KENT FLOOD RISK MANAGEMENT COMMITTEE

Monday, 22nd July, 2013

2.00 pm

Council Chamber, Sessions House, County Hall, Maidstone

Kent County Council
kent.gov.uk

AGENDA

KENT FLOOD RISK MANAGEMENT COMMITTEE

Monday, 22nd July, 2013, at 2.00 pm
Council Chamber, Sessions House, County Hall, Maidstone

Ask for: **Andrew Tait**
Telephone: **01622 694942**

Tea/Coffee will be available 15 before the start of the meeting in the meeting room

Membership

Conservative (4):	Mr A H T Bowles, Mr M J Harrison, Mr L B Ridings, MBE and Mrs P A V Stockell
UKIP (1):	Mr B E MacDowall
Labour (1)	Dr M R Eddy
Liberal Democrat (1)	Mr M J Vye

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

1. Terms of Reference and Membership (Pages 1 - 4)
2. Substitutes
3. Election of Chairman
4. Declarations of Members' Interest relating to items on today's agenda
5. Minutes of the meeting on 19 November 2012 (Pages 5 - 10)
6. Local Flood Risk Management and the Local Strategy (Pages 11 - 26)
7. Overview of Flood Risk in Kent and current issues - Presentation by Tony Harwood, Senior Emergency Planning Officer (Pages 27 - 38)
8. Coastal Communities 2150 - Presentation by Carolyn McKenzie, KCC Sustainability and Climate Change Manager (Pages 39 - 48)

9. Environment Agency Flood Alerts and Warnings since the last meeting - oral report

10. Future Committee Topics (Pages 49 - 50)

11. Date of next meeting - Monday, 18 November 2013

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)

At the end of the public session, Members of the Committee should remain in the meeting room for 20 minutes for summing up

Peter Sass
Head of Democratic Services
(01622) 694002

Friday, 12 July 2013

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To: Kent Flood Risk Management Committee – 22 July 2013

From: Peter Sass, Head of Democratic Services

Subject: Terms of Reference and Membership of the Kent Flood Risk Management Committee

Classification: Unrestricted

Summary:

This report sets out the Kent Flood Risk Management Committee's Terms of Reference and Membership.

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1. **Introduction**

1.1 The County Council agreed at its meeting on 10 December 2009 to set up a Flood Risk Management Committee with the Terms of Reference set out in the **Appendix** to this report.

2. Membership

2.1 The voting membership of this Committee is set out below:

Mr Andrew Bowles (Conservative
Mr Mike Harrison (Conservative)
Mr Leyland Ridings (Conservative)
Mrs Paulina Stockell (Conservative)
Mr Brian MacDowall (UKIP)
Dr Mike Eddy (Labour)
Mr Martin Vye (Liberal Democrat)

2.2 The Committee may also include non-voting persons who are not Members of the County Council. Accordingly, invitations have been extended to each of the District Councils in Kent and the Internal Drainage Boards. The table below sets out the current non-voting Members. Each authority may substitute or amend its representatives as it wishes.

Ashford BC	Mrs Jessamy Blanford
Canterbury CC	Mr Peter Vickery-Jones
Dartford BC	Mr John Muckle
Dover DC	Mr Frederick Scales
Gravesham BC	Mr Lee Croxton
Maidstone BC	Mr Steven Clarke
Sevenoaks DC	Mr John Scholey
Shepway DC	Mr Robert Bliss

Swale BC	Mr Gerry Lewin
Thanet DC	Mr Alisdair Bruce
Tonbridge and Malling BC	Mr Howard Rogers
Tunbridge Wells BC	Mr David Elliott
Lower Medway and Upper Medway IDBs	Mr Mike Dobson
River Stour IDB	Mr Martin Tapp
Romney Marshes Area IDB	Mr Larry Cooke

3 Recommendation

The Committee is invited to note its Terms of Reference and membership.

Contact:
Andrew Tait
Democratic Services Officer
andrew.tait@kent.gov.uk
Ext 4342

Background documents (None)

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.

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KENT COUNTY COUNCIL

KENT FLOOD RISK MANAGEMENT COMMITTEE

MINUTES of a meeting of the Kent Flood Risk Management Committee held in the Medway Room, Sessions House, County Hall, Maidstone on Monday, 19 November 2012.

PRESENT: Mr R E King (Chairman), Mr A H T Bowles, Mr D L Brazier, Mr M J Harrison, Mr C Hibberd and Mr M J Vye

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: Mrs J Blanford (Ashford BC), Mr P Vickery-Jones (Canterbury CC), Mr J Muckle (Dartford BC), Mr J Scholey (Sevenoaks DC), Mr G Lewin, Mr A Hills (Shepway DC), Mr H Rogers (Tonbridge and Malling BC), Mr D Elliott Tunbridge Wells BC), Mr M Tapp (River Stour IDB), Mr L Cooke (Romney Marshes Area IDB) and Mr T Dauben (Environment Agency)

UNRESTRICTED ITEMS

12. Minutes of the meeting on 23 July 2012
(Item 3)

RESOLVED that the minutes of the meeting held on 23 July 2012 are correctly recorded and that they be signed by the Chairman.

13. Local Flood Risk Management Strategy - pre-consultation draft
(Item 4)

(1) The Chairman explained that the original intention had been to enable the Committee Members to comment individually on the pre-consultation draft before publication in September. As the timetable had slipped, this was an excellent opportunity for the Committee as a whole to discuss it at a strategic level.

(2) Mr Tant agreed that in future colour maps would be provided in hard copy to Members of the Committee rather than the black and white version of them which Democratic Services was able to provide from its budget.

(3) Mr Tant introduced the report by saying that the Local Flood Risk Management Strategy aimed to provide a framework to manage local flood risks from surface water, groundwater and ordinary watercourses. Rivers and coastal flooding remained the responsibility of the Environment Agency.

(4) Mr Tant then set out the objectives for the Local Strategy. These were:-

(i) Improving the understanding of the risks of flooding from surface runoff, groundwater and ordinary watercourses in Kent;
(ii) Reducing the impact of flooding on people and businesses in Kent;

(iii) Ensuring that development in Kent takes account of flood risk issues and plans to effectively manage any impacts.;
(iv) Providing clear information and guidance on the role of the public sector and individuals in flood risk management in Kent and how those roles will be delivered and how authorities will work together to manage flood risk; and
(v) Ensuring that emergency plans and responses to flood incidents in Kent are effective and that communities understand the risks and their role in an emergency.

(5) Mr Tant said that the objectives, which were set out in Section 4 of the Draft Strategy informed the rest of the document, leading to the actions set out in Section 9 (Next Steps). Once published, the Strategy would be the subject of its first review three years later. Thereafter, it would be regularly reviewed on a less frequent basis.

(6) Mr Tant then informed the Committee that it was intended to publish the first draft during the week commencing 26 November 2012. The consultation period would be 10 weeks, ending in February 2013.

(7) The Chairman invited Members to comment on the pre-consultation draft at a strategic level. These comments are set out below.

(a) There should be a specific reference to highways flooding in the document. This would send out a clear message that this was an important matter that would be monitored through the recording tool described in Section 5.5.

(b) A flooding hot spot map should be produced for Kent. Reference should then be made to it if it proved impractical to include it in the Strategy.

(c) There needed to be a greater acknowledgement of the collaborative work being undertaken with the neighbouring authorities of Medway, East Sussex and Surrey.

(d) A specific reference to the effects of changes in agricultural practices as these had a palpable effect on drainage issues through greater surface water run off from fields. It was important to evidence that this issue was understood. Greater detail could be provided at a later stage.

(e) Section 2.1.3 should include a specific mention of the responsibilities of people who lived on higher ground to take measures to prevent, reduce or slow down the rate at which surface water ran off from their properties; causing flooding problems for those who lived on the lower ground.

(f) There was a possibility that national SUDS legislation would not be enacted in the next few years. This possibility should be prepared for by taking steps to ensure that they were maintained. In this context, it was important to make clear that the actual distinction between river and surface water was not always obvious and that co-operative work with the Environment Agency was essential.

(g) The Strategy needed to state that the Committee rejected a silo mentality in favour of a broad overview. In the light of climate change and related factors, there would be a whole range of overlapping risks.

(h) There should be more detail of the role of the parish councils both in respect of their role as flood managers and in monitoring. This was particularly important as much that occurred was not specifically part of the development control regime.

(i) Section 6 should include recognition that there was a potential for a conflict between the role of the planning and flood management authorities in respect of the regeneration projects that were taking place at disused wharves.

(j) Climate change and its effects was likely to create flood risks throughout the year. The reference to winter flooding in Section 2.2 should therefore be complemented by including a reference to possible heavier rains in the summer months.

(k) It would be necessary for the Committee to consider in detail what its response should be as a consultant and partner to the issues of surface water run off and the under-capacity of highways drainage systems in areas such as Ashford and Canterbury. The Strategy could make mention that this work would be taking place.

(l) An important risk from surface water run off was its ability to spread foul water.

(8) Members also commented that the draft Strategy went a long way towards addressing the problems caused by the lack of communication between the various agencies that had been identified by the County Council during the previous decade. It was also important to accept the need for more innovative working as SUDS were not the only answer in terms of drainage and heavy rain.

(9) RESOLVED that:-

(a) Mr Tant be thanked for his work in producing the draft Strategy; and

(b) the comments set out in paragraph (7) above be noted for possible incorporation into the final version of the Draft.

14. Environment Agency Restructure - Oral presentation by Tom Daubon from the Environment Agency
(Item 5)

(1) Mr Dauben from the Environment Agency gave a presentation on the Environment Agency's Flood and Coastal Risk Management Review. Owing to time constraints, he was unable to speak to the entire content of the accompanying slides which have been incorporated with the agenda papers on the County Council's website:
http://kent590w3:9070/documents/s37102/Presentation%20Slides.pdf

(2) Mr Dauben said that the review had taken place in the light of the floods in the Summer of 2007, its new coastal overview role starting in 2008, the Pitt Review of 2009, the Flood Risk regulations of 2010 and the Flood Risk Management Act.

(3) The Environment Agency's strategic role was to deliver the national strategy for managing flood risk in England and Wales (providing strategic leadership and joined-up delivery with reduced funding, and improving incident response capacity.

(4) Mr Dauben said that Phase 1 of the Review had been completed in June 2012. The teams had been restructured and become more outward facing. There was also a greater emphasis on working with others including a better response to funding. Phase 2 would enable the Environment Agency to improve processes, increase cost effectiveness and deliver efficiency savings.

(5) Mr Dauben went on to set out what the Environment Agency had achieved since Phase 1 of the Review had been completed in June 2012. As well as responding to the summer flood events it had given its views on 585 planning applications and replied to 547 Information requests.

(6) Mr Dauben then informed the Committee of the Environment Agency's Indicative Capital Allocation for the next two financial years. The figures were £25 million in 2013/14 and £61 million in 2014/15.

(7) Mr Dauben described the new resilience partnership funding regime. The old system had consisted of a nationally prioritised list where full funding had been provided for the most prioritised schemes. The new system now only funded a small number of schemes whilst providing reduced funding for others, which also required a sourced contribution from a beneficiary of the project. The Environment Agency's role was to meet potential contributors and discuss the most effective ways of securing the project's success. Contributions did not need to be financial. They could take the form of equipment or even (as was happening at Aylesford) a disused quarry. The DEFRA priority list was determined by an algorithmic formula based on the level of risk, the number of properties at risk and cost benefit amongst other factors.

(8) Mr Dauben moved on to the Environment Agency's overall priorities for the next year. These could be summed up as taking a leadership role in flood risk, helping to link the various flood risk management strategies together and ensuring that its statutory obligations were met.

(9) Mr Dauben then set out the priorities in the next year for the teams in the new structure. The Flood Resilience Teams would implement an area programme for flood and coastal risk management community engagement; recruit to its incident management rotas; and develop its duty officers' skills, knowledge and tools.

(10) The Partnership and Strategic Overview Teams' priorities were to develop a strong, manageable and deliverable medium term plan for all Risk Management Authorities; support the Lead Local Flood Authorities and strategic flood partnerships; build up the evidence base; produce Local Authority briefing packs using the *Communities at Risk* data; and prioritising their planning consultations.

(11) Mr Dauben gave some examples of joint projects. The first of these was the Deal Sea Defences at a cost of approximately £6 million. This involved recharging the beach through the importation of rock and shingle and the creation of a wave wall. This project would protect some 1,500 homes and 150 commercial properties.

(12) The Tonbridge Town Lock Wall was a £1 million scheme (mainly funded by external contributors) which would assist regeneration and protect some 100 properties by reconstructing the old flood wall.

(13) The North Kent Coast Modelling scheme had cost £110,000 over a two year period and was due for completion in December 2012. It would improve understanding of flood risk between the Dartford Creek Barrier and Margate. Further modelling was taking place on the rest of the Kent and part of the East Sussex coastline.

(14) The Environment Agency was also at the planning stage with its application to re-open Dungeness Borrow Pit, which had been closed for 70 years. This was a joint application with EDF which aimed to reinforce local sea defences. Extensive work had been undertaken to meet local people's concerns and to make the proposed operation more sustainable.

(15) Mr Dauben concluded his presentation by confirming that the Environment Agency's emergency response role was unaffected by the review.

(16) Mr Dauben replied to a question from Mr Hills on the resilience partnership funding scheme by saying that information on the new regime would be disseminated through the Borough/District and Parish Councils.

(17) Mr Dauben replied to a question from Mr Muckle by saying that the purpose of the North Kent Modelling scheme was to consider different scenarios such as a 1 in 100 year event or a 1 in 200 year coastal inundation. This modelling had only been concerned with risk (rather than cost).

(18) Mr Cooke asked in respect of the Royal Military Canal whether its maintenance programme might become a capital project. Mr Dauben replied that the Environment Agency was trying to use the Internal Drainage Board's precept as a funding source whist undertaking smarter maintenance.

(19) RESOLVED that Mr Dauben be thanked for his presentation and that the report be noted.

15. Kent Flood Update
(Item 6)

(1) Mr Tant introduced the report by saying that the Environment Agency had recently reported an increased flood risk for autumn and winter 2012/13 due to the unusually wet summer. Whilst this did not necessarily mean that actual flooding would take place, the saturation levels were a matter of concern. The Environment Agency had not issued a specific flood warning at this stage. There had been flooding incidents in West Sussex and other parts of the UK but Kent had been fortunate up to the meeting date.

(2) Mr Harwood said that KCC Emergency Planning had responded to 37 Environment Agency Flood Alerts up to this point in 2012. All of these had occurred between April and September.

(3) RESOLVED that the report be noted.

16. Dates of meetings in 2013
(Item 7)

(1) The Chairman informed the Committee that he would not be seeking re-election to the County Council in May 2013 and that the next meeting in March would therefore be his last.

(2) The Committee noted that the date for the meeting in March 2013 was different from that set out in the agenda.
]
(3) RESOLVED that the following meeting dates be agreed:-

Tuesday, 12 March 2013 (at 2.30 pm);
Monday, 22 July 2013 (at 2.00 pm);
Monday, 18 November 2013 (at 2.00 pm).

From: Max Tant, Flood Risk Manager

To: Flood Risk Management Committee

Subject: Local Flood Risk Management and the Local Strategy

Classification: **Unrestricted**

Summary:

Kent has a significant risk of flooding from a variety of sources. There are a number of risk management authorities in Kent with powers and duties for different types of flooding.

The Flood and Water Management Act 2010 makes KCC a Lead Local Flood Authorities and gives us a role to provide strategic overview of local flood risk (flooding from surface water, groundwater and ordinary watercourses). As LLFA, KCC has prepared a Local Strategy which sets out how local flooding will be managed.

Recommendation:

That the committee note the paper.

1. Introduction

The County of Kent is at risk from all forms of flooding:

- River flooding
- Coastal flooding
- Sewer flooding
- Ordinary watercourse[1] flooding
- Surface water flooding and
- Groundwater flooding

There are a number of different bodies with powers and duties to manage these forms of flooding. Kent County Council (KCC) is one of these authorities.

KCC's flood risk management role comes from two acts. From the Highways Act 1980, this gives as the county responsibility for managing the roads in the county including providing drainage for them. And from the Flood and Water Management Act 2010, this makes KCC the Lead Local Flood Authority (LLFA) for Kent, with a role to provide strategic oversight for local flooding, which is flooding from surface water, ordinary watercourses and groundwater.

2. Flood risk management authorities

The Flood and Water management Act 2010 identifies a number of bodies as risk management authorities, with powers and duties that affect flood risk. Aside from KCC, there are a number of risk management authorities in Kent, these are:

[1] Ordinary watercourses are all watercourses that are not main rivers, which are rivers managed by the Environment Agency

The Environment Agency – they have a national strategic overview role for all flood risk in England, which includes:

- Providing a National Strategy for all forms of flood risk management;
- Overseeing the distribution of grant funds for flood defence works; and
- Reporting on the progress and delivery of flood risk management in England.

The Environment Agency also has a local role to manage the flood risks from main rivers and the sea.

Internal Drainage Boards (IDBs) – they manage areas with special drainage need, usually flat poorly draining areas. They have powers to manage the ordinary watercourses in these areas. There are six IDBs in Kent, the East and West of Gravesend IDBs managed by the EA, the Upper and Lower Medway IDBs, the River Stour IDB and the Romney Marshes Area IDB.

Sewerage Undertakers – they manage the sewer network in Kent. There are two sewerage undertakers in Kent, Thames Water and Southern Water.

Coastal Districts – district authorities on the coast have powers to manage coastal erosion risk, which is closely related to coastal flooding.

The Highways Agency – they are responsible for the national strategy road network and its drainage.

Many other authorities have powers and duties that impact on flood risk management, but are not recognised as risk management authorities, for example parish councils.

3. Flood Risk in Kent

Kent is at significant risk of flooding. Approximately 70,000 properties are estimated to be at risk from coastal and river (from main rivers) flooding, according to mapping undertaken by the Environment Agency. The principle areas of flood risk are the Medway and Swale coastline and the Romney marshes, from coastal flooding, and the Rivers Medway and Stour valleys from main rivers.

Plans for managing these forms of flooding are known as Catchment Flood Management Plans, for river flooding, and Shoreline Management Plans, for coastal flooding. These plans are written by the Environment Agency.

Approximately 76,000 properties are estimated to be at risk from surface water flooding in Kent. This estimate comes from the Preliminary Flood Risk Assessment that KCC has undertaken as one of our duties as LLFA. This assessment used national surface water mapping, prepared by the Environment Agency on behalf of Defra, to identify the risk from surface water flooding for each LLFA. Kent has been identified as the most at risk LLFA, with at risk of surface water flooding.

There is no data with which to estimate the risk from ordinary watercourses or groundwater flooding accurately.

KCC has since undertaken further studies to understand where the risks of local flooding are in Kent. These studies include surface water, groundwater and ordinary watercourse flooding, but they are not quantitative, they only provide an indication of risk. These studies have shown that the surface water mapping may have overestimated the risks in some areas and underestimated it in others.

Areas with significant local flood risk are Dover, Deal, Folkestone, Paddock Wood and the Isle of Sheppey. Other areas where we are further investigating the local flood risks are Dartford, Margate, Ramsgate, the Upper Medway Valley and Whitstable.

4. Lead Local Flood Authority

The new role of the Lead Local Flood Authority gives KCC a strategic overview role for local flooding. As Lead Local Flood Authority, KCC has flood risk management powers and duties, which include:

- Providing a Local Strategy for managing local flood risk;
- A duty to investigate flooding;
- Powers to regulate ordinary watercourses;
- A duty to maintain a register of structures and features, and
- A role to promote sustainable drainage.

To help us manage the new burden of LLFA, Defra provides funds to each LLFA. KCC uses these funds to deliver these powers and duties.

5. The Local Strategy

The Local Flood Risk Management Strategy (the Local Strategy) is a requirement of the Flood and Water Management Act 2010 (the Act) for Kent County Council. It is part of our new role as Lead Local Flood Authority (LLFA) to oversee local flooding, which is flooding from surface water, ordinary watercourses and groundwater. This section gives and overview of the local strategy. The local strategy can be found here:

http://www.kent.gov.uk/local_flood_strategy

5.1 Requirements of the Local Strategy

The Act sets out the minimum that a local strategy must contain and, in accordance with this, the Kent Local Flood Risk Management Strategy details:

- The risk management authorities in the relevant area.
- The flood and coastal erosion risk management functions that may be exercised by those authorities in relation to the area.
- The objectives for managing local flood risk and the measures proposed to achieve those objectives.
- How and when the measures are expected to be implemented.
- The costs and benefits of those measures, and how they are to be paid for.
- The assessment of local flood risk for the purpose of the strategy.
- How and when the strategy is to be reviewed.
- How the strategy contributes to the achievement of wider environmental objectives.

All risk management authorities must act consistently with the local strategy, with the exception of water companies, who must act with regard to the local strategy.

5.2 Objectives

The Local Strategy sets out the following objectives for flood risk management in Kent (see Section 4 of the Local Strategy), which all Risk Management Authorities in the county must act consistently with:

1. Improving the understanding of the risks of flooding from surface runoff, groundwater and ordinary watercourses in Kent.
2. Reducing the impact of flooding on people and businesses in Kent.
3. Ensuring that development in Kent takes account of flood risk issues and plans to effectively manage any impacts.
4. Providing clear information and guidance on the role of the public sector, private sector and individuals in flood risk management in Kent and how those roles will be delivered and how authorities will work together to manage flood risk.
5. Ensuring that emergency plans and responses to flood incidents in Kent are effective and that communities understand the risks and their role in an emergency.

The local strategy aims to coordinate the work of KCC with the Environment Agency, local authorities, water companies, internal drainage boards and other partners to better understand flood risk in the county and provide effective solutions to protect the people and economy of Kent from flooding.

5.3 Action plan

The Local Strategy includes a 12 month action plan (see section 9 of Strategy) to deliver the objectives, which is split into three parts:

1. The actions KCC will deliver countywide to meet the objectives of the Flood and Water Management Act.
2. The local actions that KCC will undertake to better understand flood risks, including Surface Water Management Plans in the areas identified as hihest rsik.
3. The actions KCC will deliver in partnership with other risk management authorities.

The action plan will be reviewed annually. The annual action plan and other measures to deliver the Local Strategy will be submitted to the EHW Cabinet Committee, as requested at their meeting on 23 April 2013.

6. Conclusions

Kent has a significant risk of flooding from a variety of sources. There are a number of risk management authorities in Kent with powers and duties for different types of flooding.

The Flood and Water Management Act 2010 makes KCC a Lead Local Flood Authorities and gives us a role to provide strategic overview of local flood risk. As LLFA, KCC has prepared a Local Strategy which sets out how local flooding will be managed.

7. Recommendation

That the committee note the paper.

8. Background Documents

The Flood and Water Management Act:
http://www.legislation.gov.uk/ukpga/2010/29/pdfs/ukpga_20100029_en.pdf

National Strategy for Flooding and Coastal Erosion Risk Management, Environment Agency: www.environment-agency.gov.uk/research/policy/130073.aspx

Local Flood Risk Management Strategy for Kent; KCC, 2013
http://www.kent.gov.uk/local_flood_strategy

Preliminary Flood Risk Assessment for Kent, KCC, 2011
http://www.kent.gov.uk/environment_and_planning/flood_risk_management/how_we_manage_flood_risk/preliminary_flood_risk.aspx

Contact details

Report Author

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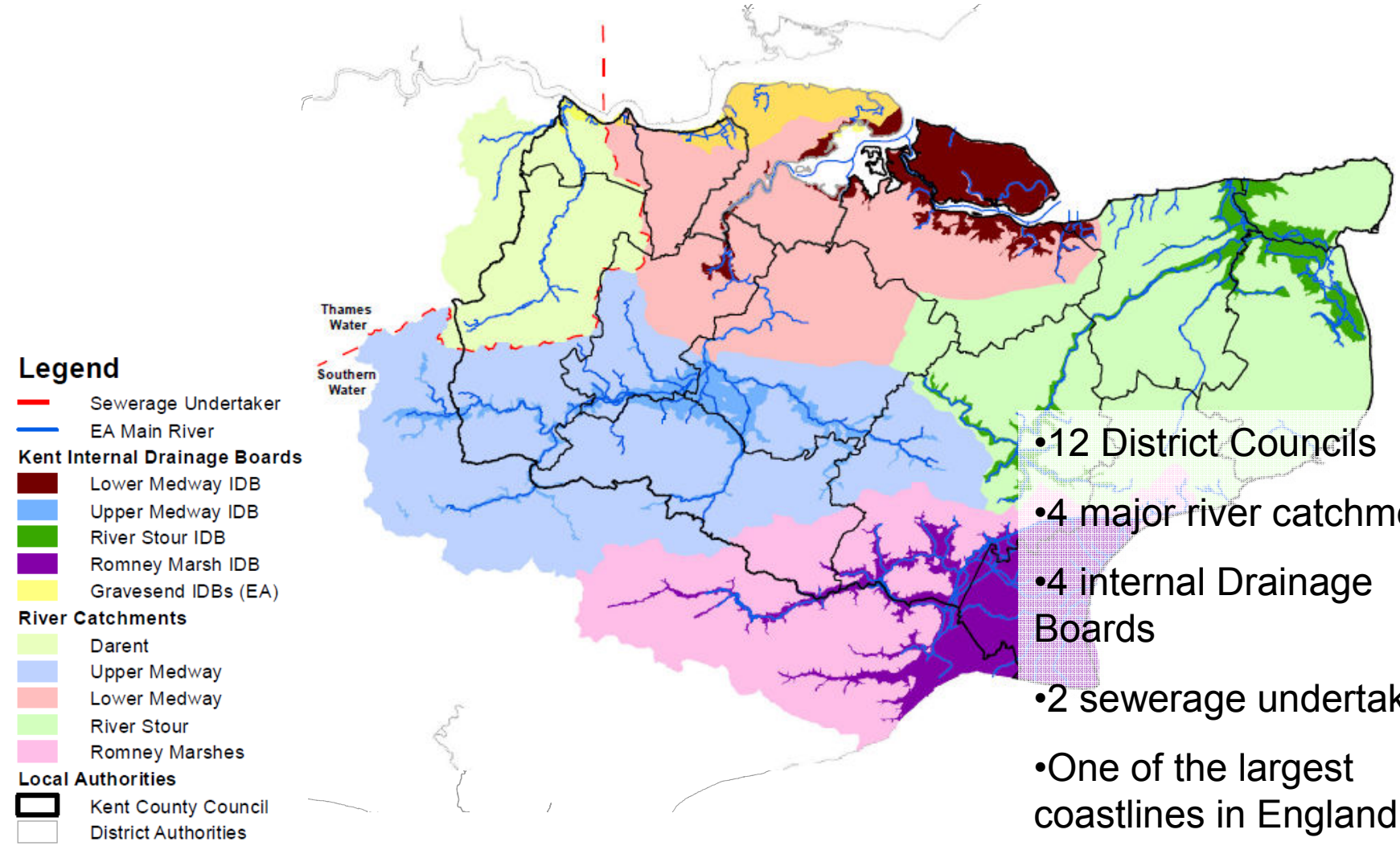
Overview of Flood Risk Management in Kent

Max Tant

Flood Risk Manager

Kent County Council

Flood Risk Management in Kent



- 12 District Councils
- 4 major river catchments
- 4 internal Drainage Boards
- 2 sewerage undertakers
- One of the largest coastlines in England

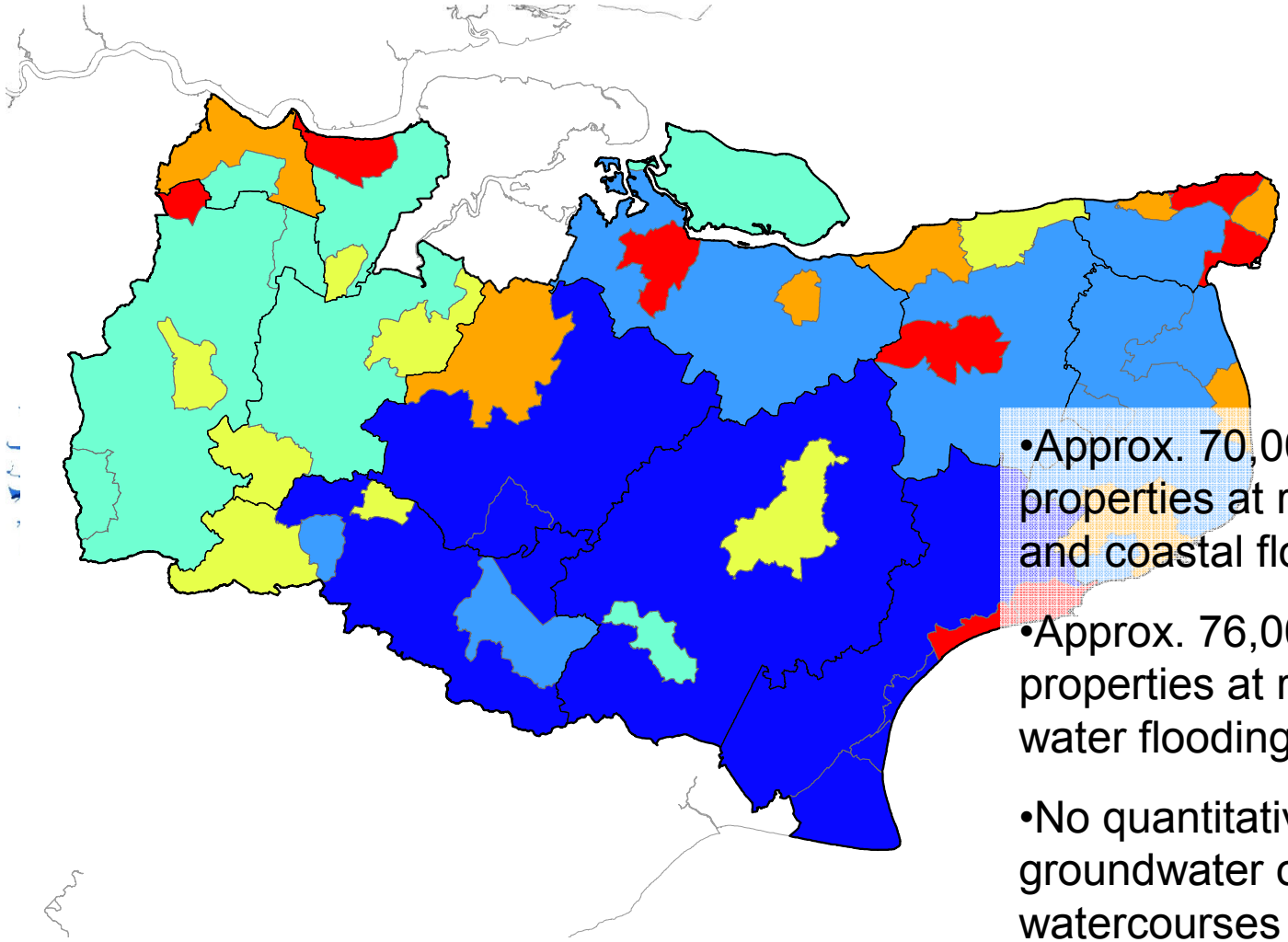
Other bodies involved in flooding

- Emergency services
- Parish and Town Councils
- Neighbouring authorities
- Standing committees
  - LGA’s Inland Flood Risk Management Group
  - LGA’s Coastal SIG
  - EFRA Committee

KCC's Role

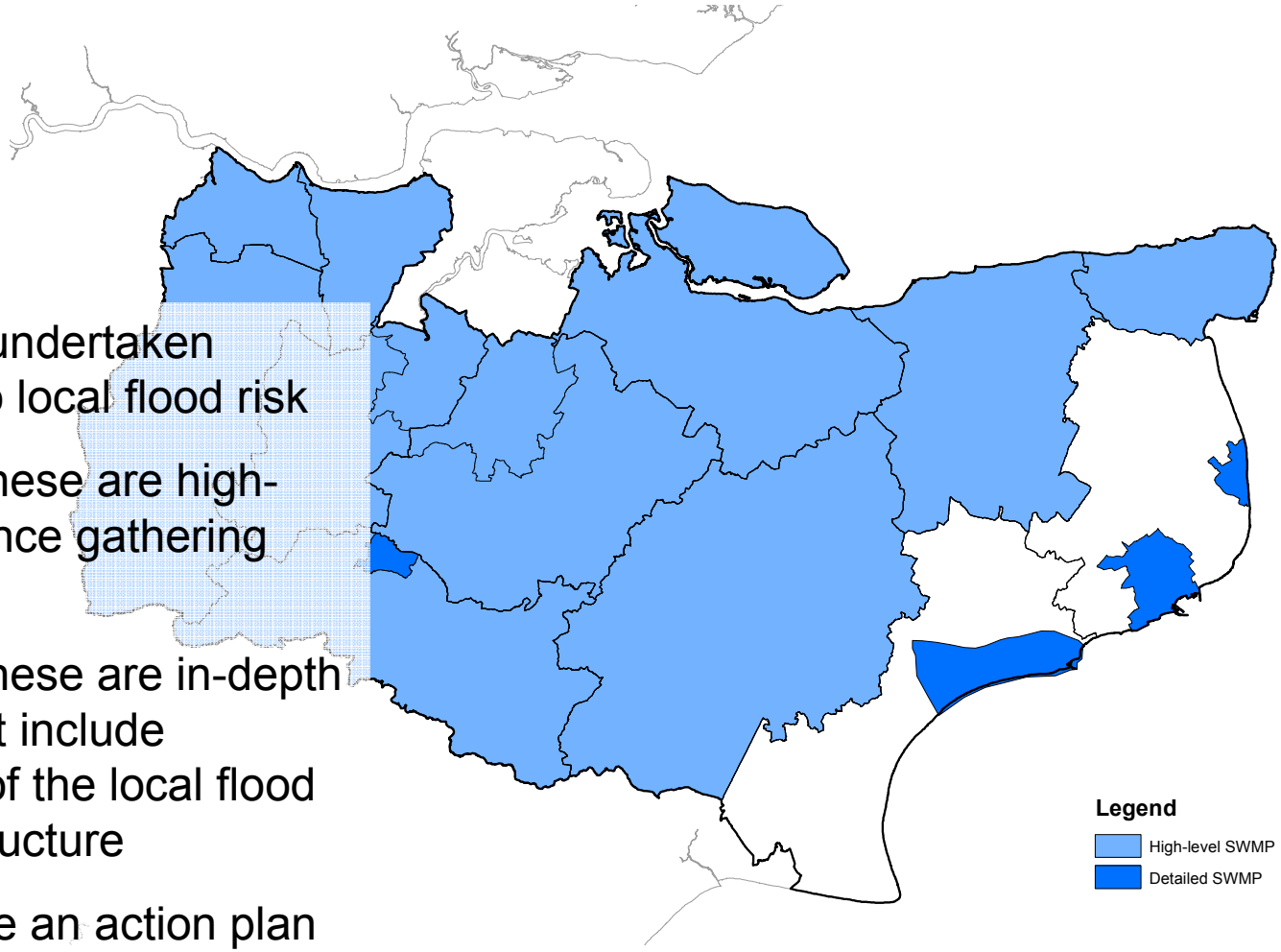
- KCC is the highway authority responsible for drainage on the roads
- KCC has a role in emergency planning and responding to flooding events
- Flood and Water Management Act 2010 gives us a new strategic overview role in flood risk management, including:
  - Duty to develop local flood risk management strategy
  - Duty to investigate
  - Duty to maintain a register
  - Ordinary watercourse enforcement powers
  - Responsibility for approval and adoption of SUDS when commenced

Flood Risk in Kent



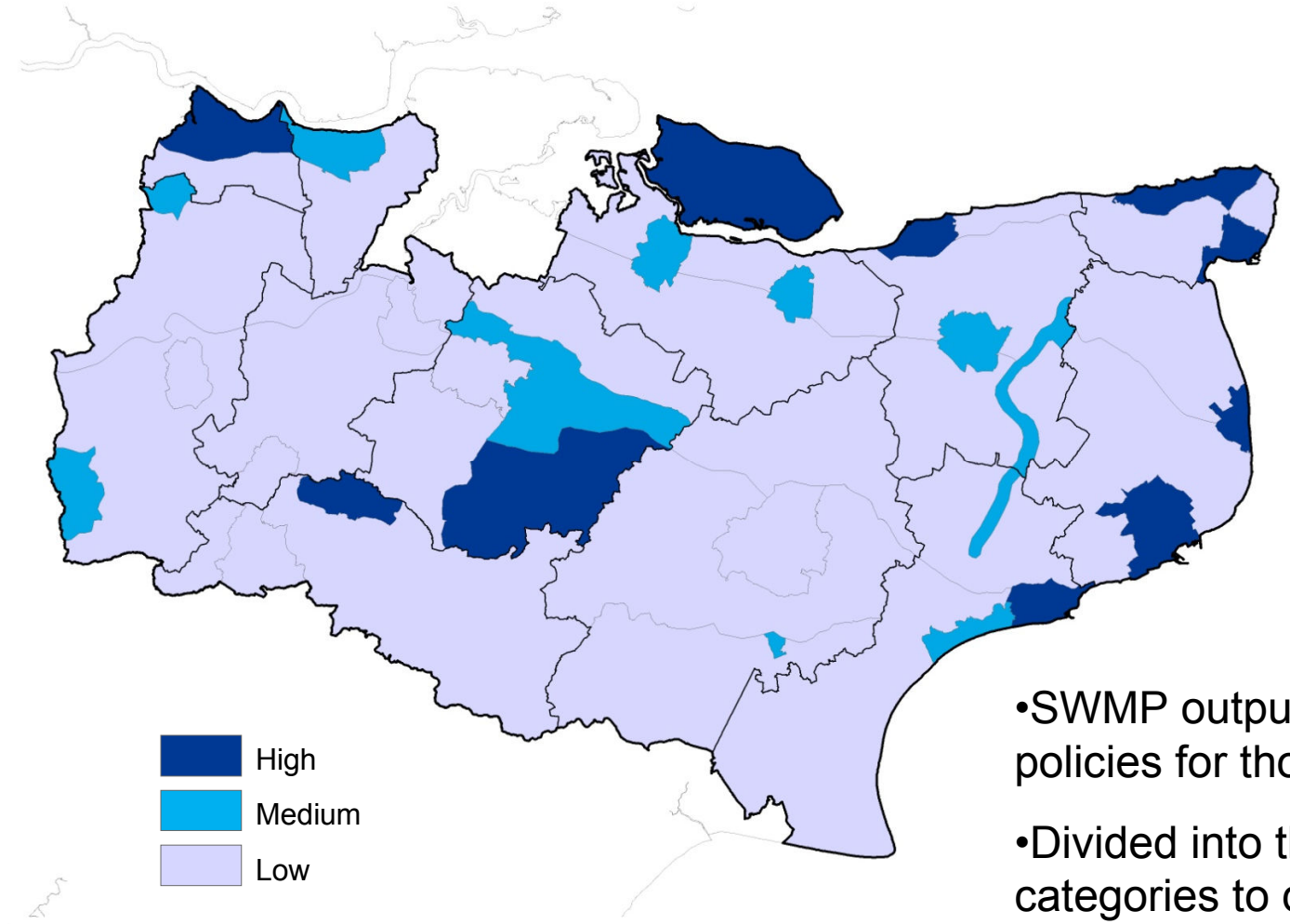
- Approx. 70,000 properties at risk of fluvial and coastal flooding
- Approx. 76,000 properties at risk f surface water flooding
- No quantitative data on groundwater or ordinary watercourses

Surface Water Management Plans



- KCC has undertaken studies into local flood risk
- Some of these are high-level evidence gathering studies
- Some of these are in-depth studies that include modelling of the local flood risk infrastructure
- All produce an action plan for managing the issues identified

Local flood risk areas



- SWMP outputs give policies for those areas
- Divided into three risk categories to denote need for further investigation

Local Strategy

- KCC is required by the Flood and Water Management Act to develop, maintain, apply and monitor a strategy for local flood risk management
- Objectives:
  1. Improving the understanding of the risks of flooding from local flooding.
  2. Reducing the impact of flooding.
  3. Ensuring that development takes account of flood risk.
  4. Providing clear information and guidance on the role of the risk management authorities. And
  5. Ensuring that emergency plans and responses to flood incidents are effective.
- The Local Strategy includes an action plan for achieving these objectives – this includes

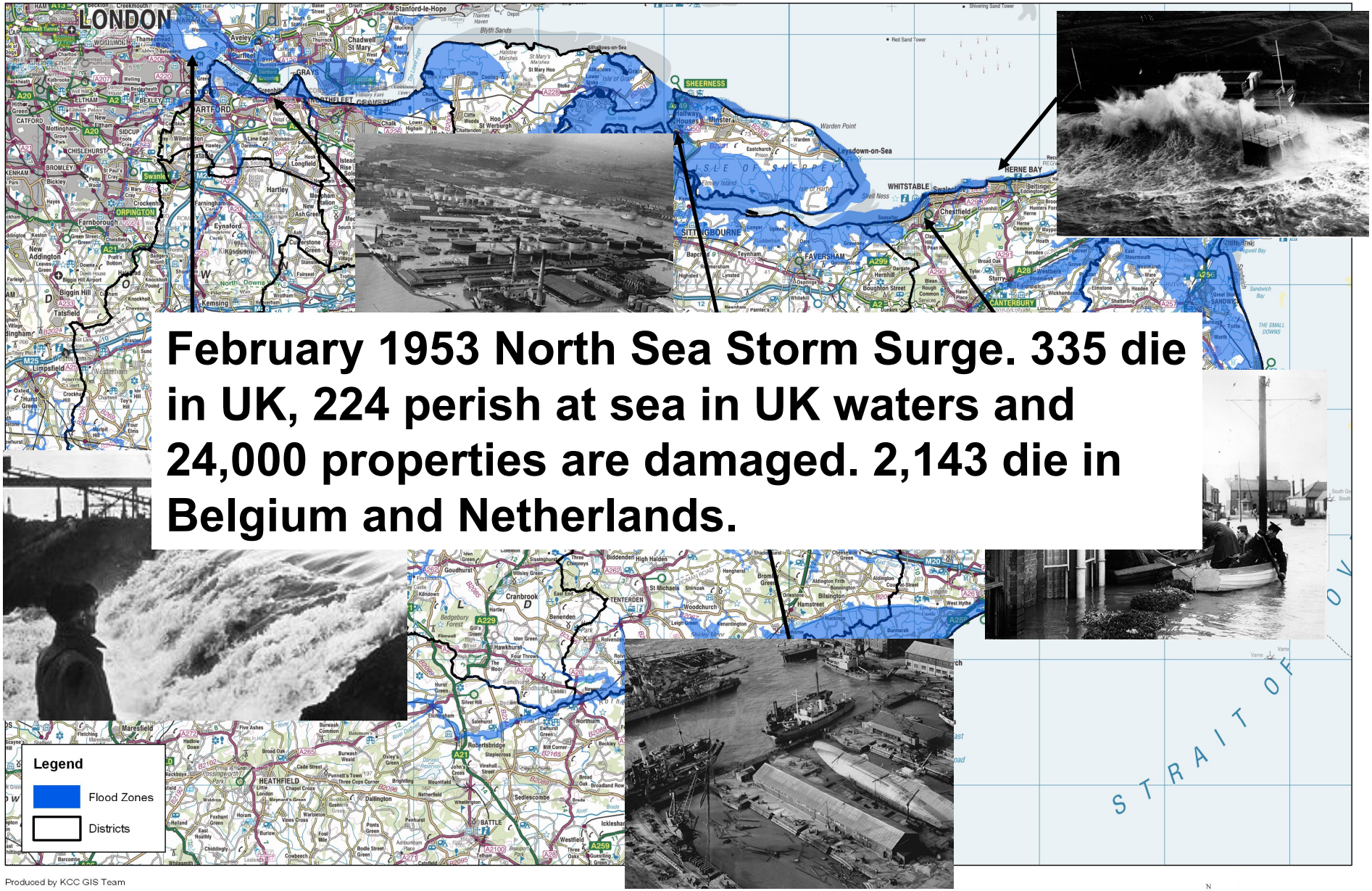
SuDS

- Sustainable drainage systems (SuDS) mimic natural drainage processes to manage runoff on new developments
- They help to:
  - Prevent increased flood risk by reducing the volume and flow of water
  - Improve water quality but removing sediments and pollutants
- KCC may become responsible for approving SuDS for new developments if Defra commence Schedule 3 of the Flood and Water Management Act 2010

Questions?

Overview of Flood Risk in Kent and Current Issues

Tony Harwood
Senior Emergency Planner
Kent County Council



February 1953 North Sea Storm Surge. 335 die in UK, 224 perish at sea in UK waters and 24,000 properties are damaged. 2,143 die in Belgium and Netherlands.

Produced by KCC GIS Team

Ref: ma1538

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Kent County Council
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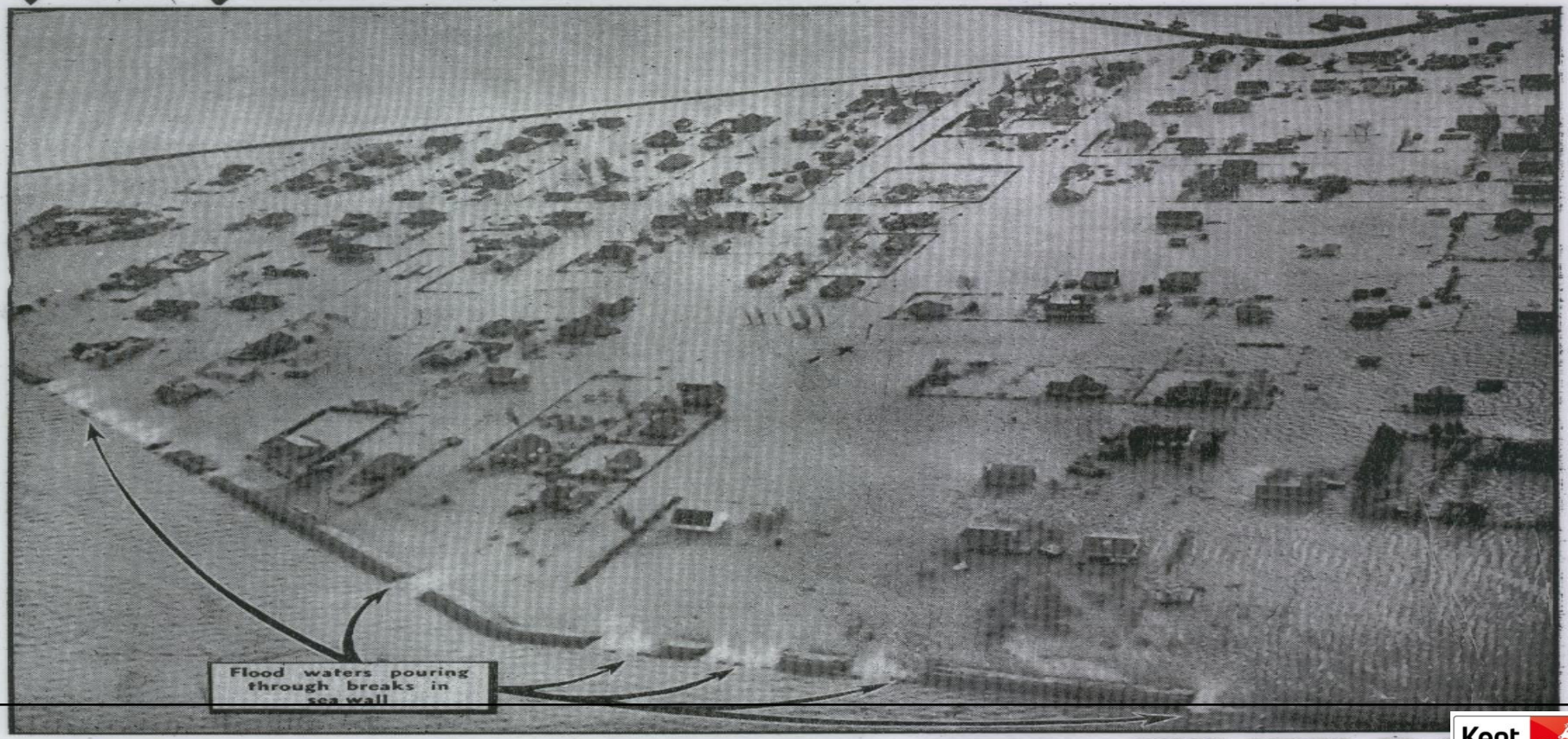
Daily Sketch and Daily Graphic, Monday, February 2, 1953

350-MILE HAVOC

This is one of the terror towns

Hundreds dead and missing in biggest sea flood disaster

DAILY SKETCH 2d
AND DAILY GRAPHIC
MONDAY, FEBRUARY 2, 1953 ★★★



CANVEY ISLAND, 150 FEARED DEAD

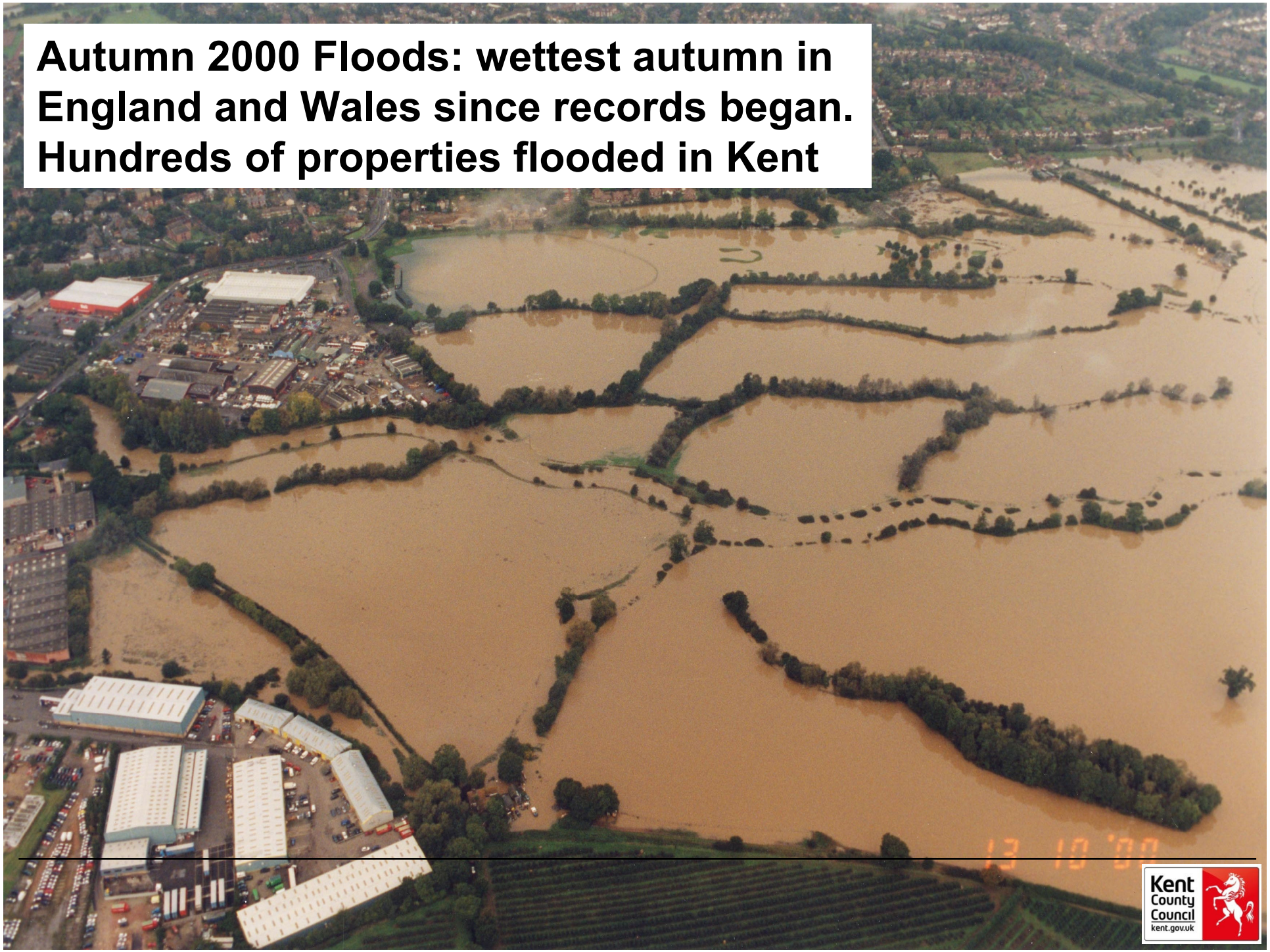
STORY BEGINS ON P
PAGES OF PICTURES

Sea Level Rise Projections for South East

- 1990 - 2025 = 4.0mm (per annum)
- 2025 - 2055 = 8.5mm
- 2055 - 2085 = 12.0mm
- 2085 - 2115 = 15.0mm
- By 2115 the cumulative rise = 1205mm (1.2m)

August 1996 Folkestone Floods: intense storm overwhelms heavily modified Pent Stream - a “rapid response catchment”

Autumn 2000 Floods: wettest autumn in England and Wales since records began. Hundreds of properties flooded in Kent



February 2013

Groundwater Flooding: the Nailbourne / South Barham Road, Barham, Kent

Local Flood Planning In Kent

- Local Multi-agency Flood Plans, with validation via extensive programme of exercise and training events
- Pan Kent Multi-agency Flood Plan
- Multi-agency Rapid Response Catchment Plans (based on District and Medway boundaries)
- Reservoir Inundation Plan

Local Flood Planning In Kent

- Local Multi-agency Flood Plans (common template)
- PART 1 GENERIC TRIGGERS, ACTIONS AND INFORMATION

- Executive Summary
- Introductory Section
- Related and Interdependent Plans
- The Risk of Flooding
- Flooding Sources
- Plan Activation
- Common Triggers and Thresholds
- Actions, Roles and Responsibilities
- Multi-Agency Flood Risk Matrix

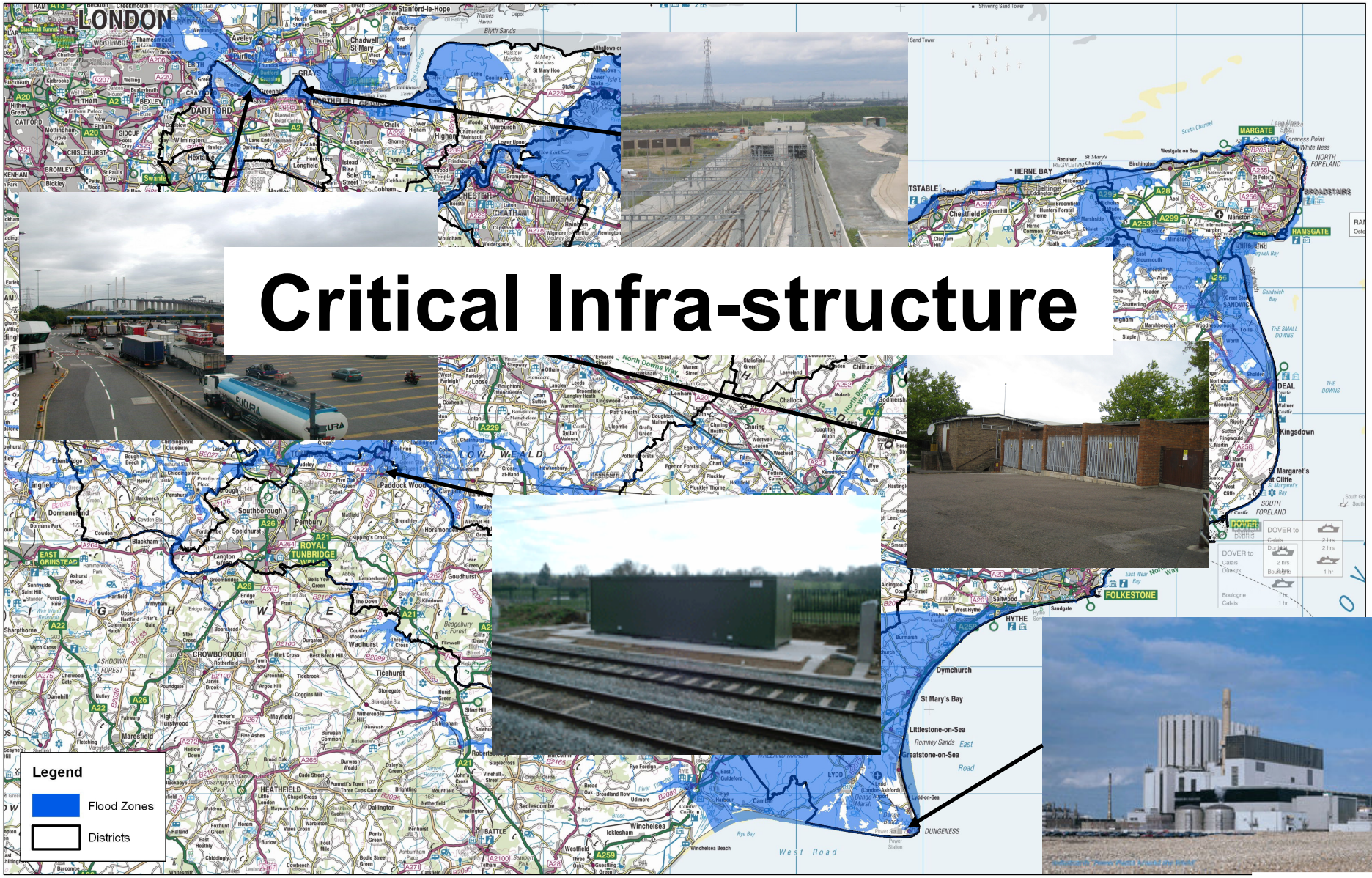
PART 1 (continued)

- Operational Response Activities
- Communication
- Flood Warnings
- Door Knocking
- Vulnerable People
- Critical Infrastructure
- Evacuation and Shelter
- Recovery
- Training and Exercising
- Appendices

PART 2 AREA SPECIFIC TRIGGERS, ACTIONS AND INFORMATION

- Area Specific Flood Plans
- Door Knocking Plan

Critical Infra-structure



Produced by KCC GIS Team

Ref: ma1538

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KCC Emergency Planning Duty Officer
01622 221 321 (24 hrs)

Coastal Communities 2150

Carolyn McKenzie
Sustainability and Climate Change Manager

Kent County Council
kent.gov.uk

What is CC2150?

A project helping **communities** develop their **own** local visions and action plans to **decrease their vulnerability** and **increase resilience** to climate and coastal **change**.

Background:

INTERREG IVA – 2 Seas programme (part-financed by ERDF)

Runs from January 2011 – March 2014

The Partners:

Hampshire County Council

Province West-Vlaanderen Door mensen gedreven

DE KUST

ALTERRA WAGENINGEN UR

Agency for Maritime and Coastal Services

COASTAL DIVISION

Environment Agency

Kent County Council kent.gov.uk

Why 2150…Here and Now?

Some impacts of climate and coastal change are already being felt.

By developing plans and actions now, we can reduce the risks and maximise opportunities.

Why Kent?

Risks

Loss of Biodiversity

Risk to Built Infrastructure

Risk to Food Security

Increased Frequency of Flooding

Health Complications

Increased Rates of Coastal Erosion

Shrinking of Beaches

Loss of Landscape Value

Opportunities

Increased Tourism

Increased Regeneration Potential

Agriculture and Biodiversity Diversification

Renewable Energy Resources

Skills Development

Economic Development

Community Building

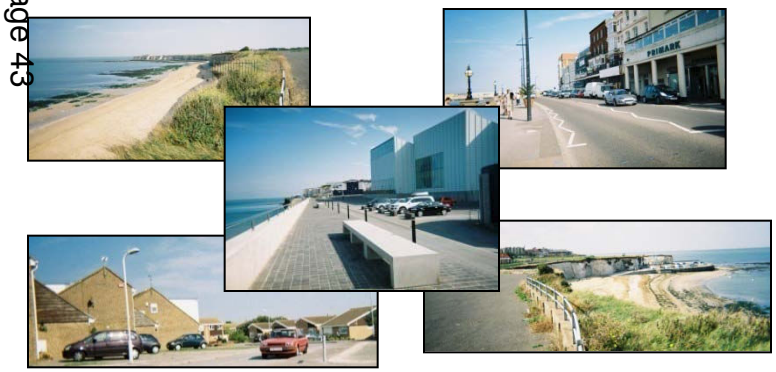
On-going Funding Potential

Why Kent? The Evidence Base

- **Background Data**

- Joseph Rowntree reports
- DEFRA reports on climate change effects
- NHS and WHO reports on health vulnerabilities
- EA Maps reports on coastal change
- UKCIP Reports

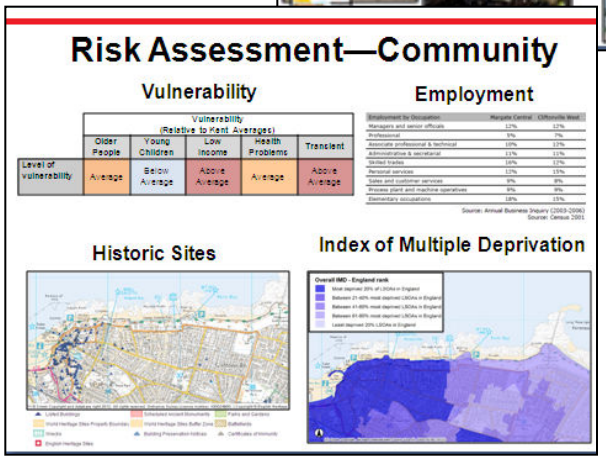
Site Visits



Stakeholder Data

Local Data

Climate Change Effect	Projected Changes							
	2050s				2080s			
	Likely		*Highly Unlikely*		*Likely*		*Highly Unlikely*	
	M	H	M	H	M	H	M	H
Change in Sea Level (m)	.2	.3	.4	.5	.6	.8	1	1.2
Change in Annual Temperature (°C)	2.46	2.74	3.57	3.93	3.44	4.28	4.99	6.09
Change in Warmest Day Summer (°C)	1.91	2.26	5.95	6.91	2.49	3.29	7.97	9.88
Change in Wettest Winter Day (%)	11.63	10.27						
Change in Summer Precipitation (%)	-18.41	-18.84						
Change in Winter Precipitation (%)	13.28	13.60						



CC2150 Priority Communities

What will CC2150 Deliver

Build knowledge

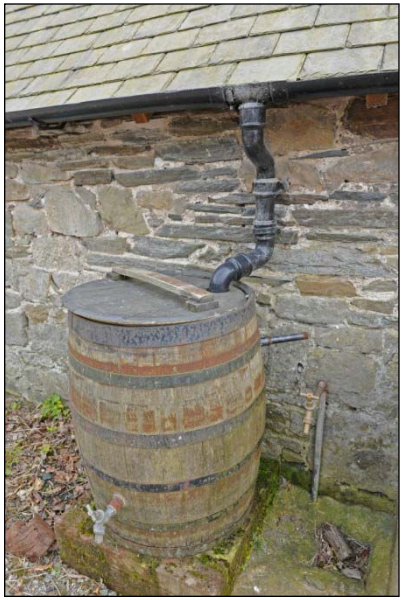
Widen Partnership Working

Develop Visions

Develop Plans

Community Launch

Practical Actions



Next Steps

- Attend and Host Events
- Gather Local Feedback
- Develop Vision and Action Plans

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From: Max Tant, Flood Risk Manager

To: Flood Risk Management Committee

Subject: Future Committee Topics

Classification: **Unrestricted**

The following is a list of suggested topic the committee could choose for discussion at future committees:

- Sustainable drainage systems / SuDS
- Highway drainage and flooding
- The role of the Environment Agency*
- The role of Internal Drainage Boards*
- The role of Sewerage Undertakers*
- Coastal erosion risk and management*
- Flooding and insurance*
- Surface water management plans
- Flood defence funding
- Flood defence installation**
- Defra East Coast Flood agenda*

*these topics will require a speaker to be invited to the committee and will depend on their availability.

**this topic will require a site visit, which will need to be arranged with the appropriate authority and depend on staff availability and access.

Contact details

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