Managing Director,		
Stagecoach) PN		
John Todd (Kent County Council,		
Communications) JT		

Item	Details	Action
1	Apologies for absence and opening of group by Chair and acceptance of minutes from last meeting Before the meeting began MV noted that with the intense public interest in this group, he wanted to retain the freedom to factually report back on the meeting. PN wanted to note that Stagecoach have previously stepped back from commenting at this group.	
2	Feedback from consultation data KC presented headline numbers on the responses to the consultation Comment was made on the distribution of option selection by mode of response. (Post meeting note: Online response 79% Option E, 9% Option C, 5% Option B, 3% Option D, 3% Option A. Email Option E 63%, Option A 25%, Option C 13%. Paper Option E 91%, Option C 5%, Option B 2%, Option A 1% and Option D 1%)	KC to find out
3	Features discussion AW went through each of the features and summarised the comments for each	

20mph speed limit

MV asked what the average speed is through the area at the moment Concerns were raised that 20mph do not always work, they require features or design of the road to slow traffic down, 20mph zones can also get quite expensive.

71% of responders agreed with making St Dunstan's a 20mph zone **Decision: Pursue 20mph zone in St Dunstan's area**

Pound Lane

RM asked what the people of Pound Lane had responded

(Post meeting note: 7 residents responded who listed Pound Lane as address – 6 were in favour of closure, 1 was unsure)

BJ commented that during the trial, businesses felt trapped – would timed access be an option?

JG – timed access is complicated and open to abuse

RM – If leaving Westgate Towers open to traffic, closure of Pound Lane would be one less barrier to pedestrians, it would keep the flow going in to town.

JG – two way traffic passing on the road is hard, with lots of pedestrian use

PVJ – Know that we have to deal with the majority, but received letters from Pound Lane residents highlighting improved air quality

Discussion over whether one way would be an option, but this could speed up traffic and still causes conflict with pedestrians. It may also be required to put in speed control measures.

JG commented that the Gaol Café and hotel will be opening in the summer, increasing footfall in the area

PN – Pound Lane could be used as an alternative route for buses (see bus section)

Decision: Options will be sought on possible closure of Pound Lane for a decision by the JTB

Widened footways

49% of responders disagreed with widening the footways in the area. However many of these commented that the existing situation should be maintained.

This decision was made without the buses using the area – if buses were to return this may affect public opinion.

BJ reported that local businesses had employed more staff to cover outside areas and many were waiting on a final decision before buying outdoor furniture

Interesting to find out what people who live on the street think (Post meeting note: 39 people responded with a St Dunstan's Street address – 11 Agree, 15 Disagree, 8 Don't know/unsure, 5 left blank)

Decision: No proposals for further widened footways but keep the existing and replace the temporary materials.

New crossing on Station Road West

LSTF Project money could support funds for this

Detailed design process would decide which type of crossing and where best placed.

Concerns over a zebra crossing raised – constant flow of pedestrian traffic would lead to congestion

KC to find out

AW to organise meeting

KC to find out

KC to find out

Pedestrian Guard Railing was discussed at this location and also at the North Lane crossing.

(Post meeting note: North Lane and Station Road West were covered in a Pedestrian Guard Railing audit report carried out by Jacobs in 2012 however the sites were removed from the report because they formed part of the Westgate Towers Trial. The initial report suggested removing the guard rail from Station Road West but that North Lane should be retained, although the decisions in the report were never ratified as the sites were removed from the final JTB report)

Railings at Station Road West would depend on the scheme – until it is

Railings at Station Road West would depend on the scheme – until it is decided where and what to put in.

GG requested that the railings in North Lane go back in as the area was currently dangerous.

RM advocated the converse argument that not having railings in would encourage walking and cycling on the route and that now pedestrians don't have to take a detour or risk jumping the barrier to take a direct route into the city. If the street scene was to change by making the area appear more like a shared space there would be less conflict between cars and other road users.

Decision: A crossing for Station Road West should be installed and a full review of pedestrian guard railing for the scheme

AW to organise meeting

Weight limit

Majority (70%) of responders agreed with a weight limit in the area. It was confirmed that this would extend along Whitstable Road, including St Thomas' Hill and Blean.

MV raised the issue of needing to discuss this with Haulage industry so that there are no breaches of the restriction etc.

AW confirmed that FTA are currently working with KCC and they will help with targeting local businesses with the up to date information.

Decision: Implement a weight restriction in the area

KCC Officers

Level Crossing

Decision: No action

Width Restriction

The consultation included a commitment to protect the towers with a width restriction.

Decision: Advertise a regulated width and height restriction.

KCC Officers

Buses

PN gave an overview of current bus usage in the area which generally showed that the out of city route (uni bus, midi bus and no.5) had shown a decrease in the number of people boarding at Westgate while the city centre bus stops had shown an increase, but not to the same level as the decrease.

Stagecoach, as the operator needs to review the city services now that the decision has been made to keep the traffic movements the same.

Stagecoach wants to have buses in the area.

Their buses will not be able to go through the Towers with the width and height restriction in place. With the width restriction in place it will be a criminal offence to breach it and to damage the monument. Stagecoach wants to support regeneration of the area and want to play a part in this. Investment has been made in biofuel buses to ease pollution on these routes which now are not being used for their intended purpose.

PN supported widened footways and stated that if traffic movements were to remain, buses would not go down towards the Towers on St Dunstan's Street but would potentially use Station Road West and service the station.

Possible route options were discussed including:

- Looping round Station Road West and up to London Road
 This would add to pollution in the area and add to the journey time.
- Going down to Kingsmead area
 JG raised problems of the roundabouts and congestion
- Uni service using North Lane to turn around back up to uni
- Access to St Peters Place through Pound Lane BJ raised concerns about the impact on traders on St Peters Place affected by the lack of bus service. Traders on St Dunstan's Street are not so affected as footfall from the train station. Stagecoach has a bus which would be small enough to use this route to provide access to this end of the city. It would mean approximately 6 buses an hour using Pound Lane. Work would have to be carried out on the road to make it suitable for buses.

Hopper Buses

After investigation, the cheapest cost to run a Hopper service in the area was £900,000 a year which was considered unviable. Kent County Council would not want to get involved in running buses and it is unlikely that a commercial operator would choose to do so. Stagecoach has looked at the option of a narrower minibus type vehicle (approx. 20 seats) for the city service, but it would still struggle to get through and would not be commercially viable.

Bus Gate

PVJ suggested a bus gate which would allow buses round the side of the Tower. This would allow buses to use the area, and importantly remove buses from London Road.

AW confirmed it was decided not to progress this idea as it would likely cause similar levels of congestion as the trial.

MV reported that CAMP have requested Stagecoach attend a JTB Action: Meeting with Stagecoach, KCC and CCC to discuss possible options for routes including Pound Lane

PΝ

PN, RM, AW

	Press release to include decision on Hopper Buses	JT
4	Scheme decisions AW presented an idea submitted by the Canterbury Society which, whilst leaving the traffic movements as they are now, provided a good idea on how to improve the street scene. KCC may not have the funds for all of this, but possible addition to the LEP list (Local Enterprise Partnerships) Roper Road access to station mention, especially as a solution to congestion and pollution – however Canterbury City Council do not own the property on the land	
	Action to investigate this in Transport Strategy	RM
5	Publicity DB suggested getting the general points out from the meeting as quickly as possible. JT confirmed a press release would be put together that afternoon so make sure it made this week's press	JT to
6/7	Next steps/Draft Program Draft program for meetings and TRO timeline to be produced Minutes to be released and made public	KCC Officer
8	Next Steering Group Meeting None planned at present – if required DB will request	



By: Peter Sass - Head of Democratic Services

To: Scrutiny Committee – Tuesday 15 July 2014

Subject: Capacity of Highways Drainage System and its impact on Flood Risk

Management

Summary: To seek information on the capacity of Highways Drainage System and its

impact on flood risk management.

1. Background

- (1) At its meeting on 12 June 2014, this Committee considered a report detailing the work of the Kent Flood Risk Management Committee for the period May 2013 to March 2014, (attached at **Appendix A**). During the discussion of this item, the Committee considered that there was a lack of capacity in surface water drainage pipes and that this led to flooding in some areas. The understanding of the Committee in June was that the Cabinet report (for the July 2014 meeting) would deal with issues such as the clearing and replacement of pipes. At its meeting on 7 July 2014, the Cabinet received a report entitled "Christmas/New Year 2013/14 Storms and Floods Final Report", which is attached at **Appendix B**. The Chairman and Spokespersons of this Committee noted that the report does not provide explicit information. Thus the Committee will re-consider this matter and invite the relevant Cabinet Member and officers to attend.
- (2) Mr D Brazier, Cabinet Member for Environment and Transport an officer will be attending the meeting to answer questions from Members.

RECOMMENDATION:

2. The Scrutiny Committee is invited to make comments for consideration by the Cabinet Member.

Contact: Denise Fitch Tel: 01622 694269 or e-mail:

denise.fitch@kent.gov.uk



From: Mike Harrison, Chairman of the Kent Flood Risk Management

Committee

To: Scrutiny Committee – 12 June 2014

Subject: The work of the Kent Flood Risk Management Committee

Classification: Unrestricted

Summary: This report provides the Scrutiny Committee with an overview of the work of the Kent Flood Risk Management for the period May 2013 to March 2014.

Recommendation(s): The Scrutiny Committee is asked to note the contents of the report.

1. Introduction

- 1.1 The Kent Flood Risk Management Committee's first meeting following the Local Government Elections took place on 22 July 2013. This meeting elected me as the Chairman.
- 1.2 The Committee's Terms of Reference are set out at **Appendix 1** to this report. The membership of the Committee consists of 8 Members of the County Council. There is also a standing invitation to each of the District Councils and the Internal Drainage Boards in Kent to send representatives to the meetings. I have followed the practice of my predecessor, Richard King in treating these representatives as though they are full Members except for the formal items of business.
- 1.2 The Minutes of the Committee's three meetings are set out at **Appendix 2.** These are very detailed. I summarise the main areas of activity from each of the Committee's events.

3. Committee meeting of 22 July 2014.

- 3.1 The Committee received reports accompanied by presentations on Local Flood Risk Management and the Local Flood Risk Management Strategy; an overview of flood risk in Kent; and Environment Agency Flood Alerts and Warnings. The main purpose of these reports was to enable the new Members of the Committee to familiarise themselves with the areas of work that the Committee was required to undertake. The presentation on Flood Alerts and Warnings was particularly significant, given the events that were to come. The Committee was impressed by the awareness shown by all the agencies at both a strategic and local level of both the risk of flooding and the potential consequences which would need to be grappled with.
- 3.2 The Committee also received an excellent presentation from Christine Wissink and Carolyn McKenzie on the Coastal Communities Project, which reinforced the Committee's understanding of current medium and long term tidal flood risks for Kent, including detailed planning that is very closely linked to our Committee's remit.
- 3.3 The meeting also agreed a series of topics for further consideration at future meetings.

4. Committee meeting on 18 November 2013

4.1 This meeting occurred a month before the major storm and flood events struck. The first report considered was an East Kent Flooding Update, prepared by the Cabinet Member

for Community Services and the Emergency Planning Team. This report detailed the national threat and Kent's preparedness to deal with it (both in terms of dealing with an emergency itself and of increasing general levels of awareness). The Committee endorsed the KCC and wider-partnership approach and agreed on the need for "sustained vigilance in the light of recent rainfall and forecast unsettled weather conditions."

4.2 The Committee also considered the standing item on Environment Agency Flood Alerts and Warnings as well as a report on the County Council's new responsibilities for sustainable drainage which were expected to commence in the near future.

5. Informal Meeting on 15 January 2014

- 5.1 I invited the Committee Members, our District and IDB colleagues to attend an Informal meeting in order to give an opportunity to discuss the response to the major flooding events that were still ongoing at this time. Many of the officers reporting to the Committee were still in "response mode." The meeting was well attended. It heard contributions from two Cabinet Members (Mr Brazier and Mr Sweetland), the Head of Community Safety and Emergency Planning; the Head of Planning Applications Group; and Kent Highways Services. We were extremely grateful that representatives from Kent Police and Kent Fire and Rescue found the time to attend. Likewise, we were delighted that the Chairman of Yalding Parish Council was able to join us and speak movingly of her community's experiences.
- 5.2 I had made it clear at the outset of the meeting that it would not be appropriate to consider the minutiae of the flooding response. Nevertheless, if there had been areas of broad dissatisfaction, they would have received a thorough airing. What emerged instead was that everyone who spoke expressed deep gratitude and satisfaction for the work of all the partner agencies and all the local volunteers who had responded with commitment and efficiency to the prolonged and serious events during the winter.

6. Site Tour on 11 March 2014.

- 6.1 The Committee Members were very keen to undertake visits which would enable them to gain a better picture of flood attenuation schemes to support their work. On this occasion, we visited three sites in the Ashford area. The first visit was to Hothfield flood storage area, which had made a major contribution to protecting many thousands of homes downstream in Ashford during the period of abnormally high seasonal flows in the River Stour. The Committee Members were able to compare the current water levels with those of a mere two weeks earlier, when the entire area on which they were walking had been completely under water. We noted that the water was automatically released into the River Stour at a rate that did not threaten the town of Ashford downstream.
- 6.2 The Committee then inspected the river restoration work at Goddington Manor. This work had been carried out by the Environment Agency. By profiling the channel and providing obstacles to flow at strategic locations, the EA had managed to get the river to flow at the optimum speed to prevent siltation and provide a better habitat for fish and other aquatic wildlife, which it will be able to maintain in perpetuity.
- 6.3 Lastly, we went to a sustainable drainage system (SUDS) scheme at Singleton Hill, Ashford. We walked the entire route from top to bottom, observing how the different features of the system provided attenuation to prevent flooding, habitat for wildlife and amenity for the development. Many Members considered this visit to be particularly valuable.

7. Committee meeting on 11 March 2014.

- 7.1 The Committee received an oral presentation from Ian Dunn from the Environment Agency, which went into detail about the entire flood response since Christmas 2013. Whilst all Members of the Committee reiterated their appreciation for the work that had been done, a number of issues of concern were also raised. These included the need for the EA and Water Companies to work closely together to ensure that flooded communities did not simultaneously experience such an event as the sewage deluges experienced in Hildenborough and Yalding over the winter; the inconsistencies in the flood warning systems (either in terms of consistency of alert levels or in their frequency); and the complexity of the bidding process for minor flood defence improvements.
- 7.2 The Committee was also very pleased to receive a report from Martin Twyman from the Little Stour and Nailbourne River Management Group. This presentation is detailed in the Minutes at **Appendix 2**. The Committee Members were particularly receptive to the view that the Environment Agency ensure that management of waterways benefitted both flood protection and biodiversity. They were also concerned to hear about the local water quality problems caused by over-pumping of the sewer by the water company.

8. Future events.

- 8.1 The Committee is due to meet three times over the next year. The next meeting is in July 2014 when a representative from Southern Water will be invited to give a presentation, including on the issues described above.
- 8.2 The meeting will be preceded by a visit to the Leigh Barrier.

9. Conclusions

9.1 The Committee has carried out its scrutiny function with diligence and enthusiasm. Its Members have participated fully, and their views as set out in the Minutes are conveyed to the relevant agencies for their information.

10. Recommendation

10.1 The Committee is invited to note the content of this report

Mike Harrison Chairman of the Kent Flood Risk Management Committee mike.harrison@kent.gov.uk

Andrew Tait
Democratic Services Officer
01622 694342
andrew.tait@kent.gov.uk



KENT FLOOD RISK MANAGEMENT COMMITTEE

TERMS OF REFERENCE

7 Members

Conservative: 4; UKIP: 1; Labour: 1; Liberal Democrat: 1.

- 1. In accordance with the Localism Act 2011 (Schedule 2), this committee is responsible for reviewing and scrutinising the exercise by risk management authorities of flood risk management functions or coastal erosion risk management functions which may affect the local authority's area.
- 2. This Committee is responsible for:-
- a) the preparation, monitoring and review (in conjunction with the Flood Risk Management Officer) of a strategic action plan for flood risk management in Kent taking into account any Select Committee recommendations, the Pitt Review and relevant requirements of the Flood and Water Management Act 2010;
- b) reporting annually (and more often if necessary) to the Scrutiny Committee and to the Cabinet Member for Environment, Highways and Waste;
- c) reviewing and responding to any consultation on the implementation of the Pitt Review and the future development of the Flood and Water Management Act 2010;
- d) receiving reports from the Southern Regional Flood and Coastal Committee and responding as appropriate;
 - e) the investigation of water resource management issues in Kent.
- 3. A risk management authority must comply with a request from this committee for information and a response to a report.
- 4. The committee may include (non-voting) persons who are not Members of the authority, including representatives of district Councils, the Environment Agency and Internal Drainage Boards.



KENT COUNTY COUNCIL

KENT FLOOD RISK MANAGEMENT COMMITTEE

MINUTES of a meeting of the Kent Flood Risk Management Committee held in the Council Chamber, Sessions House, County Hall, Maidstone on Tuesday, 11 March 2014.

PRESENT: Mr M J Harrison (Chairman), Mr D Baker, Mr A H T Bowles, Mr R H Bird (Substitute for Mr M J Vye), Dr M R Eddy and Mrs P A V Stockell

IN ATTENDANCE: Mr M Tant (Flood Risk Manager), Mr T Harwood (Senior Emergency Planning Officer) and Mr A Tait (Democratic Services Officer)

ALSO IN ATTENDANCE: Mr P Vickery-Jones (Canterbury CC), Mr T Edwards, Mr J Muckle (Dartford BC), Mr F Scales (Dover DC), Mr A Hills (Shepway DC), Mr G Lewin (Swale BC), Mr H Rogers (Tonbridge and Malling BC), Mr D Elliott Tunbridge Wells BC) and Mr M Tapp (River Stour IDB)

UNRESTRICTED ITEMS

Membership 1.

(Item 2)

The Committee noted the appointment of Mr D Baker in place of Mr G MacDowall

2. Minutes of the meeting on 18 November 2013 (Item 5)

RESOLVED that the Minutes of the meeting held on 18 November 2013 are correctly recorded and that they be signed by the Chairman.

Update on the recent floods - Oral report by Ian Nunn from the **Environment Agency** (Item 6)

- Mr Ian Nunn from the Environment Agency began his presentation by saying that the flood events over the recent winter months had been worse than those of 2000. It had rained incessantly over the entire period. He believed that Kent was the area of the UK most at risk from flooding and that the recent events bore this out. There had been widespread flooding across the County, including a high number of affected properties.
- Mr Nunn went on to say that the Flood Incident Room had been open for some 50 days and had only closed at the start of the previous week. Everyone concerned had worked very hard for long periods and he thanked the Committee for having already unofficially thanked all staff for everything that they had done.

- (3) Mr Nunn briefly explained that most people registered to receive Flood Warnings rather than Flood Alerts (which called for people to stay alert and vigilant). Often, they were not prepared for the emergency when the Flood Warning came. Fortunately, there had been no risk to life which would have necessitated a Severe Flood Warning.
- (4) There had initially been a massive coastal event, which had seen water levels rise higher than they had in 1953 (particularly in places such as Dover and Rye), making it a straightforward decision to close the Thames Barrier. This had been essential to avoid London flooding, but had resulted in significant damage to Kent's tidal defences. Repairs to these were ongoing. Those at Sandwich and Jurys Gap were almost repaired at a cost of some £1.5m to date.
- (5) The coastal event had been followed by very heavy rainfall. Between 23 December and 5 January the total rainfall had been some 500% of the usual average for that period. The months of October, December, January and February had all seen rainfall well above the normal average.
- (6) Mr Nunn said that the key was "warning, informing and preparing". The highest priority was to get information out to the highest number of people at risk. Operationally, the EA sought to prepare its assets and to link up with its partners in order to ensure that its response was as effective as possible.
- (7) Over 1,000 properties had been flooded over the period in question whilst some 40,000 had been protected by the flood defences.
- (8) Mr Nunn continued by saying that over 12,000 Flood Alerts, Flood Warnings and Severe Flood Warnings had been issued during the coastal flooding period. Thirteen percent had been unsuccessful. Some 18,000 had been issued in January and February, of which 15% had been unsuccessful. 26,000 Groundwater alerts had been issued in the same period.
- (9) The main reasons for Flood Warnings being unsuccessful were people picking up the phone and not listening to the entire message; unobtainable numbers; ringing with no answer; dialled but no ring; and engaged. A great deal of work would need to be undertaken to ensure that as many of the unsuccessful warnings as possible were rectified in the future.
- (10) Mr Bird suggested that some people put down the phone immediately because they had already been contacted. He added that he personally had received 4 messages in 10 minutes. Mr Nunn replied that the Environment Agency would be visiting a number of people to gather their views as to why the warnings had not been successful in their case.
- (11) Aldington Reservoir had been completely full and Hothfield (which some Committee Members had visited that morning) had been 80% full. Their channels and embankments had been designed to overspill and there had been no imminent danger. Full monitoring of all the data had taken place with officers visiting the reservoirs twice daily.

- (12) The Chairman asked whether it would be possible to retain some 40% of the fresh water in the reservoirs in order to replenish aquifers at times when they dried up. This same water could also be released if a flood was imminent. Mr Nunn replied that there was no combined flood protection and water storage reservoir in the county. The problem would be designing the reservoir to hold the required amount of water as well as the amount of water from the potential flood. This would certainly not be impossible.
- (13) Mr Nunn showed some pictures of affected areas including the Stour Mouth pump which had worked non-stop for 1,600 hours. He then said that the Medway had been badly affected just before Christmas, particularly in Tonbridge and Yalding. Leigh water storage area had held 25,000³ metres of water. It had been the largest flood water storage area in Europe at the time it had been constructed. The barrier had been operated to allow peak flow for a very short period at some 160m³ per second.
- (14) It had also become clear shortly before Christmas that the groundwater levels were rising significantly. Accordingly, a groundwater risk map had been produced to identify those areas where the risk was rising or reducing. There remained a significant risk, particularly in the North Downs area.
- (15) Mr Nunn commented that there had been excellent multi-agency partnership working at Nailbourne, including tremendous support from the community. The main issue here was that Southern Water was still discharging some of its sewage into the watercourses.
- (16) The Environment Agency was now gathering as much data as possible, including river gauging, damage to assets (the Government had made some money available for asset repair, areas where assets needed to be improved or where new ones were needed. The Government wanted to produce a state of the nation report in April. The Army (200 engineers in the UK) had been employed to walk the entire watercourse, with 15 military personnel inspecting some 12,000 assets on the coast and rivers in Kent and the South London.
- (17) Mr Nunn concluded his presentation by saying that overall, the Environment Agency's co-ordination with its partners had worked really well. Everyone had been aware of their roles and knew what they needed to do. Work on assets and removal of blockages was projected to continue into October. Far more Flood Ambassadors had been sent out than in 2000. This had worked out well on occasions but less well on others. Groundwater risk would also continue to be monitored for a number of months. The view was that spring had arrived earlier than usual and that this would help because the plants and trees would draw moisture from the ground and reduce groundwater levels further. It was therefore considered that the most likely end of the groundwater risk would be May 2013.
- (18) The Chairman thanked Mr Nunn for his presentation. He recognised that there had been hostile public reaction to the Environment Agency but that this was mainly an expression of understandable frustration which was to be expected, but did not give a true picture of the amount and quality of the work that had been undertaken.

He suggested that some of the difficulties experienced had been the result of the pre-flood power failures and suggested that future presentations could explain this.

- (19) Mr Hills said that parts of the Romney Marsh area had experienced the highest water levels ever and were slowly going under water. Pumps had been brought in but had not worked (largely because of the power failures) and the maintenance schedules had not been able to cope. He suggested that the lessons to be learned were that there needed to be more knowledge of the maintenance systems and that storage pumps needed to be held in reserve for a flood event. Mr Nunn replied that this area had largely been affected due to the failure at Jury's Gap in October (which was now being repaired at a cost of some £800k. Water could not be discharged through the outwall, and the repairs could not start all the time that water was seeping under the sea wall during the period of intense rain. The other problem had been the inability to bring pumps in to the area due to the decision of East Sussex CC not to permit closure of the road. Water and sewage levels in the Lydd area had now been considerably reduced.
- (19) Mr Nunn commented on the power outage problems. The first of these had lasted several weeks. Following discussions between the Environment Agency and UK Power Networks, a number of power failures had been responded to by UK Power Networks very much more speedily.
- (20) Mr Rogers thanked the Environment Agency for the brave way in which they had spoken to the public. The public meetings at Hildenborough and Yalding had been very useful, particularly in the ability of the EA to respond to public anger with facts and figures. The angriest people were those who had initially been flooded by sewage. The Environment Agency and the water companies needed to work closely together to reduce this particular aspect of flooding events.
- (21) Mrs Stockell asked questions on behalf of her Yalding constituents. The residents did not consider that the warnings had been adequate. They were sceptical about the EA's ability to operate a national flood warning system in the future. She stressed the need for the data to be complete and accurate in order that the necessary measures could be funded and undertaken.
- (22) Mr Baker asked whether the Environment Agency had examined the system in operation in Rotterdam. Mr Nunn replied that some of his colleagues had visited the Netherlands shortly before Christmas in order to observe an exercise involving the public in a village that had installed its own flood defence system. A reciprocal visit had been arranged with some Dutch engineers and discussions were taking place to see if it was feasible to carry out some joint project work.
- (23) Mr Bird asked whether it would be possible to invite Southern Water to the next meeting so that they could describe the work they were undertaking to make their sewage systems more resilient. The Chairman agreed that to this request.
- (24) Mr Bird said that there was still some confusion over flood warnings. None had been received in Yalding when the Medway was overflowing (the Environment Agency had agreed that a severe flood warning should have been issued), whilst such warnings had been issued on many occasions along the entire course of the

Thames, which had not had any worse events than Yalding had experienced. However, since Christmas he had received a number of unnecessary warnings, including one in respect of the River Tees. Too much information could become counter-productive and people were losing confidence in the system. He believed that a very comprehensive survey was needed to fully justify the cost of the programme of improvements that were needed.

- (25) Mr Edwards said that multi-agency work had been undertaken in respect of the Nailbourne (which was still flooding). A suggested programme of minor improvements had been made. The deadline for bids to the Environment Agency for 2015/16 had been brought forward from May to March, which meant that the improvements to the Nailbourne could not take place until 2016/17. Furthermore the bidding schedule had become very much more complex with some 350 columns needing to be filled in. The previous year's schedule had only had 56 columns.
- (26) The Chairman asked Mr Edwards to provide him with the pertinent information so that he could raise this issue at the EA Regional Flood Defence Committee.
- (27) Mr Tapp said that the public remained confused over the roles and responsibilities of the various agencies in respect of flood warnings, alerts and defence. This led them to blame bodies that were not responsible and also promoted the view that there was official confusion over what should be done. He suggested that KCC would be the ideal body to clarify the roles and responsibilities of the various partners. This should be done both on the website and through other media outlets.
- (28) Mr Tant said that the KCC website already explained these matters. Work was now taking place to provide an interactive tool which would enable people to identify the nature of their problem and then direct them to the appropriate organisation. The challenge was to get people to read the relevant pages.
- (29) Mr Nunn said that the Environment Agency had previously carried flood awareness work but that this had largely ceased as it had needed to prioritise in the light of reductions in Government funding. Nevertheless, the EA was committed to attending as many public meetings as possible.
- (30) RESOLVED that:-
 - (a) Mr Nunn be thanked for his presentation; and
 - (b) The Committee's heartfelt thanks be recorded to all the agencies and individuals involved in mitigating the recent flooding event be thanked for their dedicated and excellent work.
- 4. Oral Presentation by Martin Twyman from the Little Stour and Nailbourne River Management Group

(Item 7)

- (1) Mr Martin Twyman from the Little Stour and Nailbourne River Management Group gave a presentation that was accompanied by photographs which appear on the KCC website on the agenda for this meeting. He said that the Management Group comprised 11 Parish Councils from Lyminge to Stourmouth, the Canterbury region to Sandwich Great Stour as well as many farmers and landowners who had once again been affected by the recent floods. He added that he was also putting forward views held by many other parishioners.
- (2) Mr Twyman thanked Ian Nunn and Andrew Pearse and their teams from the Environment Agency as well as various councils. He wished especially to thank Ted Edwards from Canterbury CC. He also thanked other organisations, the Army and the many local volunteers. He said that without everyone pulling together the situation would have been far worse.
- Mr Twyman continued by saying that the Management Group had attended a (3).similar meeting after the floods in 2001. Similar warnings and events had been repeated on this occasion. The Nailbourne had started flowing in mid January as it normally did. This was the sixth time this had happened since 2000. This had caused 5 major sewage infiltrations and had led to disgraceful replications of the events of previous years. It was stressful and not acceptable to the local residents in this day and age. These stresses included overpumping by Southern Water into the watercourses, sewage into properties, a continual fleet of lorries thoughout the entire 24 hours of the day (although they were doing a necessary job), many road closures and businesses being put out of action. Southern Water had on three occasions undertaken major repairs (some successfully) but these events kept on occurring. It only needed the Nailbourne to flow to find the leakages and breaks. The pumping station at Bekesbourne was again in a terrible state, with the major watercourse blockage through the underpass of the railway line. The villages surrounding Bridge had taken the brunt, and Bridge High Street looked like a war zone.
- (4) Mr Twyman then said that consideration needed to be given to a holding area or reservoir in the Upper Nailbourne valley and to the construction of the Broad Oak reservoir, to cope with the fairly regular events of water availability and future water requirements. The Management Group considered that the Nailbourne had three different section. These were Lyminge to Barham; Barham to Littlebourne; and Littlebourne to Seaton. There were many pinch points along each of these sections.
- (5). The Environment Agency had constructed the relief channel around Littlebourne and Wickhambreaux after the flooding of 2001. This had been a saviour as it had been successful in avoiding house flooding, and the Action Group was grateful to them and the landowners. There was, however, a major pinch point between Wickham and Ickham Lane as the underpass was not big enough. Major services ran in the road and 5 major pumps had taken the pinch point pressures off the 4 mill sluice structures, which had only just coped. If there had been just two more days of rain there would have been some major flooding. More rain had fallen than ever before, and the Nailbourne flow had risen to 4.5 m³ per second as against the previous flow of 3.8 m³ per second.
- (6). Mr Twyman said that he had arranged a boat trip on the Great Stour with Roy Newing, the local MP, Ted Edwards and Paul Marshall (from the Environment

Agency) and the local press in mid December. They had reported that the river was in poor condition and silted up. They had not been able to reach Fordwich from Grove Ferry as the river was not navigable due to fallen trees. The river flow had been less than 50% (although the EA had not agreed with this assessment). The Management Group had immediately warned that there could be serious consequences if river maintenance was not carried out. This warning had duly been borne out.

- (7) Mr Twyman said that the Great Stour took flow from the Weald, Ashford, Canterbury, Sturry, Fordwich, with all their housing, businesses, roads and ground works, and that there would be many more of these to consider in the future. Canterbury itself had not suffered too greatly on this occasion. From there downwards the river access could not be seen, and hardly any maintenance had been carried out for many years. The river was silted up. There were major blockages. Major tree surgery was required. The necessary work was not being carried out for Health & Safety reasons or due to red tape.
- (8) Mr Twyman continued by saying that when the NRA had merged into what became the Environment Agency, landowners had been replaced by different representatives. As a result, biodiversity had become a major influence, and consequently, river maintenance had ceased to be a priority. Local knowledge and advice were no longer considered and various people with over 50 years' experience had been ignored. The IDB was now in agreement with the Management Group and was carrying out its regular maintenance. The events of the last few months had once again been bad for wildlife, nature, the SSSI and for Natural England. A lot of money and hard work had been wasted.
- (9) Mr Twyman then said that due to severe blockages, the Great Stour had overtopped for 200 metres and flooded over 1,000 acres of valuable farm land and crops in the Grove and Plucks Gutter area alone. This area would be under water for at least another two months.
- (10) Mr Twyman continued by saying that he believed the Environment Agency would now have to change its priorities and concentrate on managing waterways, getting water away for flood protection far earlier than it currently did, and running the Sandwich Cut for more hours. It should also become far less bureaucratic a view shared by a number of ground staff. The EA needed to look after people, livelihoods, property, businesses, insurance and costs rather than bureaucratic EC Rules and other environmental schemes. He agreed that such schemes did have value, but it was more important to base decisions on common sense, taking full account of people's views.
- (11) Mr Twyman summed up his presentation by saying that the Government was putting funding money aside for environmental schemes. The Management Group had sent letters to the Prime Minister, Mr Pickles and other key people. Farmers were seeing part of their Single Farm Payment being deducted to part fund them. This money now needed to be channelled into managing flood protection, waterways and the countryside. If regular maintenance continued to be neglected, it would cost far more to put everything right. Everyone needed to be positive and look after Kent's country, rivers, properties and residents. He therefore asked for Kent County

Council's support in finding the necessary funds. This would ensure that the county was properly prepared to cope with the next weather event.

- (12) Mr Vickery-Jones said that he had attended a meeting organised by the EA at Plucks Gutter. He said that the EA representative at that meeting had tended to express their priorities in the manner described by Mr Twyman.
- (13) Mrs Stockell said that she had attended a number of Flood Group meetings including one with the local MP and the Leader of the Council. One of the problems that had been discussed had been that farmers were no longer being required to carry out necessary maintenance work such as ditching. As a consequence, rivers and streams were silting up and ponds were being filled in. These concerns were being taken forward.
- (14) Mr Nunn said that he understood the concerns that were being expressed. Some 18 months earlier, the EA had commissioned a survey of the Stour. This had been part of a programme of collating evidence to prove that silt levels were building up. What was now needed was for the EA, other interested parties such as the Action Group and the public to discuss the best way forward. There were areas where silt was clearly building up in the channel. However, he was not in a position to categorically say what impact this was having on the flooding. A second survey had been carried out in October 2013. The results had very recently been released but the analysis had not been completed. He offered to share it widely once this was done. Mr Nunn then said that the 1960s had seen a great deal of concentration on land drainage and food security. In his view, food security was not now a high priority for the Government.
- (15) Mr Hills said that the interpretation of wildlife and habitat regulations was currently putting people at the bottom of the pile. This, in turn led to the damage to the very thing that environmentalists wanted to protect. He added that he had recently attended a conference chaired by Lord Smith, in his capacity as Chair of the Engagement Group Romney Marsh. Lord Smith had stated that every case needed to be treated on its merits. This answer had been very encouraging as it indicated that the Environment Agency was slowly moving in the direction of putting the needs of the community first.
- (16) Mr Tapp said that, in his view, the Environment Agency had too wide a remit. He suggested that the Minister should be lobbied to separate Flood Defence from the rest of the Agency's work. This would enable the Flood Defence function to stand alone, develop its own priorities and fight its own corner. He then said that one of the problems arising from the Stour not being properly maintained was that the water came out just upstream of Grove Ferry and then spread across the Marshes doing a tremendous amount of damage to wildlife and farming interests, and then needing to be pumped back in again. Some 50 years earlier, the Government had categorised the River Stour as "self-cleansing." Since then, two new catchment areas had been built up, reducing the speed of the waterflow so that the river no longer fitted that category. During the 1970s, there had been a number of droughts, which had raised silt levels. Environmentalists had then added to this problem by seeking to protect the species that were growing on the silt.

- (17) Mr Tapp then said that between Sandwich and Fordwich the tidal river was somewhere between 15 and 20k. There was no fall on that river at all. Only a minimal obstruction would be needed to hold the flow up. There were a number of points along this stretch which needed de-silting (rather than dredging) in order that the water could flow out.
- (18) Mr Vickery-Jones noted that the Netherlands was spending £4 billion on flood defence as opposed to the £0.5 billion spent by the UK. This led him to the conclusion that the real problem was lack of funding. This was exacerbated by EU Directives on the local environment, diverting funds from the areas where they were most needed.
- (19) The Chairman noted that a number of local officer level meetings were taking place. He asked that the Committee be kept informed so that best practice could be widely disseminated.
- (20) Dr Eddy thanked the Environment Agency for its work on flood defences in Deal and Sandwich. Although these had not been completed, they had stood up remarkably well to the storm surge. There had been groundwater flooding in Deal (particularly in Canute Road). This had been caused by the inadequate size of the soakaways and the fact that land and sea level were at the same height so that groundwater had nowhere to escape to. These problems had been exacerbated by the decision of Dover DC to turn an area of grassland into a car park. As a result more now water flooded the road than had previously been the case.
- (21) Mr Muckle said that Dartford BC had a lot of praise and no criticism for the various agencies' work in what had been an area relatively unaffected by the flood. The exception had been KCC Highways for the way in which it had managed the situation at Bob Dunn Way. He had been highly critical about its lack of preparedness at a meeting of the BC's Scrutiny Committee, particularly as the water level of the lake abutting the road was at the highest level he could remember. The only reason the road remained clear was that water was being constantly pumped away. The Fast Track route had also been flooded, so that the buses had to make their trips through water. The groundwater levels remained high, as did that of the River Thames.
- (22) Mr Muckle then said that the problem was not just one of lack of money. There was also a great difference of opinion on how the money that was made available should be used. A decision needed to be taken on the correct course of action and fully implemented thereafter.
- (23) Mr Lewin said that KCC's Emergency Planning should be thanked for its response to the crisis. The impact on Swale (at Faversham and Conyer) had been caused by coastal rather than fluvial flooding. He then referred to the closure of the Thames Barrier and said that its impact downriver needed to be discussed in detail on another occasion. He then said that the constant rain had impacted road surfaces and also asked for consideration of the best way to access funds from the Bellwin Scheme of emergency financial assistance.

- (24) Mr Tant confirmed said that funding under the Bellwin Scheme had previously required the Local Authority to provide the first £3.3m of funding. This threshold had recently been reduced by the Government in the light of the flooding. It would nevertheless remain a significant financial commitment from the County Council.
- (25) On behalf of the Committee, the Chairman thanked the Little Stour and Nailbourne River Management Group for all its work and also expressed the Committee's condolences for all those affected by the floods. He thanked the Management Group for the open invitation to Members of the Committee to attend its meetings.
- (26) RESOLVED that Mr Twyman be thanked for his presentation and that the accompanying photographs be sent to all Members of the Committee and posted on the KCC website.

5. Environment Agency Flood Alerts and Warnings and KCC Flood Response activity since the last meeting (Item 8)

- (1) Mr Harwood informed the Committee that the Environment Agency had issued 106 Flood Alerts and Flood Warnings since the previous meeting of the Committee on 18 November 2013. This contrasted with the total of 95 in the whole of 2013. The same period had seen 87 Severe Weather Warnings, as opposed to 42 in 2013.
- (2) Mr Harwood said that the whole of Kent had been affected over the period, and that this had been in terms of storm conditions as well as flooding. The extent of power outages, some 28,000 recorded across Kent, had contributed significantly to the problems faced by responders.
- (3) Mr Harwood referred to lectures given some ten years earlier by the Insurance Industry in which the prediction had been made that weather patterns were changing and that storms were increasingly tracking from the Atlantic Ocean across the southern UK, instead of the Bay of Biscay and northern Scotland. This prediction appeared to have been borne out by recent events. In a warming world, with increased sea and air temperatures, it was predicted that autumns and winters would become increasingly wet and stormy.
- (4) Mr Harwood then said that emergency planning delivery in Kent was changing from the start of the 2014/15 financial year. Ten of the currently thirteen members of the Emergency Planning Team would be seconded to a multi-agency Resilience Team based within the Kent Fire and Rescue Service. KCC Emergency Planning would now consist of Mr Harwood himself and Mr Greg Surtees.
- (5) Mr Harwood replied to a question from Mrs Stockell by saying that the creation of the multi-agency Resilience Team, comprising Fire, Police and KCC Emergency Planning, was designed to strengthen the County's ability to respond to emergencies. The Emergency Planning Centre would need to be retained as KCC was the Lead Agency for a number of functions. He said that it would now become

even more important for Managers and other staff across KCC to engage more robustly with the emergency planning agenda to ensure that corporate resilience was maintained.

- (6) Mr Harwood went on to pay tribute to the Voluntary Sector whose work across the entire range of responses to the winter severe weather emergencies had been crucial.
- (7) Dr Eddy reported that he had visited the local Emergency Centre in Dover shortly after the coastal event had begun. Whilst he had been there, an urgent request had been received from the Police for some of its staff to go to Sandwich. Having done so, these Dover DC staff had neither been given the necessary equipment nor been fed.
- (8) Dr Eddy also reported that some of the affected areas in the Dover District (such as East Studdle) had never experienced an emergency such as this before. Overall, the public had been very complimentary about the high quality response from local authority personnel in that area.
- (9) RESOLVED that the level of alerts received since the last meeting of the Committee be noted together with comments made during discussion of this item.

6. Local Flood Risk Management and the Local Strategy (Item 9)

- (1) Mr Tant reminded the Committee that the Local Flood Risk Management Strategy had been adopted in June 2013. A review and update of the Strategy had been scheduled for the year-end. Both were progressing well, as set out in the Appendices to the report.
- (2) Mr Tant then said that KCC's new role for SuDS was now expected to commence in October 2014.
- (3) Mr Tant replied to questions from Dr Eddy by saying that the most significant action to be taken forward in Deal Town was likely to be in Church Road. The Wantsum Channel was a main river. The issue of the Nailbourne was that there were more than just fluviual issues (e.g. groundwater flooding and sewage). KCC's role in this case was to act as part of a multi-agency group. Kent's role in respect of the Wantsum Channel would be similar to this.
- (4) In response to a question from Mrs Stockell, the Chairman confirmed that the Review would be considered by the Environment, Highways and Waste Cabinet Committee.
- (5) Mr Tapp commented that the amount of wheat lost due to the flooding events amounted to some 8 million loaves of bread.
- (6) Mr Bird said that the Natural Trust had estimated that more trees had been lost than in 1987. Many of these were on Council property. Even though they would

fulfil a value flood defence function in their fallen state, they would need to be replaced as living flora.

(5) RESOLVED that the implications and risks associated with delivering the 2014/15 action plan be noted.

7. Next Meeting

(Item)

- (1) The Committee noted that its next meeting would be held on Monday, 21 July. It would be preceded by a visit to the Leigh Barrier.
- (2) Committee Members also expressed their appreciation of the site tour that had been organised in the morning and asked for a letter to be sent to Mr Nick Sandford at Goddinton House thanking him and the National Trust for welcome them on to the land and for giving his time to demonstrate the river remedial measures that had been put in place.

KENT COUNTY COUNCIL

KENT FLOOD RISK MANAGEMENT COMMITTEE

MINUTES of a meeting of the Kent Flood Risk Management Committee held in the Council Chamber, Sessions House, County Hall, Maidstone on Monday, 22 July 2013.

PRESENT: Mr A H T Bowles, Dr M R Eddy, Mr M J Harrison, Mr B E MacDowall, Mr L B Ridings, MBE, Mrs P A V Stockell and Mr M J Vye

IN ATTENDANCE: Mr M Tant (Flood Risk Manager), Mr T Harwood (Senior Emergency Planning Officer), Ms C McKenzie (Sustainability and Climate Change Manager), Ms C Wissink (Coastal Communities Project Officer) and Mr A Tait (Democratic Services Officer)

ALSO IN ATTENDANCE: Mrs J Blanford (Ashford BC), Mr P Vickery-Jones (Canterbury CC), Mr J Muckle (Dartford BC), Mr J Scholey (Sevenoaks DC), Mr H Rogers (Tonbridge and Malling BC), Mr D Elliott Tunbridge Wells BC), Mr A Hills (Shepway DC) and Mr M Tapp (River Stour IDB)

UNRESTRICTED ITEMS

1. Terms of Reference and Membership (Item 1)

- (1) The Democratic Services Officer reported that the non-voting membership of the Committee set out in paragraph 2.2 of the report should be amended to indicate that Mrs Marion Ring was the representative of Maidstone BC and that Mr Anthony Hills was the Shepway DC representative.
- (2) The Committee noted its Terms of Reference and membership as set out in the report and as amended in (1) above.

2. Election of Chairman (*Item 3*)

(1) Mr A H T Bowles moved, seconded by Mrs P A V Stockell that Mr M J Harrison be elected Chairman of the Committee.

Carried with no opposition

(2) Mr M J Harrison thereupon assumed the chair.

3. Minutes of the meeting on 19 November 2012 (*Item 5*)

RESOLVED that the Minutes of the meeting held on 19 November 2012 are correctly recorded and that they be signed by the Chairman.

4. Local Flood Risk Management and the Local Strategy (Item 6)

- (1) Mr Tant gave a presentation to accompany his report. The <u>slides</u> are contained in the on-line agenda papers.
- (2) Mr Tant went on to identify the other bodies involved in flooding within the County of Kent. These included the Emergency Services, the Parish and District Councils, neighbouring Authorities, the four Internal Drainage Boards (Lower Medway, Upper Medway, River Stour, Romney Marsh), two sewerage undertakers (Thames Water and Southern Water), the water companies, and the Environment Agency. Mr Tant also identified three standing committees with a flood risk management role (the LGA Inland Flood Risk Management Group, The LGA Coastal Special Interest Group, and the EFRA Committee).
- (3) The County Council's role as the Lead Local Flood Authority was to provide a Local Strategy to manage local flood risk (flooding from surface water, groundwater and ordinary watercourses); to investigate flooding; to regulate ordinary watercourses (i.e. not main rivers); to maintain a register of structures and features; and to promote sustainable drainage systems (SuDs).
- (4) Mr Tant said that KCC would assume responsibility for the approval and adoption of SuDS once the necessary parliamentary order had been confirmed. DEFRA was currently considering how and when this should happen, as there were a number of complex issues that still needed to be resolved before this could be done. DEFRA's target date was April 2014, but it was by no means certain that this would be achieved.
- (5) Mr Vickery-Jones asked what weight the Lead Local Flood Authority carried with the various planning authorities and whether a local planning authority could designate "reserved areas" which would carry weight with a Planning Inspector when a developer appealed against a planning decision. Mr Tant replied that the Lead Local Flood Authority was not a statutory consultee. This meant that Planning Authorities did not have to take account of their advice. He also considered that it might be feasible to designate areas as unsuitable for housing within a Local Plan on flood risk grounds, so long as sufficient evidence could be provided.
- (6) Mr Tant identified the areas of greatest flood risk from coastal and fluvial flooding in the County as the Low Weald, Thames Estuary and Romney Marsh. He also explained that some 76,000 homes in Kent were potentially at risk from surface water flooding, which compared to the figure of 54,000 in the second-most at risk county of Essex.
- (7) KCC had carried out Surface Water Management Plans. These were studies of local flooding flood risk within the County. They could be high-level evidence gathering studies or in-depth studies which included modelling of the

local flood risk infrastructure. Work on these studies was currently being carried out in Margate, Whitstable and Folkestone.

- (8) Mr Tant next turned to the Local Flood Risk Management Strategy. The County Council was required to develop, maintain, apply and monitor a strategy for local flood risk management. Its objectives were to improve the understanding of the risks from local flooding; to reduce the impact of flooding; to ensure that development took account of flood risk; to provide clear information and guidance on the role of risk management authorities; and to ensure that emergency plans and responses to flood incidents were effective.
- (9) In response to questions from the Chairman, Mr Tant said that although the Local Flood Risk Management Strategy was required by Law to detail a number of functions and actions, not all of them were relevant in each of the Local Flood Risk areas. Kent's Local Strategy would be reviewed in May 2014, one year after its adoption.
- (10) Mr Rogers asked why the map in the Local Strategy identified Paddock Wood as being at risk from flooding but did not do the same for Yalding and East Peckham. Mr Tant replied that this was because the Paddock Wood suffered from persistent local flooding whilst the risk to Yalding and East Peckham came from the main river. The Local Strategy dealt with local flooding, whilst other plans prepared by the Environment Agency covered fluvial and coastal flooding.
- (11) Mr Vickery-Jones noted that 90% of Kent's water supply came from aquifers rather than reservoirs and asked whether there was a correlation between those areas at risk of flooding and aquifers. Mr Tant replied that the cause tended to vary from area to area. Groundwater flooding usually occurred after prolonged wet weather, whereas surface water flooding was usually caused by short, intense rainfall.
- (12) RESOLVED that the report be noted following full consideration of its contents.

5. Coastal Communities 2150 - Presentation by Carolyn McKenzie, KCC Sustainability and Climate Change Manager (Item 8)

- (1) Ms Carolyn McKenzie (KCC Sustainability and Climate Change Manager) gave a presentation on Coastal Communities 2150 (CC2150). The slides from this presentation are contained in the on-line agenda papers.
- (2) Ms McKenzie said that the purpose of CC2150 was to help communities to develop their own local visions and action plans to decrease their vulnerability and increase resilience to climate and coastal change. She said that some impacts of climate and coastal change were already being felt through severe events such as flooding, severe heat or cold. Preparation for these events was not at the level that it needed to be.

- (3) Ms McKenzie said that between the years 1961 and 2006, average temperatures had risen by 1 degree over all four seasons. These years had been characterised by heavy winds and downpours as well as a decrease in summer rainfall.
- (4) Ms McKenzie explained that CC2150 was a partnership. It was led by the Environment Agency and involved Kent CC, Hampshire CC, Alterra (a research institute for the green living environment in the Netherlands), Province West-Vlaanderen (Belgium) and the Agency for Maritime and Coastal Services.
- (5) Ms McKenzie then set out the risks and opportunities from climate and coastal change. The risks were loss of biodiversity, risk to built infrastructure, risk to flood security, increased frequency of flooding, health complications, increased rates of coastal erosion, shrinking of beaches and loss of landscape value. The opportunities provided were increased tourism, increased regeneration potential, agriculture and biodiversity diversification, renewable energy resources, skills development, economic development, and community building.
- (6) Ms McKenzie went on to refer to the Severe Weather Impact Monitoring System that had been developed in Kent. This had revealed that on two weeks' rainfall had fallen during a two hour period on 20 July 2012. Another example of the impact of severe weather had been provided by the London Institute of Hygiene and Tropical Medicine which had revealed that 700 deaths had occurred due to heatwaves in 2013.
- (7) CC2150's priority communities in Kent were Romney Marsh, Margate and Cliftonville, and the Isle of Sheppey. The method of delivery was to build knowledge, widen partnership working, develop visions, develop plans, and launch the project within the community. Each of these activities would lead naturally to the next, and the community launch would be the spur to further knowledge building as well as the final act of a project. Examples of practical actions were the development of flood alert systems, water retention and conservation measures and insulation from heat and cold.
- (8) Ms McKenzie said that the next steps would be to attend and host events, gather local feedback and to develop the Vision and Action Plans. This would continue the pattern of very good local engagement that had already taken place.
- (9) Members of the Committee thanked Ms McKenzie for her presentation and also commented on the excellent awareness-raising work undertaken by Christine Wissink (KCC Coastal Communities Project Manager).
- (10) In response to a question from Mr Vickery-Jones, Ms Mckenzie said that the health impacts of climate change were to dramatically worsen environment-related conditions such as asthma.

- (11) Ms Wissink replied to a question from Mrs Blandford by saying that a large number of studies had taken place locally, nationally and globally on plants that were able to sustain themselves. This was all part of work being undertaken to identify crops that needed less intensive water usage.
- (12) RESOLVED that the presentation on CC2150 be noted with thanks, including the work that is being undertaken on the impacts of coastal and climate change.

6. Overview of Flood Risk in Kent and current issues - Presentation by Tony Harwood, Senior Emergency Planning Officer (Item 7)

- (1) Mr Harwood (Senior Emergency Planning Manager) gave a presentation. The <u>slides</u> are contained in the on-line agenda papers. He said that 2013 marked the 60th anniversary of the February 1953 East Coast storm surge and the 736th of the Great Storm of February 1287 which diverted the mouth of the River Rother by 15 miles overnight and destroyed the towns of Old Winchelsea and Broomhill (http://en.wilkipedia.org/wiki/Broomhill) as well as causing economic chaos along the English Channel coastline. It had cost 500 english and 50,000 dutch lives.
- (2) Mr Harwood then said that a major multi-agency flood response exercise had taken place on 30 April 2013 based on the scenarios of the 1953 storm surge event. The exercise had been informed by a new study on the effectiveness of existing defences and single and multi-agency contingency plans, whilst also testing the effectiveness of communications, which had been a major flaw in the response in 1953.
- (3) Mr Harwood went on to describe some of the features of the 1953 disaster. In that event, loss of life in Erith had mainly occurred through hypothermia rather than drowning so alerting, evacuation and humanitarian welfare interventions were all being enhanced. There had been significant breaches in the coastal defences at Canvey Island in Essex.
- (4) It was important to note that sea levels had risen over the past 60 years. This was not only due to climate change. A second cause was hydroistatic rebound following the end of the last glaciation with land levels rising in the north of the UK, whilst the south was sinking.
- (5) Mr Harwood then referred to the Folkestone floods of August 1996 which had seen fire fighters having to use sledgehammers to break down walls to release pockets of floodwater. The flooding had resulted in numerous people being made homeless and, in some cases, destitute.
- (6) The year 2000 had seen major flooding in the Medway and Stour Valleys, impacting hugely in Tonbridge, Maidstone and surrounding villages, requiring the setting up of numerous rest centres.

- (7) Mr Harwood moved on to explain the need for very sophisticated planning to protect populations that were vulnerable to flooding. Essential work had been undertaken to develop local multi-agency flood plans, multi-agency rapid response catchment plans and reservoir inundation plans.
- (8) Mr Harwood replied to a question from the Chairman by saying that the Pitt Review had made 92 recommendations. One of these had called for political oversight of flood planning.
- (9) Members of the Committee commented that flood defence work would be strengthened if an annual report on the work of the Kent Flood Risk Management Committee were to be presented to the County Council. Minutes from other Committees regularly appeared as items on the County Council agenda papers and it would be appropriate if this Committee's minutes were added.
- (10) Mrs Stockell said that the best way to ensure that the Committee's work was embedded in the County Council's mainstream was for regular reports to be considered by the Environment, Highways and Waste Cabinet Committee.
- (11) Mr Tapp asked whether Mr Harwood was in a position to give an assurance that there would be a timely warning if an event such as that of 1996 were to occur. Mr Harwood replied that this was a critical issue addressed by the new rapid response catchment emergency plans and through Severe Weather Advisory Group meetings. Such early warnings were vital in responding to sudden surface water emergencies.
- (12) RESOLVED that the report and its implications be noted.

7. Environment Agency Flood Alerts and Warnings since the last meeting - oral report (Item 9)

- (1) Mr Harwood reported that there had been 63 flood alerts and warnings since the last meeting of the Committee in November 2012. These had all been fluvial warnings, bar one for groundwater. He added that the flooding on the Nailbourne near Canterbury had lasted from 22 January to 19 April 2013.
- (2) Mr Vickery-Jones asked whether there was a general policy of not housing people in ground floor flats if they lived in flood plains. Mr Harwood replied that this was often but not always recommended by the Environment Agency in their statutory consultee role to District planners. If an area was susceptible to fluvial flooding, it was usually recommended that the ground floor should not contain habitable rooms. Coastal flooding, on the other hand tended to pose more of a risk to the actual structure of a building because of the energy of the event so coastal defences were prioritised over structural adaptation of individual buildings.
- (3) RESOLVED that the report and its implications be noted.

8. Future Committee Topics

(Item 10)

- (1) Members of the Committee considered a report suggesting future topics for its consideration. It was recognised that a number of the items which appeared in the report would require an invitation for a speaker to come to the meeting. Additional topics suggested were:-
- the role of the Police, Fire and Social Services;
- the impact of farming;
- working with Medway on planning in the flood plains;
- the latest thinking of the Environment Agency and the funding available to it;
- highways, drainage and flooding as they relate to railways;
- coastal erosion and risk management as it relates to Dungeness Power Station.
- (2) The Chairman's suggestion of a day to be set aside for site visits was agreed.
- (3) RESOLVED that the topics set out in the report and in paragraph (1) above be agreed for future meetings together with the possibility of an additional day being set aside for site visits.

9. Date of next meeting - Monday, 18 November 2013 (*Item 11*)

The Committee noted that its next meeting would be held on Monday, 18 November 2013.



KENT COUNTY COUNCIL

KENT FLOOD RISK MANAGEMENT COMMITTEE

MINUTES of a meeting of the Kent Flood Risk Management Committee held in the Council Chamber, Sessions House, County Hall, Maidstone on Monday, 18 November 2013.

PRESENT: Mr M J Harrison (Chairman), Mr A H T Bowles, Dr M R Eddy, Mr G Lymer (Substitute for Mrs P A V Stockell), Mr B E MacDowall, Mr L B Ridings, MBE and Mr M J Vye

IN ATTENDANCE: Mr M Tant (Flood Risk Manager), Ms B Buntine (Sustainable Drainage Engineer), Mr T Harwood (Senior Emergency Planning Officer), Mr M Salisbury (Emergency Planning Team Leader) and Mr A Tait (Democratic Services Officer)

ALSO IN ATTENDANCE: Mrs J Blanford (Ashford BC), Mr J Muckle (Dartford BC), Mr J Scholey (Sevenoaks DC), Mr A Hills (Shepway DC), Mr G Lewin (Swale BC), Mr H Rogers (Tonbridge and Malling BC), Mr D Elliott Tunbridge Wells BC) and Mr L Cooke (Romney Marshes Area IDB)

UNRESTRICTED ITEMS

10. Minutes of the meeting on 22 July 2013 (Item 3)

RESOLVED that subject to some minor textual amendments, the Minutes of the meeting held on 22 July 2013 are correctly recorded and that they be signed by the Chairman.

11. Dates of meetings in 2014 (Item 4)

- (1) The Committee agreed the following meeting dates in 2014:-
 - (a) Tuesday, 11 March 2014;
 - (b) Monday, 21 July 2014;
 - (c) Monday, 17 November 2014.
- (2) The Committee agreed in principle to Mr Tant's proposal that its March meeting should encompass a tour of the Hothfield Flood Storage reservoir, the restoration works on the Great Stour at Godinton Park, and the drainage at Singleton Hill. As these sites were all in Ashford, the Committee meeting itself would be held in a suitable venue in the neighbourhood.

12. East Coast Flooding Update

(Item 5)

- (1) Mr Mark Salisbury (Emergency Planning Team Manager) began his presentation by setting the background. Kent's coastline was some 525 km in length. Tidal and coastal flooding was a key risk for the Kent region. January 2013 had seen the 60th anniversary of the East Kent Flood which had killed over 300 people in the UK whilst affecting a great number of homes, leading to large scale evacuations. Some 46,000 farm animals had also died as a consequence of this event and the overall estimated cost had been between £40k and 50k. This would equate to £5 billion if the same event were to be repeated today.
- (2) Mr Salisbury went on to say that coastal flooding continued to be a "tier one risk" which required a co-ordinated and resilient response across a large number of Local Resilience Forums (LRF) with the ability to co-ordinate national resources.
- (3) Mr Salisbury stressed the need for timely and accurate weather predictions as well as other intelligence which would inform the decision-making process and the co-ordination of national resources where they were most needed. A crucial aspect of local preparation work was the ability to warn the general public, complementing the prior work of increasing its understanding of what should be done in the event of an emergency. To this end, a multi-partnership Information Group was in operation, chaired by Mr Salisbury himself.
- (4) Mr Salisbury moved on to describe the national threat. An East Coast Flood (ECF) event had a 0.5% chance of occurring between September and April in any given year. It had been estimated that such an event could lead nationally to up to 400 fatalities and 11,000 injured with some 297,000 residents affected (of whom about 20% would be likely to require assistance with evacuation). It was anticipated that 357,000 buildings would be affected, including 224,000 residential properties. The overall cost of damage to property would be over £23 billion. People would be stranded over a large area with 11,000 people in need of rescue or assistance over a 36 hour period. A further 107,000 people in caravan and camping sites would be affected during the high season, together with nearly 5.000 km of roads and 423 bridges and fords.
- (5) Mr Salisbury then said that there would be five broad phases in the management of a major ECF event. These would be Early Warning (Kent would receive 5 days warning); an Assessment phase; a preparedness phase; the Impact itself; and the Recovery phase.
- (6) Mr Salisbury turned to the question of Kent's preparedness for an ECF event. He said that 200 people had attended the East Coast Flooding Workshop in April 2013. These had included Emergency Planning Officers from KCC and representatives from the District authorities.
- (7) The Environment Agency had developed flood data and mapping to support the planning for evacuation and critical infrastructure in an ECF event which would affect some 12,500 properties in areas such as Dartford; the

Thames Estuary; the Isle of Sheppey, Faversham, Graveney Marshes, Seasalter and Swalecliffe; the Sandwich, Deal, Romney Marsh area; and (indirectly) Dover Port. This did not include mobile homes of which there were 10,000 in Shepway District alone.

- (8) Mr Salisbury outlined the next steps. The Kent Resilience Forum would be involved in a joint exercise with the Essex Resilience Forum in January 2014 to test ECF preparedness. Meanwhile the KRF Public Warning and Informing Group had produced a public booklet entitled "Are You Ready." This was due to be launched in January 2014. It would be sent to every household with e.versions being placed on the KCC and all District Council websites.
- (9) Dr Eddy noted that the next steps were due to take place in January 2014. He asked how prepared the county would be if an ECF event were to happen before then. Mr Salisbury replied that an East Coast Flood surge inundation would happen between the months of April and September. Kent had only recently been identified as an area at risk. The steps described demonstrated that the risk of an ECF event was now being taken very seriously at a national level.
- (10) The Committee asked for feedback at its next meeting from the joint exercise with the Essex Resilience Forum, and from the bespoke Dft/Defra ECF workshop.

(11) RESOLVED that:-

- (a) the potential level of the threat that an East Coast tidal surge could pose to the communities, infrastructure, environment and economy of Kent be noted; and
- (b) the KCC and wider-partnership approach be endorsed as outlined in the report.

13. Environment Agency Flood Alerts and Warnings and KCC Flood Response activities since the last meeting (Item 6)

- (1) Mr Harwood said that there had been 38 flood alerts in Kent between the months of January and October 2012. The overall figure for 2012 had been 87. This demonstrated that the winter months were by far the most concentrated time for such events. The total figure for flood alerts up to this point in 2013 was 40.
- (2) Mr Harwood then said that work with other agencies had continued to take place and that overall resilience was improving.

- (3) Mr Harwood referred to the East Kent tidal surge on 10 October 2013 which had triggered a high state of readiness and multi-agency liaison but had not led to a Severe Weather Warning because its occurrence had not conflicted with high tides.
- (4) The St Jude's Day storm on 28 October 2013 had caused power outages which had led to a need to put humanitarian support interventions in place.
- (5) In response to a question from Mr Vye, Mr Harwood said that early warnings of Severe Weather were usually received 4 to 5 days before the event occurred. This enabled the necessary planning to be put in place. It was essential that public warning and information and evacuation measures avoided generating any unnecessary panic.
- (6) Mr Harwood then said that flood risk response planning was focussed on the less well defended areas, rather than areas with robust coastal defence structures, which he described as "superb." He also explained that if a breach of the flood defence structures should occur during a flood event, a dynamic approach to evacuation and temporary repair would be expedited.
- (7) The Committee asked whether future reports on this matter could display the statistical information in tabular form.
- (8) RESOLVED that the level of alerts received since the last meeting of the Committee be noted together with the need for sustained vigilance in the light of recent rainfall and forecast unsettled weather conditions.

14. Flood and Water Management Act and Sustainable Drainage (*Item 7*)

- (1) Ms Buntine gave a presentation on KCC's responsibilities under Schedule 3 of the Flood and Water Management Act and its future duties in respect of Sustainable Drainage approval. She said that the law, once commenced, set out that construction work with drainage implications could not be commenced unless a drainage system for the work had been approved by the approving body (in this case KCC). The approving body (SAB) had to grant permission if it was satisfied that the drainage system complied with National Standards for sustainable drainage.
- (2) Ms Buntine explained that sustainable drainage elements could be landscaped or hard-engineered, and that they aimed to mimic natural processes.
- (3) Ms Buntine turned to the drainage approval process, which began with pre-application consultation before an application either to the Local Planning Committee or, directly, to the SAB. The drainage approval process ran parallel to and independently of the planning process.

- (4) Mr Scholey asked how much consultation had taken place between KCC and the District planning authorities in respect of the arrangements. He also asked for clarification on whether a District planning authority could decide to reject the SAB's advice in respect of planning applications. Ms Buntine replied that it was acceptable for a planning authority to disregard the SAB's advice when determining a planning application, given that the SAB was a statutory consultee to the planning process. It remained the case that the SAB would exercise its role in respect of the drainage approval process.
- (5) Ms Buntine then considered the role of SABs in detail. Their first task was to respond to pre-consultation by assessing applications against a number of principles designed to ensure that surface runoff was managed both on the surface and at its source wherever it was practical and affordable. These principles were assessed against the criteria of drainage hierarchy, peak flow rate and volume, water quality and function. The second task was to ensure compliance with national standards by issuing technical approvals and carrying out adoption inspections. Lastly, they would adopt specific SuDS and carry out ongoing maintenance.
- (6) Ms Buntine briefly set out the roles of the various KCC Departments in delivering the SAB role and then explained the financial implications. It was intended that the role would be self-funding through application fees and inspection costs. There remained, however, a lack of clarity over maintenance cost recovery.
- (7) Ms Buntine described the Defra implementation timetable which would culminate with the legislation being laid before Parliament in January 2014 with the intention of commencing in April 2014. KCC would undertake a series of District workshops in the New Year. SuDS would be promoted through pre-application advice and workshops with developers.
- (8) Ms Buntine summed up her presentation by saying that the Flood and Water Management Act 2010 gave KCC a statutory duty to approve, and in certain circumstances, adopt and maintain drainage systems for new developments. KCC already had a strong skill set in flood management and drainage which would be built upon to deliver the SAB role. It was expected that the SAB would be self-funding through pre-application charges, application fees and maintenance fees, although the charging and fee structure had not been fully announced by Defra.
- (9) Dr Eddy asked how the establishment of SABs would link with the work of local district planning authorities and whether there was a danger that local knowledge of drainage conditions would be undermined by national standards. Ms Buntine replied that SABs would need to carefully explain their needs and expectations to local planners. At the same time, they would need to ensure that local knowledge was fully taken into account. The Act did not specify that planning authorities needed to be consulted, but she considered it to be fundamental that they were.

- (10) In response to a question from Mr Vye, Ms Buntine confirmed that there was an ability to appeal against a SAB decision.
- (11) Ms Buntine replied to a question from Mr Muckle by explaining that implementation would be phased, starting with major applications for more than 10 homes or greater than 0.5 ha, moving to minor and permitted developments over 100m² in size after three years.
- (12) Ms Buntine agreed with Mr Scholey's comment that elected members from District Councils needed to be included in the consultation process. She agreed that KCC should consider the option of offering to give presentations at or before District Council Planning meetings.
- (13) Mr Rogers commented that there would be a great deal of duplication of roles as Planning Committees already had the responsibility of considering drainage implications. He noted that KCC had the option of delegating the role to another public body and asked why this option had not found favour. Ms Buntine replied that although the function could be delegated, this did not apply to the actual responsibility. Consequently, there would need to be oversight. Mr Tant added that only one of Kent's Districts had indicated that it had the capacity to take these duties on.
- (14) Mr Hills commented that he did not believe that the Districts and IDBs had sufficient manpower to fully carry out this new responsibility. He considered that standards and consistency would best be maintained if KCC as the only Kent-wide authority carried out the role.
- (15) Mr Cooke said that the IDBs wished to be consulted not only for proposed developments in their own areas but also for those in their wider catchment areas.
- (16) Mr Lewin said that it was important to have service levels defined within a memorandum or service agreements in order to ensure a clear communication channel between the District authorities and the SAB. This would ameliorate the risk of the local planning authorities seeing some of their spatial planning powers eroded, whilst also enabling effective consultation during the preparation and review of Local Plans.
- (17) RESOLVED that KCC's new responsibilities under Schedule 3 of the Flood and Water Management Act with respect to Sustainable Drainage approval be noted, together with comments made during consideration of this matter.

From: Michael Hill, Cabinet Member, Community Services

To: Cabinet – 7th July 2014

Decision No: N/A

Subject: Christmas / New Year 2013-14 Storms & Floods – Final Report

Classification: Unrestricted

Past Pathway of Paper:

Future Pathway of Paper: Growth, Economic Development & Communities Cabinet

Committee - 8th July 2014

Environment & Transport Cabinet Committee – 22 July 2014

Electoral Division: N/A

Summary: This report provides Cabinet with a full review of lessons learned from the Christmas / New Year 2013-14 storms & flooding (and previous severe weather events) and makes recommendations for how the County Council, in collaboration with its partners, can be better prepared to manage such future events and flood risk.

Recommendations: Cabinet is asked to a) note and endorse the recommendations outlined in the Action Plan in **Annex 1**; and b) once approved, receive further options papers / progress reports on delivery against the Action Plan.

1. Introduction

- 1.1 Members will be aware that the extreme severe weather experienced over Christmas and New Year was unprecedented and presented an exceptionally challenging time for all concerned.
- 1.2 Indeed, in the Government's 'Flood Support Schemes Guide' sent to Local Authority Chief Executives in flood affected areas by Sir Bob Kerslake, Permanent Secretary, Department for Communities & Local Government (DCLG) and Head of the Civil Service stated:
 - 'On 5th and 6th December 2013, the worst tidal surges in 60 years struck the east coast of England, leaving a trail of destruction and flooded properties. In addition to the December tidal surges, the country has experienced the wettest winter in over 250 years. This has resulted in many areas of the country remaining on high alert for extended periods as the emergency services, supported by local authorities, statutory agencies and local residents have battled to protect communities'.
- 1.3 Notwithstanding that the initial severe storms and rainfall occurred during the Christmas Bank Holiday with many staff on leave and out of county, KCC deployed all its available staff throughout this period to support those communities across the County that were affected, not only by flooding, but by storm damage and power outages.
- 1.4 Kent was one of the most severely affected areas in the country with some 28,500 properties without power on Christmas Eve and 929 homes and business flooded over the following 8 week period. See **supporting Appendix 1 sections A1 and A2** for a detailed breakdown of properties flooded and other key facts and statistics.
- 1.5 It is recognised that these unprecedented severe weather events strained not only KCC resources but all other emergency and public services and priority decisions had to be made in order to ensure support to those communities, residents and businesses affected by these events.
- 1.6 This report provides:

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- A summary of the storms & floods that affected Kent between December 2013 and February 2014 & the actions taken by KCC & its multi-agency partners in response;
- Good practice and lessons learned to inform how KCC and its partners can better respond to such emergencies in the future;
- A review of options for managing flood risk in the long-term; and
- Draft Action Plan for taking forward proposed recommendations see Annex 1.
- 1.7 Whilst this report will focus on the events from 23rd December 2013 onwards, to provide further background and context, reference is also made to the preceding severe weather events on 28th October (St Jude storm) and 5th & 6th December (east coast tidal surge).
- 1.8 Contributions from the following have been used to inform the content of this report:
 - Internal KCC and multi-agency debriefs;
 - Key internal departments & partner agencies e.g. KCC Flood Risk Management, Environment Agency (EA) and Kent Police;
 - Individual responses from residents, businesses and elected representatives; and
 - Public consultation meetings and 'flood fairs' in affected communities¹.
- 1.9 Details of key meetings & event dates are provided in **Appendix 1 section A3**.

2. Managing Emergencies

- 2.1 The Civil Contingencies Act 2004 establishes a clear set of roles & responsibilities for those involved in emergency preparedness & response at the local level. The Act divides local responders into 2 categories, imposing a different set of duties on each.
- 2.2 'Category 1 Responders' are organisations at the core of the response to most emergencies (e.g. the emergency services, local authorities, NHS bodies and the EA) and have statutory responsibilities for the ensuring plans are in place to deal with a range of emergency situations, including flooding. 'Category 2 Responders' (e.g. the Health & Safety Executive, transport and utility companies) are 'co-operating bodies'. They are less likely to be involved in the heart of planning work, but are heavily involved in incidents that affect their own sector. Category 2 Responders have a lesser set of duties co-operating and sharing relevant information with other Category 1 & 2 Responders.
- 2.3 Category 1 & 2 Responders come together to form 'Local Resilience Forums' (based on police force areas) which helps co-ordination and co-operation between responders at the local level. In Kent, this is known as the Kent Resilience Forum (KRF), which is chaired by Kent Police who adopt the lead organisation role in most emergency situations.

3. Management of the Emergency

3.1 Kent Police undertook the role of lead organisation in the 'emergency response' phases, with each declared emergency given an operational name - see Appendix 1 section A4 for details.

3.2 During the 'emergency response' phases, a multi-agency 'Gold' Strategic Co-ordinating Group (SCG) and 'Silver' Tactical Co-ordinating Group (TCG) were hosted and chaired by Kent Police at Kent Police Headquarters and Medway Police Station respectively.

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¹ Public meetings with residents / businesses were co-ordinated by the EA via the Parish / Town Councils & the Tonbridge Forum, with attendance from elected members and officers from KCC, District / Borough Councils, Kent Police and Southern Water. Flood fairs are a joint initiative between District / Borough Councils, EA, KCC, Parish / Town Councils & the National Flood Forum - a charity that raises awareness of flood risk & helps communities to protect themselves & recover from flooding.

- 3.3 Multi-agency 'Bronze' Operational teams were deployed across the County in specific affected communities (e.g. Yalding, Bridge and the Brishing Dam) and undertook work such as door-knocking, evacuations, sandbagging and public reassurance.
- 3.4 Led by the Kent Police Gold Commander, the SCG agreed upon a Gold Strategy to guide the response, with the central aim of:

'Saving and protecting life and property risks to people in Kent and Medway by coordinating multi-agency activity to maintain the safety and security of the public'.

- 3.5 The core roles undertaken by KCC were as follows:
 - Supporting and, at times, leading multi-agency co-ordination;
 - Responding to the effects on the highway network throughout the period dealing with fallen trees, damaged roads, surface water flooding, blocked gullies and more;
 - On-scene liaison with partners and affected communities;
 - Working with District / Borough Councils to provide temporary accommodation to those who were flooded, with transport arranged to take people from flooded areas to safety;
 - Provision of welfare support to those evacuated or in their own homes²;
 - Co-ordinating support from the voluntary sector³; and
 - Logistics management of countywide resources such as sandbags.

4. Recovery Management

4.1 As of 18th February, KCC has been the lead organisation in managing the long-term recovery process and has developed a Gold Recovery Strategy with the central aim of:

'Ensuring partnership working to support the affected individuals, communities and organisations to recover from the floods and return to a state of normality'.

- 4.2 To manage the recovery, five task-focused teams have been established with representatives from all appropriate authorities and organisations involved
 - Health, Welfare & Communities: KCC Public Health led;
 - Environment & Infrastructure: EA led;
 - Business & Economy: KCC Business Engagement & Economic Development led;
 - Finance, Insurance & Legal: KCC Finance led; and
 - Media & Communications: KCC Communications led.
- 4.3 Central Government are taking a keen interest in progress and key issues, with regular reporting to DCLG and the office of Greg Clark MP, the Flood Recovery Minister for Kent.

5. Lessons Learned

- 5.1 The following are the main points raised during the relevant debriefs, meetings & individual responses received, which have been used to inform a set of recommendations which are summarised in the Draft Action Plan in **Annex 1**.
- 5.2 For reference, the draft lessons learned from the KRF multi-agency debrief held on 21st March 2014 can be found at **Appendix 1 section A5**.

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² This included vulnerable person checks and provision of food, clothing and other practical support, such as arranging electrical contractors to ensure safety within people's flooded homes and hiring dehumidifiers to support the clear up.

³ This included undertaking community liaison roles and provision of equipment, practical support (such as first aid, transportation, or provisions for responders) and psycho-social support.

Pre-Planning & Resilience

Identified Successes

- 5.3 Overall, KCC and it's KRF partners, with joint planning for responding to and management of emergencies, were able to deliver support and assistance to the many communities, individuals and businesses in Kent affected by the severe weather events.
- 5.4 Staff, systems & procedures coped well when one considers the unprecedented scale, complexity and protracted nature of the events that took place
- 5.5 There were numerous examples of the commitment & resourcefulness of staff, partners, volunteers and communities to help others in need and to provide practical solutions to real problems for those affected.

Areas for Improvement

- 5.6 In the early stages of the response, staffing levels were affected by the timing of the emergencies, which occurred over the Christmas Bank Holiday period. Coupled with the sustained and complex nature of the emergency, on occasions considerable demands were placed upon a small number of individuals & teams undertaking crucial emergency response roles. Increased resilience should be established across KCC to be better prepared in the future.
- 5.7 Although there is no legal obligation on any organisation to provide sandbags and other practical support (e.g. pumps, dehumidifiers), public expectation was, understandably, to the contrary. This was exacerbated throughout the response by a general lack of awareness, mis-communications & inconsistency of approaches adopted.
- 5.8 Linked to this last point, it has been observed and reported of a general lack of flood awareness and individual / community resilience. For example, in some parts of Kent, 40-50% of the homes and businesses at risk of flooding in Kent are not signed-up to the EA's Floodline Warnings Direct (FWD) Service and so are unlikely to receive any prior warning of flooding see **Appendix 1 section A6** for more details.

Recommendations

<u>REC1:</u> Undertake a fundamental review & update of key KCC and partnership plans to ensure they are fit-for-purpose for even the most complex and protracted of incidents.

<u>REC2:</u> Provide Cabinet with an options paper for enhancing KCC's resilience, including training a cadre of 'emergency reservists'. Once approved, implement a programme to train, equip & support relevant personnel in readiness for Winter 2014.

<u>REC3:</u> Develop a consistent countywide policy & plans for maintaining & providing sandbags and other practical support to individuals & communities at risk of flooding.

<u>REC4:</u> Implement a strategy to encourage greater flood awareness & individual / community resilience, including improving sign-up for the EA's Floodline Warnings Direct (FWD) Service and training local volunteers as Flood Wardens.

Command, Control, Co-ordination & Communications

Identified Successes

5.9 Actions by KCC and our partners undoubtedly saved and protected life, livestock and properties.

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- 5.10 As the emergency progressed, joint plans, procedures and working arrangements matured, informed by the experiences of previous events.
- 5.11 When established, multi-agency co-ordination was effective, particularly when this was co-located. Specifically, Bronze / Operational teams deployed on the ground provided an effective and invaluable link into affected communities, particularly when communication and transport links were disrupted
- 5.12 Throughout the sequence of events, the voluntary sector provided extremely valuable support, demonstrating a high level of professionalism, dedication and capability.

Areas for Improvement

- 5.13 Feedback from debriefs, public consultations & flood fairs suggest that the EA's flood warnings were not always received or there was difficulty in receiving warnings, particularly as power supplies were disrupted. Additionally, many residents received conflicting warnings, were unsure of the level of risk & therefore the relevant actions they should take.
- 5.14 KCC and its partners responded to emergency calls throughout Christmas Eve, Christmas Day & Boxing Day. However, pressure on staffing levels due to the Bank Holiday & sheer volume / complexity of incidents that were being reported led to delays in establishing coordinated multi-agency support structures in key affected communities (e.g. Tonbridge, Hildenborough, East Peckham, Yalding & Maidstone) until the following weekend which, understandably, has angered many residents & businesses.
- 5.15 Additionally, partner agencies, residents & businesses alike all suffered from a lack of / poor quality engagement & support from the utilities companies, particularly the power, water & sewerage providers.
- 5.16 Information management was a continual challenge difficulties in obtaining critical information when it was need and, vice versa, information overload at times of intense pressure.

Recommendations

<u>REC5:</u> Undertake a fundamental review & update of the EA's Floodline Warnings Direct (FWD) Service for communities with high / complex flood risk.

<u>REC6:</u> Develop enhanced arrangements for warning & informing the public in flooding / severe weather scenarios, including contingency arrangements in the event of power outages and greater usage of social media.

<u>REC7:</u> Develop multi-agency arrangements to provide critical 'on scene' liaison & support to affected communities e.g. via multi-agency 'Bronze' / Operational teams.

<u>REC8:</u> Work with DCLG and the Flood Recovery Minister for Kent to bring pressure to bear on utilities companies to improve their arrangements for engaging with & supporting partners & customers.

<u>REC9:</u> Streamline & enhance existing multi-agency information management protocols & systems for sharing critical data in the planning for & management of emergencies.

Escalation, De-Escalation & Recovery

Identified Successes

5.17 Central Government colleagues have commended KCC and our partners for our approach in a number of key areas, and are promoting these as good practice e.g. early identification & monitoring of warnings / developing situations and a flexible / proportionate approach; and recovery management arrangements developed during Operation Sunrise 4.

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Areas for Improvement

- 5.18 Some partners felt that, at times, there were delays in 'standing up' the co-located multiagency emergency response co-ordination arrangements and, conversely, that these were occasionally stood-down too soon, declaring the 'emergency' over and handing-over to the 'recovery' phase.
- 5.19 Delays in involvement / support from Central Government caused difficulties for partners and the public over Christmas / New Year period. Conversely, once Central Government command & control was put in place, requests for detailed information at very short notice placed an additional burden on local responders.
- 5.20 The financial support schemes brought in by Central Government have also been difficult to interpret and implement at the local level, and do not adequately reflect the significant burdens placed on County Councils e.g. most schemes are focussed towards the Districts / Borough Councils, with significant cost incurred by KCC currently unlikely to qualify for central support.

Recommendations

<u>REC10:</u> Formalise the recovery management structures developed during Operation Sunrise 4 and adopt these as good practice.

<u>REC11:</u> Develop protocols to support emergency responders in deciding when to escalate / deescalate to / from the 'emergency response' & 'recovery' phases.

<u>REC12:</u> Influence Central Government to secure additional financial support in recognition of the severe burden that these incidents have placed on KCC.

6. Flood Risk Management

6.1 As well as lessons learned to improve how KCC prepares for and manages flooding emergencies in the future, consideration must also be given to roles of each organisation and the broader flood risk management options available for preventing or reducing the likelihood and / or impacts of flooding occurring.

Roles & Responsibilities

- 6.2 <u>EA</u>: Responsible for taking a strategic overview of the management of all sources of flooding and coastal erosion. This includes, for example, setting the direction for managing the risks through strategic plans; working collaboratively to support the development of risk management and providing a framework to support local delivery including the administration of Flood Defence Grant in Aid (FDGiA). 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.
- 6.3 KCC: Lead Local Flood Authority (LLFA) for Kent as defined by the Flood and Water Management Act (2010) and has a role to provide strategic overview of local flooding, which is defined as flooding from surface water, groundwater and ordinary watercourses (watercourses that are not main rivers). As part of its role as LLFA KCC has prepared and adopted the Kent Local Flood Risk Management Strategy, which sets out the objectives for managing local flood risks in Kent. All risk management authorities must act consistently with the local strategy.
- 6.4 <u>District / Borough Councils</u>: Key partners in planning local flood risk management and can carry out flood risk management works on minor watercourses, working with LLFA and others, including through taking decisions on development in their area which ensure that

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- risks are effectively managed. Districts / Boroughs and Unitary Authorities in coastal areas also act as coastal erosion risk management authorities.
- 6.5 <u>Internal Drainage Boards</u>: Independent public bodies responsible for water level management in low lying areas, also play an important role in the areas they cover (approximately 10% of England at present), working in partnership with other authorities to actively manage and reduce the risk of flooding.
- 6.6 <u>Water and Sewerage Companies:</u> Responsible for managing the risks of flooding from water and foul or combined sewer systems, providing drainage from buildings and yards.

Effectiveness of River & Flood Management Assets

- 6.7 Partners, residents & businesses alike have raised a number of queries & concerns regarding the effectiveness of river & flood management systems / assets operated by the EA and Southern Water, including:
 - <u>EA:</u> dredging of rivers and the operation of the Leigh Barrier and sluice gates at Yalding & Allington; and
 - <u>Southern Water:</u> lack / effectiveness of non-return valves in preventing sewage flooding, particularly in the Tonbridge area.

Recommendations

<u>REC13:</u> EA / Southern Water to respond to queries / concerns regarding the perceived lack / effectiveness of their management of rivers & flood management systems / assets.

Potential Flood Defence Schemes - information supplied by the EA

- 6.8 Approximately 65,000 homes and businesses are at risk of fluvial or coastal flooding in Kent, of which 38,000 currently benefit from flood defences with 27,000 not benefitting from defences. The EA has identified a further £194m of investment which would protect an additional 17,000 properties, between now and 2021. It has also identified further schemes identified for 2021 and beyond through its pipeline development programme.
- 6.9 The EA has worked successfully in the past with KCC and the private sector to implement flood risk management schemes such as the Sandwich Town Tidal Defence Scheme. It has also attracted additional partnership funding from a range of contributors including private businesses, developers and other government departments. There is a need to continue to work together to secure funding for priority schemes.
- 6.10 The recent flooding across the County has reinforced the need to accelerate this investment to reduce the risk of flooding. The EA in Kent & South London has secured £27.4m FDGiA for 2014-15. This will allow the EA to progress schemes including:
 - Broomhill Sands Sea Defences
 - Sandwich Town Tidal Defences
 - Leigh Barrier Mechanical / Electrical Improvements
 - Study into Yalding Storage on the Beult
 - Denge shingle re-nourishment

- East Peckham (Medway) Flood Alleviation Scheme (FAS)
- Aylesford Property-Level Protection Scheme (£50k contribution from KCC)
- Repairing assets damaged in the recent coastal surge and fluvial floods

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Flood Defence Grant in Aid (FDGiA)

- 6.11 In order to protect areas at Kent at risk of flooding investment is required in flood defences. The government will contribute to flood defences through FDGiA. However, current rules mean that schemes are rarely fully funded through this grant. Additional contributions or partnership funding is required to make up the shortfall. Without partnership funding flood defence schemes cannot be delivered.
- 6.12 The Government's partnership funding mechanism means that each scheme must have a minimum cost benefit of 8 1 and a partnership funding score of more than 100% in order to achieve Government allocated FDGiA. The EA has identified priority locations for accelerating flood defence projects based on people at risk and economic development including Yalding and Tonbridge that do not currently meet FDGiA criteria.
- 6.13 Areas that require investment to deliver flood defences in Kent include:
 - The Leigh Flood Storage Area (FSA) and Lower Beult;
 - East Peckham;
 - Five Oak Green;
 - South Ashford;

- Dover;
- Whitstable & Herne Bay;
- Folkestone; and
- Canterbury.
- 6.14 See **Appendix 1 section A7.4** for a detailed financial breakdown of each scheme.

Recommendations

<u>REC14:</u> Explore all possible opportunities with partners and beneficiaries to contribute to the priority flood defence schemes required in Kent, including influencing the EA, Defra & HM Treasury to secure funding to deliver the schemes that do not currently receive sufficient FDGiA funding even with substantial partnership contributions.

Other Flood Risk Management Options

- 6.15 Work is also currently on-going in the county by the EA and KCC to improve our understanding of flood risk and investigate options to provide protection. These include:
 - Spatial & land-use planning & drainage;
 - Personal flood resilience;
 - High / complex flood risk communities; and
 - Surface water management.
- 6.16 In most of the above areas, existing strategies and programmes of work are maintained by the relevant authorities. However, in light of recent events and the issues / opportunities highlighted in **Appendix 1 section A8** the following recommendations are made.

Recommendations

<u>REC15:</u> Ensure the consequences of flood risk are fully considered before promoting development in flood risk areas by consulting all organisations with a role in flood risk management and emergency management.

<u>REC16:</u> Implement a strategy to encourage greater awareness & take-up of individual & community flood protection measures e.g. property-level protection, sandbags.

<u>REC17:</u> Support awareness & implementation of key initiatives to support communities with high / complex flood risk, particularly e.g. Surface Water Management Plans (SWMPs), Multi-Agency Flood Alleviation Technical Working Groups

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7. Recommendations

Recommendations: Cabinet is asked to a) note and endorse the recommendations outlined in the Action Plan in **Annex 1**; and b) once approved, receive further options papers / progress reports on delivery against the Action Plan.

8. Supporting Information

8.1 Annex 1. Draft Action Plan

8.2 Appendix 1 – Christmas & New Year 2013-14 Storms & Floods Final Report

Sections as follows:

- A1. Numbers of Properties Flooded;
- A2. Key Facts & Statistics;
- A3. Key Meeting & Event Dates
- A4. Summary of Emergency Response Operations;
- A5. Kent Resilience Forum (KRF) Multi-Agency Debrief Draft Lessons Learned;
- A6. Floodline Warnings Direct (FWD) Service;
- A7. Potential Future Flood Defence Schemes; and
- A8. Other Flood Risk Management Options.

8.3 Background Documents

Christmas / New Year Storms & Floods Update Report to KCC Cabinet (22nd January 2014)

https://democracy.kent.gov.uk/mgConvert2PDF.aspx?ID=44733 (Report & https://democracy.kent.gov.uk/mgConvert2PDF.aspx?ID=44762 Appendices)

Kent Local Flood Risk Management Strategy

http://www.kent.gov.uk/about-the-council/strategies-and-policies/environment-waste-and-planning-policies/flooding-and-drainage-policies/kent-flood-risk-management-plan

Local Surface Water Management Plans

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

Revenue & Capital Budget Monitoring Report to KCC Cabinet (28th April 2014)

https://democracy.kent.gov.uk/mgConvert2PDF.aspx?ID=46275

Flood Support Schemes – Funding Available from Central Government

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/304805/Flood_Recovery - Summary of Support Guide.pdf

DfT Pothole Challenge Fund

https://www.gov.uk/government/news/councils-urged-to-apply-for-168-million-pothole-repair-fund

Severe Weather Impacts Monitoring System (SWIMS)

http://www.kent.gov.uk/business/Business-and-the-environment/severe-weather-impacts-monitoring-system-swims

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9. Contact Details

- Paul Crick, Director of Environment, Planning & Enforcement 01622 221527 / paul.crick@kent.gov.uk
- Stuart Beaumont, Head of Community Safety & Emergency Planning 01622 694878 / stuart.beaumont@kent.gov.uk
- Steven Terry, Kent Resilience Team (KRT) Manager 01622 692121 x 7811 / steve.terry@kent.gov.uk

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Annex 1. Draft Action Plan

No.	Recommendation	Lead / Supporting Action Owner(s)	Start Date	End Date
REC1	Undertake a fundamental review & update of key KCC and partnership plans to ensure they are fit-for-purpose for even the most complex and protracted of incidents.	KCC / KRT	Jun 2014	Nov 2014
REC2	Provide Cabinet with an options paper for enhancing KCC's resilience , including training a cadre of 'emergency reservists'. Once approved, implement a programme to train, equip & support relevant personnel in readiness for Winter 2014.	ксс	Aug 2014	Nov 2014
REC3	Develop a consistent countywide policy & plans for maintaining & providing sandbags and other practical support to individuals & communities at risk of flooding.	KRT / Districts &	July 2014	Nov 2014
Page 99	Implement a strategy to encourage greater flood awareness & individual / community resilience, including improving sign-up for the EA's Floodline Warnings Direct (FWD) Service and training local volunteers as Flood Wardens.	Boroughs / EA	Apr 2014	Nov 2014
REC5	Undertake a fundamental review & update of the Floodline Warnings Direct (FWD) Service for communities with high / complex flood risk.		July 2014	Nov 2014
REC6	Develop enhanced arrangements for warning & informing the public in flooding / severe weather scenarios, including contingency arrangements in the event of power outages and greater usage of social media.	EA / KRT		
REC7	Develop multi-agency arrangements to provide critical 'on scene' liaison & support to affected communities e.g. via multi-agency 'Bronze' / Operational teams.	KRT	July 2014	Nov 2014
REC8	Work with DCLG and the Flood Recovery Minister for Kent to bring pressure to bear on utilities companies to improve their arrangements for engaging & supporting partners & customers.	KRT / KCC / EA	A Ongoing	
REC9	Streamline & enhance existing multi-agency information management protocols	KRT	July 2014	Nov 2014

[&]amp; systems for sharing critical data in the planning for & management of

No.	Recommendation	Lead / Supporting Action Owner(s)	Start Date	End Date
	emergencies.			
REC10	Formalise the recovery management structures developed during Operation Sunrise 4 and adopt these as good practice.			
REC11	Develop protocols to support emergency responders in deciding when to escalate / de-escalate to / from the 'emergency response' & 'recovery' phases.	KRT	July 2014	Nov 2014
REC12	Influence Central Government to secure additional financial support in recognition of the severe burden that these incidents have placed on KCC.	KCC Ongoing		oing
REC13	EA / Southern Water to respond to queries / concerns regarding the perceived lack of / effectiveness of their rivers & flood management systems / assets	EA / Southern Water	July 2014	Sept 2014
Pag REC14	Explore all possible opportunities with partners and beneficiaries to contribute to the priority flood defence schemes required in Kent, including influencing the EA, Defra & HM Treasury to secure funding to deliver the schemes that do not currently receive sufficient FDGiA funding even with substantial partnership contributions.	KCC & Districts & Boroughs	Ongoing	
REC15	Ensure the consequences of flood risk are fully considered before promoting development in flood risk areas by consulting all organisations with a role in flood risk management and emergency management.	lopment in flood risk areas by consulting all organisations with a role in flood Districts / Boroughs		Mar 2015
REC16	Implement a strategy to encourage greater awareness & take-up of individual & community flood protection measures e.g. property-level protection, sandbags.	KRT / Districts / Boroughs / EA		
REC17	Support awareness & implementation of key initiatives to support communities with high / complex flood risk, particularly e.g. Surface Water Management Plans (SWMPs), Multi-Agency Flood Alleviation Technical Working Groups	Various leads, determined by nature of flood risk	Ongoing	

^{*} Action Owners listed here are illustrative and these lists are not exhaustive. Work will need to involve a broader range of organisations with flood risk management responsibilities.

Christmas & New Year 2013-14 Storms & Floods Final Report Appendix 1

A1. Numbers of Properties Flooded

A1.1 As of 15th May 2014, the following are the latest figures provided by the EA and Districts / Boroughs to the Department of Communities & Local Government (DCLG).

County	Residential	Commercial	Total
Surrey	1,971	342	2,313
Thames Valley	635	295	930
Kent	731	198	929
Lincolnshire	662	106	768
Wiltshire	484	56	540
Cornwall (incl. the Isles of Scilly)	267	144	411
North Lincolnshire	339	70	409
Dorset	252	81	333
Norfolk	215	69	284
Devon	121	85	206
West Sussex	112	18	130
East Sussex	81	16	97

A1.2 Detailed breakdown of properties flooded in Kent.

Authority Area	Residential	Commercial	Total
Ashford	-	1	1
Canterbury	40	4	44
Dartford	10	3	13
Dover	30	6	36
Gravesham	2	-	2
Maidstone	207	55	262
Medway	3	2	5
Sevenoaks	30	6	36
Shepway	8	1	9
Swale	36	17	53
Thanet	-	-	0
Tonbridge & Malling	335	101	436
Tunbridge Wells	30	2	32
Total	731	198	929

<u>Important Note:</u> These figures presented are likely to be an underestimate as they mainly consist of properties known to have been flooded by rivers, groundwater or groundwater-fed rivers. Information on numbers of properties flooded by surface water or sewage is less certain. Additionally, many hundreds

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more properties were indirectly affected by flooding (loss of utilities, access etc.) e.g. Tonbridge & Malling Borough Council (TMBC) estimate 720 businesses indirectly affected in their area.

A2. Key Facts & Statistics

- A2.1 The following is a snapshot of key facts & statistics from Operation Vivaldi and Operations Sunrise 2, 3 & 4.
- A2.2 A comprehensive report into the key facts & statistics, costs & demands (collated using the Severe Weather Impact Monitoring System SWIMS) from all the severe weather events experienced over Winter 2013-14, will be tabled by KCC Sustainability & Climate Change Team later in the coming months.
 - **4.7m** peak sea levels in Dover on 5th & 6th December, the highest recorded since 1905. The Environment Agency (EA) estimates that the tidal impacts in Sandwich were equal to a 1 in 200 year event and the biggest tidal event to impact Kent since the devastating event of 1953.
 - **120mm** of rainfall falling between 19th to 25th December on already saturated ground on the Upper Medway catchment. December 2013 was the wettest December for 79 years.
 - **342m³** / **second** the highest ever peak flows upstream of Leigh Barrier Flood Storage Area (FSA) were recorded on Christmas Eve.
 - **91** x Flood Alerts, **73** x Flood Warnings and **5** x Severe Flood Warnings issued by the EA for Kent since December.
 - **28,500** properties without power in Kent on Christmas Eve.
 - **929** properties flooded in Kent since Christmas Eve. In the 2000 floods, approximately 1000 properties were flooded in Kent.
 - **50,000** sandbags provided by KCC, District / Borough Councils and the EA to help protect at risk communities.
 - **6,400** hours worked by KCC Emergency Planning staff since 20th December in response to the storms & floods, including 1,300 out-of-hours and sustained periods where the County Emergency Centre (CEC) was operating 24 hours a day.
 - **88** flood victims supported by Kent Support & Assistance Service (KSAS) with essential cash, goods and services.
 - **32,000** calls received by KCC Highways & Transportation in January, a 150% increase in normal call volumes.
 - **6km** of public rights of way in need of repair.
 - £8.6m central government grant received by KCC under the 'Severe Weather Recovery Scheme' to help repair damaged highways infrastructure¹.
 - £3m new investment by KCC Highways & Transportation into significant drainage schemes to improve existing infrastructure that was impacted by the floods.

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¹ KCC Finance is exploring the potential for additional central funding being progressed by KCC Finance, under the Bellwin Scheme and the 'Pothole Challenge Fund'.

A3. Key Meeting & Event Dates

A3.1 The following is a summary of key debriefs, public consultation meetings and flood fairs, feedback from which has been used to inform this report.

Date	Details	Location		
3 rd December 2013	Kent Resilience Forum (KRF) multi-agency debrief for Op. Sunrise 1	Kent Police HQ		
4 th February 2014	Public consultation meeting	Hildenborough		
4 Tebruary 2014	Public consultation meeting	Faversham		
5 th February 2014	Public consultation meeting	Danvers Road, Tonbridge		
12 th February 2014	Public consultation meeting	East Peckham		
17 th February 2014	Public consultation meeting	Tonbridge Forum		
19 th March 2014	Public consultation meeting	Collier Street		
21 st March 2014	KRF multi-agency debrief for Op. Vivaldi and Ops. Sunrise 2, 3 & 4	Kent Police HQ		
28 th March 2014	KCC internal debrief for Op. Vivaldi and Ops. Sunrise 2, 3 & 4	KCC		
5 th April 2014	Flood fair	East Peckham		
12 th April 2014	Flood fair	Hildenborough		
8 th , 13 th & 19 th April 2014	Flood fair	Yalding		
26 th April 2014	Flood fair	Little Venice Caravan Park & Tovil		
27 th April 2014	Flood fair	Maidstone		
3 rd May 2014	Flood fair	Tovil & East Farleigh		
4 th May 2014	Flood fair	Clifford Way, Maidstone		
10 th May 2014	Flood fair	Yalding		
11 th May 2014	Flood fair	Little Venice Caravan Park		

A4. Summary of Emergency Response Operations

A4.1 Important Notes

- The sequence of severe weather events, which necessitated complex & protracted multiagency emergency operations are summarised below.
- The date ranges and operational names outlined above refer specifically to the 'emergency phase' of these events, where the situation is deemed to present a risk to life. For several days and weeks preceding and superseding each event, a significant multi-agency effort in the pre-planning for, and recovery from, each incident was put in place throughout and beyond these periods.
- Indeed, to date the recovery operations are still ongoing for the Christmas / New Year events, some 4 months later.
- A range of additional complex and challenging events also occurred during this period, including:
 - Significant operations to prevent flooding from Brishing Dam at Boughton Monchelsea;
 - Widespread surface water flooding in Eynsford (17th to 19th January);
 - o A 'mini tornado' on 27th January; and
 - A number of sink-holes causing disruption, including a 15ft deep hole on the M2 central reservation (11th February).

A4.2 'Operation Sunrise 1': 28th October 2013

• St Jude Storm – Winds speeds in excess of 90mph hit the County causing widespread disruption to travel & power supplies and, tragically, one fatality.

A4.3 'Operation Vivaldi': 5th & 6th December 2013

Spring tides combined with a tidal surge caused flooding along the East and South UK coastline impacting much of Kent coastline. The EA issued 5 x Severe Flood Warnings, 3 x Flood Warnings & 6 x Flood Alerts to homes and businesses. 41,000 properties were protected by flood walls, banks and other flood risk management assets along the Kent coast and estuaries. 58 properties were flooded.

A4.4 'Operation Sunrise 2': 23rd to 27th December 2013

 Storm force winds (60-70mph) leave 28,500 properties without power. Heavy rainfall on already saturated catchments causes river, surface water and sewage flooding across Kent, particularly in the north and west of the county. Numerous communities suffered flooding, with hundreds of homes and many businesses affected. Edenbridge, Tonbridge and Hildenborough, East Peckham, Yalding, Collier Street and surrounding communities, Maidstone, and South Darenth, amongst other locations, were all significantly affected.

A4.5 'Operation Sunrise 3': 4th to 6th January 2014

 A sudden deterioration in weather conditions threatened to bring further flooding of severity akin to that experienced over Christmas to already affected communities, and elsewhere. A significant multi-agency operation was put in place (including Military assistance) to provide thousands of sandbags for communities at risk.

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A4.6 'Operation Sunrise 4': 6th to 18th February 2014

• Heavy rainfall continued into February 2014. As the rainfall soaked into the ground we experienced extremely high groundwater levels. In some locations groundwater flooding exceeded previously recorded levels by over 1 metre. The peak of the event was experienced towards the end of February and communities were subject to both groundwater flooding and flooding from groundwater fed rivers. The impacts of groundwater flooding in Kent were widespread with particular concentration along the Elham Valley. A multi-agency response to the groundwater flooding and pre-planned measures were deployed to reduce the damage to communities vulnerable to groundwater flooding, including over-pumping of sewage by Southern Water and a significant sand-bagging operation.

A5. Kent Resilience Forum (KRF) Multi-Agency Debrief – Draft Lessons Learned

A5.1 Important Note

- The following are initial <u>draft</u> lessons identified through the KRF multi-agency debrief process hosted by Kent Police on 21st March 2014.
- At time of writing these have yet to be agreed with partners, but Kent Police will shortly be circulating a draft debrief report to all partners for consultation.

A5.2 Pre-Planning & Resilience

- Kent Resilience Team (KRT) to develop guidance for the public in a range of situations advising them of which agencies are responsible for which issues within their areas, and who will provide what information.
- Pan-Kent flood response plans to be reviewed to ensure they are cognisant of arrangements and contingencies across all levels, including Parish, District / Borough and County.
- Review of emergency plans to ensure use of social media for warning and informing purposes is included.
- A number of respondents cited the benefit of taking part in Training & Exercising programmes at National and Regional level which left us better placed than in previous flooding events.
- It was suggested that adoption a similar programme focussed at district level would have eased some of the more local issues and built working relationships. The KRT should work with local partners to deliver a number of District / Borough based exercises focussed on civil emergency type scenarios.
- KRF to maximise training & exercising opportunities for staff attending the multi-agency Tactical Co-ordination Centre (TCC) / Strategic Co-ordination Centre (SCC), including the College of Policing's Multi-Agency Gold Incident Command (MAGIC) training course.
- Resilience in a number of partner agencies was stretched, particularly Category 2 responders and those with regional responsibilities.
- This impacted on maintaining a physical presence at the TCC and participation in the TCG process.
- Some agencies not present on the ground outside normal working hours.
- Bank holiday staffing particularly over Christmas period was lacking.
- Sustained nature of the operation presented problems for maintaining staffing at TCC / SCC.

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A5.3 Command, Control, Co-ordination & Communications

- The operation was acknowledged as being tactically led, those Districts / Boroughs which
 involved an Operational Coordination Group at Bronze level reported a higher level of multiagency understanding and coordination at ground level.
- Commonly Recognised Information Picture (CRIP) template to include location maps in future.
- Teleconferencing facilities in the SCC have now been upgraded to allow a greater volume of dial-in from partner agencies.
- The multi-agency room within the TCC at Medway has also been upgraded to allow hardwiring of partners IT systems, to allow a quicker transfer of information.
- It was considered that Airwave radio interoperability was not used to full effect on ground.
- Single countywide Silver control was acknowledged as being fit for purpose, non-blue light agencies would not have been able to cope with multiple TCCs.
- Decision to locate the Scientific & Technical Advice Cell (STAC) at TCC was considered sound, in view of the operation being tactically driven.
- Confusion about who the key decision maker should be for ordering evacuation.
- Clearer command protocols need to be developed between responsibilities of County / District / Parish councils e.g. evacuation, sandbag distribution.
- KRT to develop clear guidance for partner agencies to understand decision making process and responsibilities of each agency in a range of civil emergency situations.

A5.4 Escalation, De-Escalation & Recovery

- Escalation from Severe Weather Advisory Group (SWAG) with a proportionate Silver Control, set-up to flex into a functional TCC was identified as good practice.
- Need to ensure understanding of status of incident to each agency.
- Clear and distinct lines of communication are needed to ensure dissemination of escalation / de-escalation of operations. It is not sufficient to only include this in CRIP or minutes from meetings.
- KRT to develop protocols for establishing tipping points at which point an event or situation
 escalates into an emergency and when the 'response' phase may be safely de-escalated
 into the 'recovery' phase.
- The relationship between the Recovery Working Group (RWG) and the SCG during the 'emergency' phase was unclear. However, recovery structures subsequently developed during Operation Sunrise 4 to be formalised and adopted by KRT as best practice.
- Menu of capabilities of agencies / organisations to be developed by KRT for assets available for on-going deployment during 'recovery' phase.

A6. Floodline Warnings Direct Service (FWD) – information supplied by the EA

The EA will be working with affected communities, KCC and other partners, to learn the
lessons of the flooding and how it can make its FWD service even more effective. This will
include providing warnings to communities that were not able to receive a warning, making
warnings more focussed on particular communities, and developing Flood Warden schemes
in at risk communities.

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- One of the challenges during the flooding was providing consistent and trusted information to communities prompting appropriate action. Where Flood Wardens or community leaders were able to be involved in this activity it proved effective. The EA is working with Parish Councils, District / Borough Councils and KCC to establish Flood Warden Schemes in communities, especially those with a complex flood risk where the benefit can be greatest. Amongst others, the communities of central Tonbridge and Hildenborough are communities where we are supporting flood wardens.
- Registering with FWD allows customers to register multiple contact details (mobile, e-mail etc) and manage which messages they receive e.g. Flood Alerts, Flood Warning no-longer in force etc. This increases our ability to get a message through, and provide a good level of service. In areas of relatively low take-up e.g. where fewer people have registered) the EA has automatically registered properties. This is a positive step because it allows the EA to provide a service and warning to those who wouldn't otherwise have received one. However, it only uses home landline contact details (provided by BT). This therefore has a higher message failure rate, and because people haven't chosen to register, there is a lower level of engagement with the service
- The importance of receiving Flood Warnings means that a partnership effort is needed to encourage people to:
 - o Sign-up:

In some parts of Kent, take-up is as low as 51% of those properties for whom the EA is able to alert via the FWD Service.

Keep their details up to date and provide multiple contact numbers:

The most common reason for warning messages not being received is out of date contact details. 1 in 4 people have been automatically signed-up to receive Flood Warnings, meaning that only basic contact details are available e.g. landline telephone.

o Act: When they receive a Flood Warning: we have received some feedback that people were waiting for a Severe Flood Warning to be issued before acting, when a Flood Warning indicates immediate action required.

Take-Up of the FWD Service Across Kent²

Percentage of 'at risk' properties offered the FWD Service	91%
Percentage of Flood Zone 2 properties registered	76%
Percentage of Flood Warning Area properties registered	84%

Take-up of the FWD Service by District / Borough Council Area

Authority Area Nos. of Properties Offered FWD Service		Take-up of FWD Service (Fully (Automatical Registered) Registered		% Take-up of Properties (Fully or Automatically Registered)	
Ashford 2,360		1,459	1,012	104.70%	
Canterbury	7,770	4,728	1,850	84.66%	

² Data correct as of 31/03/14

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Authority Area	Nos. of Properties Offered FWD Service	Take-up of FWD Service (Fully Registered)	Take-up of FWD Service (Automatically Registered)	% Take-up of Properties (Fully or Automatically Registered)
Dartford	3,198	844	1,365	69.07%
Dover	7,591	5,424	1,241	87.80%
Gravesham	2,125	554	808	64.09%
Maidstone	2,966	1,440	917	79.47%
Sevenoaks	1,738	1487	467	112.43%
Shepway	133,80	8,741	3,092	88.44%
Swale	9,981	3,686	3,788	74.88%
Thanet	671	133	215	51.86%
Tonbridge & Malling 3,715		2,200	972	85.38%
Tunbridge Wells	542	276	149	78.41%

A7. Potential Future Flood Defence Schemes in Kent – information supplied by the EA

A7.1 Leigh Flood Storage Area (FSA)

• The EA is working hard to communicate better the purpose of the Leigh FSA and its operation³. On 24th December, 5.5million cubic metres of water were stored at the Leigh FSA. By operating the Leigh FSA the EA was able to reduce the 342m³ / second of water entering the FSA reservoir down to 160m³ / second flowing downstream and continued to moderate the persistently high water levels during 25th and 26th December.

A7.2 East Peckham

- The EA will use its analysis of the event to test the proposed River Medway and Bourne East Peckham Flood Alleviation Scheme (FAS). It discussed this proposed scheme with East Peckham Parish Council in summer 2012 and, if constructed, it would protect all developed areas of East Peckham and Little Mill. The EA hopes to start the scheme design in November 2014.
- The EA's review of the event will also cover the operation of its existing assets (including the Coult Stream FSA), to see if there is anything more can be done to maximise their performance.

A7.3 Yalding

 Yalding is a particularly vulnerable location. 197 properties were flooded when river levels peaked on 24th December 2013. This flooding was comparable to the 1968 flood and worse than in 2000, when 119 properties flooded.

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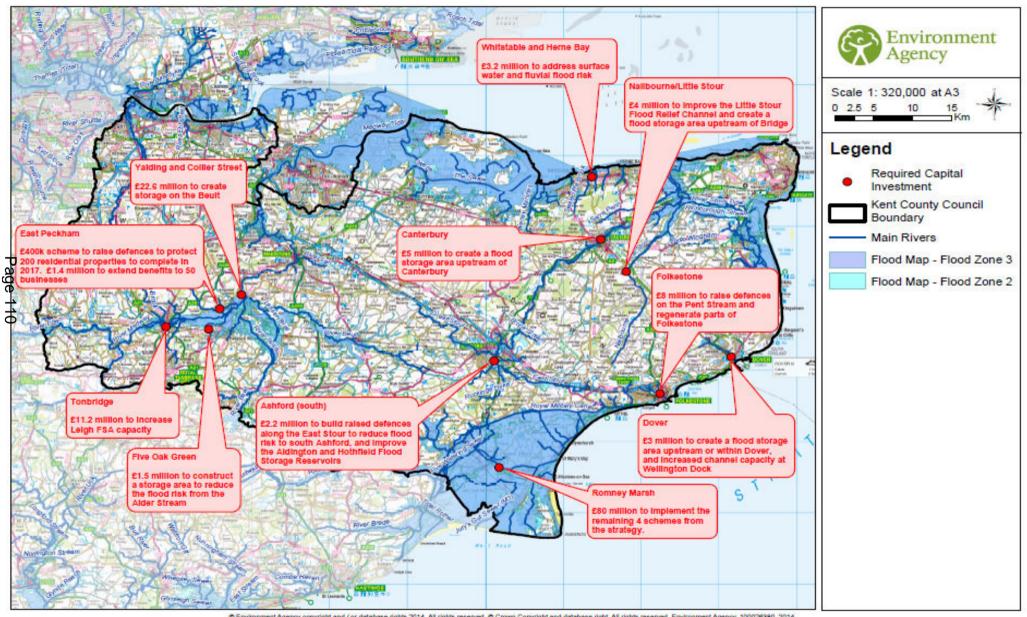
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³ http://m.youtube.com/watch?v=336-6IN-J2I

- The EA is urgently investigating whether it can accelerate projects to reduce the risk of flooding in Yalding. There is no single solution that will benefit the whole community because of the way the homes and businesses are spread out. It is using the data it has collected from the recent flooding to review our understanding of the way floods happen in the catchment. This will help present the best case to gain funding for future schemes.
- The EA is investigating if it can further localise the current Floodline Warnings Direct (FWD)
 Service for Yalding. The data it is currently collecting from a project to improve the flood risk
 modelling for the River Medway will help the EA to improve further its forecasting and flood
 warning.
- Future works to reduce the risk of flooding are set out in the Middle Medway Strategy which
 was developed in 2005 and updated in 2010. The EA has considered a number of potential
 schemes to reduce flooding in Yalding.
- An option that residents are keen to progress is to find a suitable location to store water on the lower reaches of the River Beult.
- The Middle Medway Strategy also recommended that the Leigh FSA be raised by 1m giving an additional 30 per cent storage capacity.
- However, under Government funding rules, most of the schemes will need substantial contributions from external partners in order to proceed – see A6.4 and A6.5 for details.
- The EA has secured funding to progress a feasibility study into both options. It is anticipated this work will be completed by summer 2015. KCC has offered to part fund an additional FSA on the River Beult at Stile Bridge and an increase in the capacity at the Leigh FSA. The EA has submitted its funding bid to secure the additional £17.6m needed to complete both schemes. If this is successful, the earliest construction could start would be in the financial year 2017-2018.
- The EA will continue to work with KCC, Maidstone Borough Council (MBC), Tonbridge & Malling Borough Council (TMBC) and other professional partners to identify partnership funding opportunities which will increase the likelihood of the above works going ahead.

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A7.4 Future Capital Investment Requirements for Potential Future Flood Defence Schemes



A7.5 Priority Schemes Currently Not Qualifying for FDGiA Without Partnership Contributions

Scheme	Estimated cost	Nos. of properties to which flood risk would be reduced	Raw partnership funding score	Required partnership contribution	Final partnership funding score (including contribution)	Planned completion
Lower Beult Storage	£22.6m	1,151	36%	£16m	125%	2020
Increased Storage at Leigh	£11.2m	2,151	74%	£5m	130%	2019
Five Oak Green Flood Alleviation Scheme	£1.5m	266	46%	£900k	100%	2018 (only achievable with contributions)
South Ashford Flood Alleviation Scheme	£2.2m	282	24%	£1.7m	100%	2019 (only achievable with contributions)
Canterbury	£5m	1364	144%	N/A	N/A	2020 (dependant on investigations and consultations)
Romney Marsh	£80m	14,500	119%	£3m	N/A	2022
Whitstable & Herne Bay	£3.2m					
Dover	£3m		Projects i	n early stages of dev	velopment	
Folkestone	£8m					
East Peckham	£400k	200 domestic	165%	N/A		2017
	£1.4m	50 businesses	50%	£1m	100%	This scheme will currently only defend homes in East Peckham. Additional funding required for an extension of the protection to businesses.

A8. Other Flood Risk Management Options – information supplied by EA and KCC

A8.1 Summary of Ongoing EA Work

- The EA is keen to learn with communities, and gain a clearer understanding of the impacts
 of these events on people, its assets and the environment. Also to discuss how, collectively,
 it can improve its preparations for and response to future events.
- The EA has worked with partners to visit affected communities and attended public meetings across the County. These meetings were an opportunity for people to learn about the risks associated with flooding, to share their experiences and to find out what they can do to better prepare themselves for flooding.
- It was also an opportunity to discuss how flood protection assets, such as the Leigh Flood Storage Area (FSA), are operated to reduce the impact of flooding.
- Attending community events, including flood fairs, hosted by Parish and District / Borough Councils taking place in communities impacted by the recent flooding.
- Holding one-to-one meetings with residents.
- Planning to give residents the opportunity to visit the Leigh FSA.
- A review of the Flood Warnings issued will help the EA to understand if their warnings were timely, appropriate and relevant to those who were affected.
- Identify that new or improved warning areas are required in Hildenborough and Yalding and are investigate how the EA can localise the current Flood Warning Service.
- Work with partners to set up and support a number of Flood Warden schemes.
- Distribute questionnaires to affected communities to find out more about the extent and impact of the flooding to improve EA flood maps and Flood Warning areas.

A8.2 Spatial & Land-Use Planning & Drainage

- The EA's role as a statutory planning consultee is to provide advice to local planning authorities to manage flood and environmental risks and enable sustainable growth. We do not receive government funding to protect development built after 2012. It is therefore vital that flood risk is managed within the planning system. The EA works with partners to seek solutions to overcome these risks. Where risks cannot be overcome and development is contrary to the National Planning Policy Framework (NPFF), the EA recommends planning authorities refuse applications.
- In line with the NPFF we recommend that development is outside the flood plain. If this is not feasible the EA provides advice to Local Planning Authorities (LPAs) to ensure that people are not put at risk and that flood risk is not passed downstream.
- LPAs must ensure that Emergency Plans are fit for purpose to ensure that access and egress is still possible in flood conditions. In all circumstances where warning and emergency response is fundamental to managing flood risk, the EA advise LPAs to formally consider the emergency planning and search & rescue implications of new development in making their decisions.
- It is Local authority responsibility to ensure that flood resilience measures are incorporated into building design. The EA still advise on surface drainage at sites over 1 hectare. The future implementation of Sustainable Drainage Systems (SuDS) Approving Bodies (SABs) will mean that KCC and Local authorities will need to manage surface water risks, groundwater flooding and access and egress within the planning process.

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A8.3 Personal Flood Resilience

- A 'Property-Level Protection Scheme' is already in place in Lamberhurst. In response to Flood Warnings these measures were deployed by residents, and greatly reduced the flood impact. Funding is also now in place to adopt similar measures in Aylesford.
- District / Borough Councils have been proactively promoting the Central Government 'Repair & Renew Grant' but take-up across the County has been patchy. However, as at 10th April 2014, T&MBC had received 49 requests for further information, 20% from businesses.
- The EA and KCC have also been supporting flood fairs in various locations around the County (see section A3 of this appendix for further details) where residents have been investigating their personal flood resilience options.

A8.4 Investigating & Improving Support to Communities with High / Complex Flood Risk Profiles

- The EA has heard from affected communities that there are often multiple sources of flooding and that the appropriate flood risk management options required are complex to determine.
- The EA has therefore promoted the formation of Multi-Agency Flood Alleviation Technical Working Groups across the County to explore future options.
- Groups that have already met (including existing groups):

 Tonbridge & Malling (Hildenborough, Tonbridge & East Peckham)

Five Oak Green

Aylesford

o Edenbridge

Yalding

Collier Street

Canterbury – Nailbourne

New groups still to meet:

Maidstone

Eynsford*

South Darent & Horton Kirby*

Forest Row

Lamberhurst

Staplehurst

Headcorn

Faversham

Westerham

Sundridge & Brasted

Key:

* Still to be established if wider group needed

A8.5 Surface Water Management Plans (SWMPs)

In order to understand the risks from local flooding KCC has undertaken a number of studies
across the county to collect and map data on these floods. These studies are known as
Surface Water Management Plans (SWMPs). These documents vary in their nature, some
are high-level assessments of the risks, while others are in-depth studies of the causes and
potential solutions to local flooding. SWMPs can be found on the KCC website.

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⁴ A scheme providing up to £5,000 per flood-affected home or business to contribute to the costs of additional flood resilience or resistance measures.

- During 2014-15 KCC will continue to develop SWMPs, and will undertake studies in Marden, Staplehurst, Headcorn and Paddock Wood (all areas impacted by varying degrees of local flooding during the winter). KCC will also be exploring the opportunities to manage local flooding identified by the recently completed SWMPs in Folkestone, Margate and Dartford. SWMPs include an Action Plan of measures that can be used to manage local flooding identified by the study. However, many options require funding in order to be delivered, this funding is drawn from the same Defra fund, which is administered by the EA, as all other flood risk management investment, and each scheme must compete for funding.
- Additionally, KCC is currently co-ordinating the development of local flood risk documents that provide local communities with a simple overview of the range of flood risks in their area. KCC is working with the EA, Internal Drainage Boards (IDBs), Local authorities and water companies to prepare a pilot document. The document will show what the main flood risks are, where significant assets are, which authorities exercise risk management functions in the area, any plans or strategies they may have in hand to manage flood risks in the future and who to get in touch with for more information. Initially, the pilot will focus on the Canterbury City Council (CCC) area. If this proves successful it will be rolled out across the County, with TMBC and MBC areas likely to be considered next.

A8.6 Little Stour, Nailbourne & Petham Bourne Flood Management Group

- The EA, KCC, CCC, Shepway District Council, Southern Water, and representatives from key Parish Councils are investigating the causes and effects of the flooding experienced during the winter of 2013/14 in the Nailbourne, Little Stour and Petham Bourne valleys. These partners are working together to assess the options to manage this winter's flooding, and are seeking to reduce the potential for disruption in the future.
- The Nailbourne, Petham Bourne and parts of the Little Stour are groundwater fed watercourses. This means that they are dry for long periods of time. However, following periods of prolonged rainfall groundwater levels in the underlying aquifers rise to a point where water emerges through springs throughout the length of these valleys, and the streams begin to flow.
- The Nailbourne has been flowing since mid-January and has approached near-record levels. There has been extensive flooding of farmland, with internal property flooding reported in Bridge, Patrixbourne, Bishopsbourne and Barham. The Petham Bourne, which typically flows less frequently than the Nailbourne, has also been active over the winter causing flooding and disruption. The Little Stour has burst its banks in a number of locations, also flooding farmland properties and roads.
- Owing to the high flows experienced this winter, many culverts have been overwhelmed in these valleys. At its peak, portable pumps were used to help move water over the culverts in some places, and sandbags were used extensively to protect many properties.
- The group will be undertaking three main activities:
 - 1. Survey the measures put in place over the course of this winter to manage and reduce flooding. This will provide a blueprint for future events, and will help enable us to mobilise and deploy necessary equipment in time if the groundwater levels rise again.
 - 2. Identify any opportunities that can be delivered as quickly as possible to reduce the impact of flooding should these watercourses flow again next winter.
 - 3. Identify opportunities to reduce the impact of flooding that can be delivered over a longer timeframe. These measures will require further investigation, more detailed design work and an application for additional funding.

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