

## Local Flood Risk Management Strategy : Consultation Responses

West Sussex County Council consulted on the Local Flood Risk Management Strategy from Monday 17 June 2013 - Monday 9 September 2013. Over that period responses from over 68 groups and individuals, totalling over 250 individual comments, were received. These comments were from individuals, town and parish councils, and other local organisations. This document provides a record of all responses received on the consultation, and the action taken following consultation. The majority of our responses to comments can be categorised into one of the following:

- clarifying where there has been a misunderstanding in the Strategy documents;
- signposting responses to where existing information is located which addresses a query or comment;
- identifying specific local issues which need to be investigated outside of the Strategy, or;
- amending the Strategy documents and confirm what change has been made.

Please note that the consultation responses have been published in the form they were submitted. However, to comply with the Data Protection Act, personal information including names and property addresses has been removed, and responders identified by R1, R2 etc with individual comments listed as C1, C2 etc

For reference the consultation asked respondents a series of questions, and then allowed free text beneath the question to qualify the answer or provide additional comment. For completeness the consultation questions are provided below:

- Is the purpose of the LFRMS clear?
- Do you agree or disagree with the work programme listed?
- Have any significant flood risk areas not been considered?
- Is the LFRMS easy or difficult to understand?
- Do you agree with the structure?
- Is there anything missing?
- Overall, do you think the LFRMS will be successful in reducing flood risk?

**Summary:** The key feedback topics from the consultation were:

- The prioritisation of projects, and, the order of works;
  - The work programme has been improved to show more clearly what has funding and what is not yet funded. A 'top ten' priorities for West Sussex has also been agreed between the risk management authorities, showing where work will be considered first. This does not guarantee work will go ahead in these locations, but it will mean investigation and identifying options will be considered before other areas. The work programme is a living document and will be published separately to the final strategy.
- Specific comments about locations of recent and historic flooding;
  - Feedback has been received on the detail of the surface water flood map and the data shown on the wet spot maps. This information has been passed to the local drainage engineers for consideration in light of the new surface water flooding maps, to be released by the Environment Agency in December 2013. Where appropriate changes to LFRMSD have been made.
- Concern about the funding gap of partnership projects;
  - Information has been added in Chapter 3 and appendix E on the funding arrangements for projects, and also in the executive summary. This information has been strengthened in the LFRMS to communicate more clearly that many future projects will need contributions from different parties in order to be implemented.
- Concern about the planning process and location and design of new houses;
  - The main concern the public have about new development is the perceived increased flood risk to the existing housing stock. The planning and development section of the report has been added to significantly to reflect the current checks that are undertaken, and, the current 'no increased risk' policy that the planning departments across West Sussex operate.
- Concern about riparian owner responsibilities;
  - More information has been added throughout the report on the importance of riparian ownership, including Chapter 2, and the executive summary. The readers are more clearly directly to supplementary information.
- Information about how the public can get involved;
  - More information has been added in Chapter 2 about how the public can get involved via West Sussex County Council, District and Borough Councils, local groups and the Parish and Town Councils.

**PUBLIC FACING VERSION : REFERENCES TO INDIVIDUAL NAMES OR ADDRESSES TO COMPILE WITH DATA PROTECTION**

Comment Ref.	Responder Ref.	Consultation suggestion/comment	Comment relates to:	Change made to LFRMS?	Reason	Response
C1	R1	It is interesting to see that West Wittering has 55 houses at risk as opposed to East Wittering's 145. West Wittering has just had £8M spent on sea defence. Will East Wittering get work done to the sum of £24M ? Probably not.	Specific area	N	Local Issue	West Wittering improvements were recommended by the North Solent Shoreline Management Plan. A more local and focused 'Pagham to East Head Strategy' followed and identified options at West Wittering. Significant local contributions to the overall cost were raised (£650,000), helping the project achieve good cost benefit. East Wittering currently has a project that has approval, for investigation and potential improvement works of pinch points of surface and fluvial water. This project is listed in the work programme and is estimated to cost around £1 million
C2	R2	I am not sure from the Flood Map for Chichester whether the road safety hazard to motorists and pedestrians is clearly illustrated. In particular I am concerned by flooding in the following locations: Junction of Highland Road and the Broadway; Junction of College Lane and Spitafield Lane Quarry Lane and the Bognor Road	Specific area	N	Local Issue	The Local Strategy highlights flood risk to properties and infrastructure. The maps are scaled at 1:10:000, a requirement of the metadata of the surface water flood map. The flood maps are designed to be used to this scale as they are a broad assessment of risk.
C3		And would welcome a clear expression by the Highways Authority on the remedial work being taken to alleviate flooding problems at these locations, not once in 200yrs but every time we get heavy rain.	Specific area	N	Local Issue	The Work Programme (Appendix D) lists four drainage improvements that are to be undertaken in Chichester, including Spitafield Lane. Appendix D is available on the West Sussex Flood Risk Management webpages.
C4	R3	Just one question – instead of reading all through the pages and pages of the local Flood Risk documents on the website, could you please explain how the North of Littlehampton Development will be dealing with the flood areas marked on the attached map.	Explanation required	N	Local Issue	The Planning Authorities already use flood maps. The process involves the Environment Agency who are a statutory consultee of development in the floodplain. They are used to direct development away from areas of highest risk. If no alternative is possible sufficient drainage must be proposed by the developer that will ensure the new houses are safe, and, no negative impact is created on existing dwellings.
C5	R4	I've lost the will to live! I didn't get past the introduction to the Strategy Report before I was waylaid by a sentence that wasn't a sentence. It appeared to have been edited incorrectly. It starts 'I see the document...'. I expected something like 'as an incentive for action', 'as a positive step', but, no, there was nothing.	Language	Y	Clarity/Language	The wording for the final introduction has been reviewed
C6		The work plan for Selsey has a statement about 'Improve the standard of protection to 1% annual probability'. Huh???? Annual probability of flooding I assume. So, does this mean that it will be OK for 99% of the time? This report was written by people who presumably knew what they were talking about for others who were equally knowledgeable. The Campaign for Plain English would be horrified with these documents. Just out of interest, I have A-Level English and Post-graduate qualifications in teaching English either as a Foreign language or to people with learning difficulties. I have no qualifications in flood management	Language	N	Clarity/Language	The text has been reviewed by the project team and is considered to be succinct and clear in the context of the strategy document. The first two paragraphs in Chapter 1 explain risk and the likelihood of storms and floods. The example paragraph about the Bognor event describes an event of a certain size in plain English. Explaining the likelihood of flooding has traditionally been done using annual probability and by return periods.
C7	R5	I attach a highlighted section of the Hunston.pdf showing the location of culverts which have been missed from the map. I brought culverts and ditches in this area to the attention of CDC and WSCC back in 2009 after local land owners failed to respond to my request to maintain them. Lack of maintenance to these causes twice yearly flooding of the B2145. In June and December 2012 it caused some flooding to my garden.	Specific Area	N	Local Issue	The maps are unfortunately not inclusive of all culverts that exist. The mapped infrastructure of England and Wales is improving all the time however due to the nature of development and changing record management systems, not all river obstacles will be present. Your information has been passed on to the relevant team in the Environment Agency who hold the data on this.
C8	R6	I was invited to comment on the above strategy. I looked particularly at areas of Littlehampton and Littlehampton West. In my opinion the strategy is clear and understandable. The objectives and their status will assist in understanding the progress that has been made if any. The only criticism I have is that the coloured blue lines on the Legend on the actual maps all look the same. This makes differentiation on the map unclear.	Presentation	Y	Clarity/Language	The legend of the maps has been reviewed.

C9	R7	The local council should give more serious consideration before granting planning permission for new developments on local flood plains. Those long term residents in North Bersted were not surprised to find their valuable homes flooded last year due to the drains being unable to cope from the amount of surface water created by the construction of the new homes on the Chichester Road.	Comment	N	Outside of Strategy Scope	The local planning authority consider flood risk as part of a balanced decision based on the risks and benefits of each new development. West Sussex County Council and the Environment Agency believe that the local flooding in North Bersted on the 10th and 11th of June 2012, as elsewhere in south west Sussex, was primarily due to surface water flooding resulting from an exceptional amount of rain. This rain fell in a short period of time and this overwhelmed the highways drains and local drainage ditches, which led to the flooding. To help put the scale of the rainfall into context, Environment Agency rain gauges in the area recorded the heavy rainfall event. The rainfall record at Bognor was 111mm in 28 hours. This is equivalent to twice the average monthly rainfall for June, falling in just over 1 day. It is the kind of event that would statistically be expected only once in every 200 years (a 0.5% chance of occurring in any one year).
C10	R8	In relation to flood prevention ,there are issues about antiquated sewerage systems which are prone to burst pretty regularly especially at West beach where repairs to the system in the road are cracking up ,also the relationship with groundwater / precipitation overloading the system by infiltration into the sewerage system as in the case of North Lancing. Southern Water should regularly check systems to reduce the above risks, particularly in areas at risk around the flood plain. All the above have been / are/ can be a contributory factor to the flooding issues .	Comment	N	Outside of Strategy Scope	The work programmes for sewerage systems and other drainage infrastructure include routine maintenance and emergency works. With the current resources in place a rolling programme is carried out annually. In many cases reported faults highlights the issues to the risk management authorities who can then take action.
C11	R9	From Page 21: Similarly, the riparian owners have responsibilities to maintain their stretch of watercourse. The Districts and Borough Councils undertake consenting and enforcement. This is to ensure that work on ordinary watercourses is checked, approved, and that appropriate action is taken against landowners who undertake unconsented works or fail to carry out their responsibilities. In my view this is the single most important part of the document. Enforcement of riparian duties has not been happening for far too long. In my case, 5 years has elapsed since notifying CDC of a delinquent riparian owner ... and still no enforcement action has been taken.	Comment	N	Content already included	Riparian ownership responsibility in West Sussex, particular those areas of low lying land, is especially important. The ditches together are the main drainage network and their failure (by heavy rain or by blockage) causes property flooding as seen in June 2012. The Drainage Strategy Team deals with issues together with the Districts. The process of reporting and investigation is ongoing.  The West Sussex webpages have been updated to link with District and Borough webpages, for better information on riparian ownership rights and responsibilities. Enforcement is only used as a last option, as usually communication of the problem to the landowner achieves results without costly legal proceedings. An enforcement process is in place however and is used to ensure works are completed. If there is a particular problem please call the Drainage Strategy Team at West Sussex County Council to raise a query.
C12		Page 8 Working in partnership is integral to the local flood risk strategy Partnership is all very well providing ONE of the partners takes the LEAD and divides the work up, makes sure it is done etc. From what I have seen so far, there are rather too many agencies/bodies involved in solving flooding issues, getting any ONE of them to commit to doing work is impossible - they will continually pass the buck. So, partnership, OK if it has to be done that way, but ONE agency MUST take the LEAD.	Comment	N	Noted: no action required	Each project will always have a designated lead, usually this is the organisation who has responsibility for that type of flooding or particular area. A project manager will be assigned to each project from the lead organisation. While it is increasingly common to have numerous partners in any one project, it is the job of the project manager to unite efforts and deliver progress.
C13	R10	I am the head lease-holder of Hotham Park House, in Hotham Park. Although the house and park are outside the flood area shown on the flood map, on that day, the rainfall was so intense that the Parkside flat, one of the five flats in the house, was flooded to a depth of several inches, and our garden, at the rear of the house, was also several inches deep in water. Bognor was virtually cut-off, most of the incoming roads also being flooded. More drainage must be a priority. Flooding, especially of residential property, is a huge and heart-breaking personal disaster.	Specific area	N	Local Issue	The Work Programme (Appendix D) that was included in the consultation document lists four drainage improvement works that are to be undertaken in the County, including work in the Bognor area. West Sussex County Council has funding from the Government (Chapter 3 of the Local Strategy) in order to make progress and improve drainage to affected areas. The County Council is in the process of working with communities and partners to spend this resource. We are working hard to plan for future works in the short, medium and long term.
C14		The flooding of the flat can only be attributed to the inadequacy of the drains to take away the volume of rainwater being channelled down from the house roof, and falling around the house. Short of a new mains drain, it is difficult to see what can be done, although Southern Water could be asked to see whether the drain is adequate, or was blocked. Unfortunately, these '200 year' events are becoming a lot more frequent. Owing to the high water table, and the flat and low-lying area of the park generally, surface rain-water lies around large areas of the park every winter.	Specific area	N	Local Issue	Flooding will either occur due to blockages or to volume exceeding capacity in the system. The decision to over design capacity, to cope with infrequent storms, becomes questionable as the price increases the larger the event the system is designed to deal with. The extra expenditure on the over designed capacity of one system limits the extent of drainage improvements elsewhere. In many cases property level protection measures can improve the overall level of protection available to individual properties.

C15		I am concerned that the current consultation process does not feature and make clear how a comprehensive wide ranging sequential testing process would become part of the whole process. Ultimately such a process has the power to give confidence to a sceptical public who are very concerned at the quality of planning decisions in an area that is low lying, near the sea and has experienced severe flooding on a number of occasions. The appearance of an add hock approach /site specific assessment to development when the common sentiment amongst residents is that all areas of land should be considered and measured against each other with the greatest level of detail in hand, has not inspired confidence. I suggest that if this critical work cannot demonstrate very best practice it could adversely affect the Local Plan and attract the Inspector charged with the responsibility of the LP review.	Comment	N	Outside of Strategy Scope	The planning process and sequential testing is one chapter within the local strategy, all be it an important one. The strategy does not change anything about the planning process, it continues as it did before the Flood and Water Management Act 2010. All new development by design should be directed away from areas at highest flood risk or have the required drainage infrastructure so that the new buildings are safe, and that existing housing are not compromised. These principles are embedded into the National Planning Policy Framework which covers all planning and development, including Local Plans. Each planning authority will also have a Strategic Flood Risk Assessment, SFRA, which details areas at risk of flooding and informs planning policy and decisions. The local drainage engineers will be able to answer any questions regarding specific cases.
C16	R11	I am also concerned that at this very moment in time the 3rd generation of mapping has been completed by Jeremy Benn Associates on behalf of the EA/DEFRA but it is not being made available to the public until the end of 2013 while it is given a confidence score by WSCC. At present you are promoting the dated 2nd generation mapping which will be influencing decisions by those who are none the wiser. The extent of the purple areas clearly does not demonstrate the full extent of flooding and this needs to be highlighted by always readily updating information quickly. I understand that the 3rd generation does/will allow for updates, but how quickly?	Technical	Y	Content already included	The Strategy must use the latest data available, the 2nd generation surface water map. Improvements are being to the 3rd generation map, and the data will be displayed differently, but the flood outline of the 2nd generation should not be discarded and in fact is the basis for the 3rd generation map. These updated risk areas were not available until after the consultation of the strategy took place. There will be a process for updating the maps over the immediate timescale of the strategy (likely to be 2014) to ensure that the areas at risk are adequately identified.
C17		Critically the report was proposed to have exercised the greatest level of due diligence by allowing for the highest resolution Lidar mapping, flow paths and record of buildings and existing ditch systems.	Technical	N	Outside of Strategy Scope	It was the decision of each Lead Local Flood Authority how to design their strategy and what data to use. The Local Government Association set general structure but the councils could choose the most suitable data to use. Updates to the mapping to use best available information will take place during the lifetime of the strategy.
C18		I spoke with Stewart Smith (WSCC) some months ago and explained that certain members of my local community were interested in financially supporting an independent FRA for the whole area to enable a genuine sequential testing process as required by NPPF. The report would list land sites in order of suitability for being built upon, which as you may agree is the most sensible first step in the development process. This tabled information could provide neighbourhood planning teams for example, with an easy to understand appraisal of all land so they can make sensible informed decisions as to which sites are best placed for new development. Very Important consideration would be given to the protection of existing developments, especially those that have suffered flooding already. Other constraints and considerations like an AONB status would then also be layered by the community to enable a full and balanced consideration process	Unrelated	N	Outside of Strategy Scope	Sequential testing is already used by each local authority in developing its Local Plan, and each authority will have a Strategic Flood Risk Assessment to direct this process. This approach is set out in the National Planning Policy Framework which overarches and all local planning policies. Local communities can bid for money from West Sussex County Council's Operation Watershed Scheme. A proposal needs to be submitted and each application will be assessed on merit. This money can be used to bid for flood risk assessments.
C19	R12	I am a parish councillor for Itchingfield Parish Council and have been forwarded the on line version of West Sussex County Council's Local Flood Risk documents. An updated emergency plan was submitted some 10 months ago which included the identification and categorising of potential and actual flood risks for the parish. Despite this I note that under the list of local plans the Parish of Itchingfield is not covered. Could you please let me know how this has happened and what has to be done to rectify the matter.	Specific area	N	Local Issue	The Itchingfield Parish and urban areas within it have not been classified within the priority areas at flood risk. This means that the risk is lower with the Parish when compared with other Parishes and urban areas. The risk of flooding and its impact is therefore less, meaning that investment can be prioritised in other locations where damages are most likely to occur. The updated emergency plan submitted will still be used by the WSCC Emergency and Resilience Team to ensure flood risk for the community is assessed and the risk effectively managed.
C20	R13	I wish to write to CDC councillors outlining my concern that a proposed development in Birdham on a meadow that you identify as an area susceptible to surface flooding. Currently this meadow holds the rain water as meadows do, disposing of it via transpiration and evaporation with little of it making its way into the drainage system. Even last June run of from the field was minimal. What is now planned is to channel rain water away via culverts which exit at another site you have identified close by Birdham Church.	Specific area	N	Outside of Strategy Scope	For information with regards to the planning process in relation to flood risk, the Environment Agency provide technical advice to ensure that new development complies with all relevant policy and guidance, and that any assumptions made are reasonable. The District or Borough Council are responsible for granting or refusing planning permission, taking into account the guidance given to them by the Environment Agency. The council's engineers also have a role in checking the designs and how they mitigate risk from surface water flooding.  Ultimately, however, it is the responsibility of the developer and their flood risk consultants to design a system that functions correctly, and does not increase the risk of flooding to third parties. The industry standard (also outlined in the Technical Guidance to the National Planning Policy Framework) is for surface water systems for new development to contain the 1 in 100 year storm event plus a climate change allowance, without causing flooding off site.

C21	R14	Little disappointed not to have main parishes which are affected itemized on the list. I live in Shripney which is in Bersted and had to hunt in BR/Felpham and Aldingbourne/Westergate. Would have liked to see more detail as well - so perhaps BR & Felpham including Aldwick and Bersted is too wide an area? Also, really need explanation of what 1:200 year flood event really means - it is a probability I know but what data is this based on (actual events between 1800 and 2000 perhaps or does it track back from current year, i.e. 2013 back to 1818), i.e. is it dynamic forecasting or fixed on data from a particular period of time. Unless we know this, the plan is fairly meaningless. To most people, if we flood twice a year, it cannot be a 1:200 event, so a bit more explanation of how this was reached is essential.	Technical	N	Content already included	The 'wet spots' were created at locations where approximately 10 or more properties were within a flood risk area. The Strategy has chosen a community level scale to assess flood risk, based on urban areas. Parishes were deemed too large an area to give sufficient detail. Chapter 1, the first two paragraphs, explain risk and the likelihood of storms and floods occurring. The text has been reviewed by a project team. Scientific principles sit behind the analysis that are fact and cannot be altered, however the paragraph about the Bognor event goes a long way to describing an event of a certain size in plain English. Explaining the likelihood of flooding has traditionally been done using annual probability and by return periods. Unfortunately, a 1 in 200 year event can occur twice in one year, although very rarely, as the measurement is a probability
C22	R15	We at West Beach wish to draw your attention to several omissions from your strategic plan extract below . 1 There is no mention of Groundwater flooding in the area , there is a 75% risk of groundwater flooding over the north and Southern half of the flood plain according to EA research .	Technical	N	Content already included	Ground water is assessed within the report together with the surface water assessment, as the risk areas overlap closely. I will review the ground water text along with the locations of known flooding. Lancing has been identified as an area for a surface water management plan that will consider ground water issues. This project is listed in the work programme. The plan will carry out optioneering for project solutions.
C23		2 The fluvial protection work proposed for the River Adur will not reduce the risks of flooding in the north or south of the Lancing flood plain	Specific area	N	Outside of Strategy Scope	-
C24		3 The Work to the North has only just been undertaken because of the severe flooding at Xmas . No work has been undertaken on the South of the railway line flood plain even though severe flooding was also experienced at West Beach	Specific area	N	Local Issue	-
C25		4 A great deal of the flood plain is unfortunately owned by developers who have Riparian Law duties to ensure the watercourses are cleared including silt traps on the West Beach roads which are owned by Landstone Ltd who are responsible under Riparian Law to clear them . The area has been neglected by the owners and was a contributory cause of the severe flooding at West Beach forcing flood water up through the roads ( evidence can be provided of the severity described )	Specific area	N	Local Issue	-
C26		5 We therefore urge you to mention the Importance of upholding Riparian Law responsibilities to landowners/ developers and the enforcement processes that WSCC now are responsible for .	Comment	Y	Clarity/Language	The importance of riparian ownership will be made more prominent in the document, and reference page 45 of the document that describes this. A link and reference will be made to the Environment Agency literature on the subject.  The West Sussex webpages have been updated to link with District and Borough webpages, for better information on riparian ownership rights and responsibilities.
C27		6 recently land on the flood plain was sold to Brighton and Hove Albion Football club and planning permission was granted to build 15 plus football pitches 5 of which are all weather pitches . BHAFC refuse to guarantee there will be no flood risk to a 3 rd party due to their development . We urge you to include the publication of no 3 rd party flood risk to all residents surrounding a development .	Specific area	N	Content already included	The planning process section on page 54 of the local strategy to reflects rules in place to protect third parties. For information with regards to the planning process in relation to flood risk, the Environment Agency provide technical advice to ensure that new development complies with all relevant policy and guidance, and that any assumptions made are reasonable. The District or Borough Council are responsible for granting or refusing planning permission, taking into account the guidance given to them by the Environment Agency. The council's engineers also have a role in checking the designs.  Ultimately, however, it is the responsibility of the developer and their flood risk consultants to design a system that functions correctly, and does not increase the risk of flooding to third parties. The industry standard (also outlined in the Technical Guidance to the National Planning Policy Framework) is for surface water systems for new development to contain the 1 in 100 year storm event plus a climate change allowance, without causing flooding off site.  The BHAFC development will not discharge water into the existing drainage network, a separate channel will take the discharge. This is part of the design. Currently the exceedance route designs are being scrutinised to ensure that they are robust and do not impact existing development. This process is usual under planning process. The local drainage engineer can provide more information.
C28		7 the Golf course allegedly being built on the north flood plain has dumped thousands of tons of land waste on to the flood plain reducing the absorption capacity and increasing runoff. We urge to include robust monitoring of owners in relation to the material used for raising ground levels .	Specific area	N	Local Issue	Alterations to land levels require planning permission from the planning authority to ensure no negative impacts are experienced elsewhere.
C29		8 we urge you to impress upon the public that building dams or throwing rubbish into local watercourse has a devastating affect in relation to flood risk to surrounding areas .	Comment	Y	Content already included	Outside of routine maintenance programmes risk management authorities rely on calls from the public alerting those responsible to fly tipping instances or watercourse regulation who deal with the investigation and enforcement of blockages. This has been included in the ordinary watercourse consenting section p52 and the riparian owners section on p48.

C30		9 we urge you to ensure that regular channel maintenance by all agencies and Riparian Owners on all local watercourses ,not just the North and not on an adhoc basis is essential to ensure flood risk is reduced significantly we suggest an annual clearance in August September to prepare for winter weather .	Comment	Y	Content already included	Promoting riparian ownership issues is a priority for the Environment Agency and West Sussex County Council. Every opportunity is taken to promote the 'living on the edge' document with riparian owners. Where the land is owned by an authority, channel maintenance is constantly being undertaken by the risk management authorities, to the best of our abilities with our given resources.
C31		Whilst much of the thrust of the new plan will be directed towards the effects of flooding due to high levels of rainfall and the inability of surface water drainage to cope with it. I do hope that the opportunity will also be taken to review the equal and sometimes more drastic effects of both river flooding (e.g. The Lavant and The Arun) and of tidal sea flooding.	Comment	N	Content already included	The focus is very much on surface water flooding, given the nature of flooding in the last decade. However, the risk of flooding from rivers and the sea is included in the strategy and the EA continue to lead on fluvial and coastal flooding, and will continue to invest to maintain existing infrastructure in coming years.
C32	R16	I don't know if you will be aware of the continuing saga of the EA's plans to abandon flood protection at Clymping Beach as part of its withdrawal strategy. This has caused great concern locally and it is particularly notable that the sums involved in retaining the current status quo are not large.	Specific area	N	Local Issue	The Environment Agency have informed West Sussex that they will re-consult on Clymping Beach. The EA will lead on this process as the risk management authority for the coast, and will consult West Sussex. At the time of writing no decision has been made on the management at Clymping Beach. The re-consultation could lead to a collaborative funding discussion, however it is too early for West Sussex to comment because the outcome of the re-consultation is not yet known.
C33		There may also be other flood risk areas (e.g. Horsemere Green Lane) but I will leave that to the Parish Council to respond.	Specific area	N	Local Issue	Horsemere Green Lane does not feature in the top flood risk areas within West Sussex.
C34	R17	The issues are actually quite complex but I am sure that Clymping Parish Council would appreciate any support that WSCC can give it as and when the EA next publishes its plans. My personal belief is that a relatively small annual contribution from WSCC towards the costs of annual coastal management at Clymping could well swing the EA's views. But that is just my supposition of course.	Specific area	N	Outside of Strategy Scope	Environment Agency re-consultation on the Clymping Beach is planned for this financial year. The EA will lead on this process. Please see previous comments relating to response in C35.
C35		Is the purpose of the Local Strategy clear? The purpose appears clear enough; various services or areas that are at risk are correctly identified together with those bodies involved in providing a solution. I have doubts about the lack or proper prioritisation for work and for proper accountability for failures.	Comment	N	Noted: no action required	The prioritisation of the work programme is ultimately decided by the cost benefit ratio, calculated by the number of houses that receive reduced flood risk, compared to the estimated price of the scheme. Most of this information is not known for the projects on the work programme, so , some degree of investigation work is needed.  The work programme will be improved (Appendix D) to prioritise those projects that are not advanced enough to have a cost benefit score. Prioritisation has been improved by selecting priority areas where risk management authorities will look to undertake work first. There is no guarantee this will happen, as resources are limited. Prioritising certain areas does not exclude other areas from investment, if good reasons for a project exist.
C36	R18	Do you agree with work programme? As it currently stands the Work Program is only a first step. Far too many of the items in the program are merely for further investigation and far too few are for actual specific work. It would be more honest and informative to split it into a Work Program for identified and costed works and an Investigation Program for the areas where more information is needed to assess what is required.	Comment	Y	Updated	Agreed the work programme included in the consultation was only a snapshot of the existing projects at the time. The work programme is now a 'live' document and will include a prioritisation process which will identify which projects should be progressed or need more information
C37		Are there any significant flood risk areas not considered? Speaking only about the Manhood Peninsula, it being the area I am familiar with, you do seem to have covered most of the areas of concern with the exception of road drainage. There are still places which have road drains that flood in heavy rain and take some days to clear. I do not know enough about other areas in heavy rain but I would accept that there are probably more severe problems elsewhere. However, the roads with surface water problems are the ones with the associated pot-hole problems. Failing to get the water off the road quickly results in damage to the surface, ingress of water and the subsequent freezing in winter causes the damage. It is noticeable that the roads where the surface is sound are the ones with the fewest recurring pot-hole problems.	Comment	N	Noted: no action required	Much of the Pathfinder money given to West Sussex after June 2012 was to repair the road network and halt additional road damage from water ingress. West Sussex have already made significant in additional road repairs since June 2012.
C38		Is the Local Strategy easy to understand? Up to a point, Lord Copper... Several areas are lacking a positive set of actions and also lacking are allocation of responsibilities for the further actions required.	Comment	Y	Updated	An action plan has been included with specific actions and a lead authority. It is acknowledged within the Local Strategy that not all wet spot locations have actions assigned to them.

C39		<p>Do you agree with the structure? I am not sure I understand that question or what it is intended to cover. I am concerned that too many organisations are involved in some cases. Notwithstanding the allocation of a lead organisation for each area identified, the range of organisation with an interest will tend to cause delays and indecisiveness and potential failure.</p>	Comment	N	Content already included	The Floods and Water Management Act 2010 sets of the responsibilities to each organisation. An action plan has been included with specific actions and a lead authority. This distribution of responsibilities will create the need for project managers to work across organisations and make a success of partnership working. The increased funds partnership working generates is worth this spread responsibility.
C40		<p>Is there anything missing? I am concerned that no proper attention has been given to priorities. The while area is under some pressure to provide more housing as part of a national strategy. The flooding problems need to be dealt with before too many more houses are built. There is no indication in the Strategy document that there will be any concerted effort to ensure that necessary future development does not exacerbate the current problems. Even when planning permissions contain provisions for developers to provide infrastructure improvements there is rarely a case where developers are forced to do the infrastructure improvements first, They usually delay these if they can; understandably, they want to sell some houses first to make some money and will only be persuaded to alter their priorities if there are some enforceable consequences for failure.</p>	Comment	Y	Updated	An action plan has been included with specific actions and a lead authority. Page 54 - planning process - text will be reviewed to underline the emphasis that no impact can be experience by existing property from new development. The planning process has also been referred to, in updated text, upfront in the foreword by the Highways Commissioning Manager.
C41		<p>Overall, do you think the Local Strategy will be successful in reducing flood risk? I think it is a good start; but, surely, only a work in progress.</p>	Comment	N	Noted: no action required	This is the first local strategy for County Councils. The Council will progress the work programme to its priorities.
C42	R19	<p>The most major aspect of flood risk has not been addressed at all. That is the continual building of new homes within and near to flood plains. Arun district Council have approved the building of in excess of 1700 homes in potential flood risk areas around Bognor Regis. ADC have reports from the environment agency to that effect that have been ignored. If I bought a home there and it flooded I would sue ADC for giving building consent against the environment agencies advice. The past flooded areas around Bognor Regis is grossly under reported. The area on the A259 by the Downview traffic lights at Felpham, Bognor Regis floods every year and sometimes several times per year.  The problem cannot be addressed properly until the above is taken into account. The Home building must stop now.  I await your reply in the hope you can prevent new homes being flooded, which you can do by taking action now.</p>	Specific area	N	Content already included	Page 54 - planning process. All new development by design should be directed away from areas at highest flood risk or have the required drainage infrastructure so that the new buildings are safe, and that existing housing are not compromised. These principles are embedded into the National Planning Policy Framework which covers all planning and development, including Local Plans. Each planning authority will also have a Strategic Flood Risk Assessment, SFRA, which details areas at risk of flooding and informs planning policy and decisions.
C43		<p>The lancing Brooks Area is predominantly owned by developers Landstone Ltd and Taylor Wimpey . The flood plains must be preserved , the indiscriminate development of flood plains has led to catastrophic flooding of areas around the country . The Lancing Brooks area to the south is a designated zone 3 flood plain it is 4.5 metres below sea level with extremely high groundwater levels . When there is precipitation 3 - 4 days after the event West Beach floods ,groundwater is forced up through the roads ,this is a regular occurrence mainly due to neglected water courses on the floodplain.</p>	Specific area	N	Local Issue	The main risk in this area is groundwater as the reader describes. The local engineer from Arun District can provide further detailed information if required. The local engineer is contactable via the District Office.
C44		<p>Already 15 football pitches are being developed with all the associated disruption of the clay layer , especially the 5 All weather pitches which are the equivalent of covering the area with a slab of concrete , no natural absorption of water can take place causing groundwater to be displaced . The same applies to the alleged golf course in the north where thousands of tons of landfill has been compacted on top of the flood plain again disrupting the natural function of the flood plain . It is critical that no more development of the flood plain is agreed by WSCC in future to ensure the flood plain naturally fulfils its task of absorbing excess water to protect the surrounding areas from catastrophic flooding .</p>	Specific area	N	Local Issue	The design of the football pitch complex discharges from a recycle area into a new separate ditch and does not enter the existing drainage ditch network. The area described is the other side of the railway line and will not be affected by the run-off from the new development.
C45	R20	<p>Is the purpose of the Local Strategy clear? Yes.</p>	Comment	N	Noted: no action required	-

C46		<p>Do you agree with work programme? I am not in a position to answer this question, as I do not have access to all the necessary information. The presentation of all schemes in a single alphabetical list is unhelpful. It would be much better to sort the list into completed schemes, and then to list other schemes in priority order.</p> <p>As it stands the work programme gives the number of properties benefitting from reduced flood risk and scheme costs, but there is no explanation of overall cost/benefit, nor of how the scheme priorities have been set. It is not immediately obvious if the number of properties involved refers to dwellings only, or if non-residential properties are included. Is the total value of the property at risk factored into the cost/benefit calculation?</p>	Technical	Y	Updated	<p>The prioritisation of the work programme is ultimately decided by the cost benefit ratio, calculated by the number of houses that receive reduced flood risk, compared to the estimated price of the scheme. Most of this information is not known for the projects on the work programme, so, some degree of investigation work is needed.</p> <p>The work programme will be improved (Appendix D) to prioritise those projects that are not advanced enough to have a cost benefit score. Prioritisation has been improved by selecting priority areas where risk management authorities will look to undertake work first. There is no guarantee this will happen, as resources are limited. Prioritising certain areas does not exclude other areas from investment, if good reasons for a project exist.</p>
C47		<p>Are there any significant flood risk areas not considered? I'm not sure how the layman is expected to answer this question?! Presumably, the document has correctly identified all the Wet Spots in West Sussex.</p>	Comment	N	Noted: no action required	The methodology is explained on page 25 of the strategy.
C48		<p>Is the Local Strategy easy to understand? No. It is not clear how the new funding arrangements will work – the Defra expectation (aspiration?) that funding shortfalls will be met by contributions from elsewhere is not at all convincing! At least the old "All or Nothing" system provided certainty. The new process is said to "encourage" those that will benefit from new flood improvement works to contribute financially, but how this is to be achieved is not explained. The report also states that "If partial funding is achieved, the shortfall in the total project cost is expected to be met by a contribution or by revising the proposal" (my emphasis). Again, this is not explained very well, as it seems to imply inferior solutions may be adopted if financial contributions are not forthcoming from other sources. I am rather alarmed by the statement that – "The approval, adoption and future maintenance of the SuDS will be undertaken by West Sussex as Lead Local Flood Authority". This implies that WSCC will be liable for any costs involved in dealing with any problems with SuDS systems after the developers have walked away!</p>	Technical	Y	Updated	<p>The new funding system is designed to draw in more money, therefore allowing the industry to make more progress overall. This may mean that some projects will have a funding gap, and not be taken forward immediately. This has been clarified in the final Strategy</p> <p>It will be the job of the SuDS Approving Body to ensure the SuDS are built to the proper standard. It is unclear how the developer will be held to account is the SuDS fail after a year, within the year it would be usual to check the build quality and ensure the contractor amends any defects as part of the original cost. The County Council will be required to maintain the asset after adoption.</p>
C49		<p>Do you agree with the structure? There are a few instances where new topics are introduced without adequate explanation – for example, Flood Risk Assets are mentioned in the discussion of Adur, on page 33, but not explained until page 46. This could be solved by adding the term to the Glossary.</p>	Language	Y	Clarity/Language	Included in Glossary
C50		<p>Is there anything missing? As mentioned above, the way in which schemes have been prioritised is not clear from the document. Is this information available elsewhere?</p>	Technical	Y	Updated	Prioritisation of wet spot areas will be added to the report to make the project selection process more clear. Appendix D has been updated to include the criteria for prioritisation.
C51		<p>Are you happy to be contacted for further information? No.</p>	Comment	N	Noted: no action required	-
C52		<p>Overall, do you think the Local Strategy will be successful in reducing flood risk? On balance, the Strategy might be expected to be successful, but it is essential that limited funds are used efficiently to deliver the optimum outcome.</p>	Comment	N	Noted: no action required	-
C53		<p>Other points On presentation, it would have made it easier to comment on the document if the paragraphs had been numbered. The document would also have benefitted from proofreading before being released for consultation! It doesn't inspire confidence in your readers when place names are misspelt – Bersted (page 21), Hayward's Heath (page 34) – this is not the only time when extraneous apostrophes have appeared in the document! Similarly, the reference to the South East Seven on page 51 should include Brighton and Hove. Lastly, I was also intrigued by the food defences mentioned in the section on the CIL on page 64!!</p>	Presentation	Y	Clarity/Language	These amendments will all be made to the final document. Paragraph numbering was considered but rejected in the final document as it was not deemed necessary.
C54	R21	<p>A very comprehensive review but unfortunately does not address the one area that affects anyone coming in and out of Worthing on the A 24 at Findon. North of its junction with the A 270, Both sides of it have flooded when it rains since it was built for about a mile. The road just south of this junction floods after heavy rain blocking the road making life a misery for everyone trying to use it. This however would appear to be due to the drains that are always blocked with leaves and grass after grass cutting has taken place. A common problem throughout the area.</p>	Specific Area	N	Local Issue	Query passed to the Drainage Strategy Team. Findon does not feature in the top risk areas within West Sussex.

C55	R22	I've just received the link to your Flood risk management strategy and wanted to congratulate you on a succinct, simple but informative plan / document. I only have a couple of comments which are :- 1) That there is currently no real mention of a catchment wide, partnership approach to flood risk management that I could see (other than references to the CFMP) . It might be worth specifically adding something to the document which states that the key stakeholders will work at a more strategic landscape level to help create catchment / landscape scale solutions to catchment flood risk problems. This is particularly relevant in terms of linking in with Surface water sub groups delivering catchment management plans for Water Framework Directive. We are currently working on a project in East Sussex which is analysing how natural habitats can be used to reduce flood risk in the Uck catchment, and much of the work we are doing there can be transposed to other catchments (including modelling best locations to plant woodland and to create washlands to reduce flooding). <a href="http://www.treesontheriveruck.org.uk/">http://www.treesontheriveruck.org.uk/</a>	Technical	N	Content already included	The Water Framework Directive (WFD) is integral to the Local Strategy and the work programme (Appendix D) features actions from the Environment Agency's virtual groups (project teams) and the investigations that have taken place and that will take place in the future. Most of these concern the removal of structures from water courses and improving fish passage. The main report and SEA also states WFD water body status and summarises the current assessment so that future progress can be measured. Projects that are not on the work programme, and that are relevant in West Sussex, can be added to the list. The work programme is an evolving list and will be updated constantly by the risk management authorities.
C56		2) Slightly tying in to this, there is no real mention of other landowners and stakeholders at a catchment level being involved in the consultation process (only riparian landowners). As a large owner of land in Sussex, and a local NGO, we would also like to be involved in any catchment scale flood risk management, particularly from a SUDS / sustainability / green infrastructure / habitat restoration point of view . We have for example, a number of heathland sites which have been grip drained for forestry, which we might be able to re-wet and reduce the surface water run off from them, thus assisting with the implementation of the plan at a wider landscape scale.	Comment	N	Noted: no action required	RSPB already attend catchment level meetings that the EA, Southern Water and West Sussex and Districts attend. This is the best forum to communicate with other risk management authorities. West Sussex will be present at the future 'virtual group' meetings on WFD and so can keep in touch here on a regular basis.
C57		3) I personally would like to see a bit more discussion about the contribution that land drainage can make to exacerbating flood peaks, and how WSCC will work with others to reduce land drainage in strategic locations in order to reduce flood risk / flood peaks.	Comment	Y	Updated	Land Drainage is a vital part of the management activities across the county. Sections have been updated to include this statement and the enforcement of land owner responsibilities in maintaining watercourses on their land.
C58		4) Hopefully Janyis has responded to the document regarding planning and green infrastructure. I think there probably needs to be some kind of joined up thinking between local strategic plans and flood risk management plans, as at the moment we are still seeing lots of development going in without much flood risk mitigation / SUDS.	Technical	N	Noted: no action required	The West Sussex County Council Drainage Strategy Team are now included in consultations of the Local Plans and comment on the level of flood risks from local sources. The Environment Agency continue to comment on development affected by flooding from rivers and the sea. The SuDS Approving Body, under the Floods and Water Management Act 2010, has yet to be enacted. This will begin to impose sustainable drainage on new development. Retro-fitting will also become more common after SuDS begin to be adopted. Currently there is no date for this to commence.
C59	R23	I live in Burpham in the Arun Valley just outside of Arundel. the lower parts of the village (fields) suffered very badly from flooding last winter with the fields just looking like a large lake, and the EA cleared the ditches to allow for the water, but this was beginning to overlap onto the lane, and did so at Warningcamp making the road impassable. If these ditches are not kept clear by the Environment Agency will West Sussex County Council clear them, because if not then there will considerable flooding during heavy rainfall, and during the high tide of the Arun? So, if not already, WSCC should take this into consideration.	Specific area	N	Local Issue	Many fields in the Arun valley are floodplain and will flood naturally during times of high rainfall. Last June and December (2012)the county experienced high rainfall totals that exceeded the capacity of much of the drainage network.
C60		It is villages like these, close to local rivers, that should be taken into consideration to ensure that there is a good drainage system that can take this water away, especially for the downland areas of the National Park area and surrounds. Also Chichester has quite considerable localised road flooding which indicates that the drainage system is not adequate during heavy rainfall and thus giving the danger that the flooding of Chichester could happen again.	Specific area	N	Local Issue	Regarding the rainfall last June 2012, even with a larger sewer system, the roads would still have flooded due to the quantity of water that fell with the 24 hour period.
C61		The coastal areas need constant monitoring and adequate flood defence systems updated and installed to minimise risk of flooding of the coastal towns. This has been especially worrying at Clymping near Littlehampton.	Comment	N	Outside of Strategy Scope	The Environment Agency continues to be the risk management authority for the coast. They liaise with the Met Office and the national flood forecasting centre to produce flood warnings for the coast. The EA will be consulting on Clymping this financial year.
C62		Our winters have changed considerably over the last few years and the rain has seemed constant and heavy at times, causing local residents to worry about the situation. It would be good if at times WSCC could arrange talks in villages like ours in order that questions can be answered and asked regarding these problems	Comment	N	Noted: no action required	This has been raised with the Drainage Strategy Team as a suggestion. It maybe that the National Flood Forum (NFF) can provide some resource for this.
C63	R24	Just one more point in relation to the Riparian law issues , any remedial or clearance work regarding privately owned watercourses are at nil cost to WSCC , the work can and should be recharged to the riparian owner . If the remedial work is undertaken annually, a robust and enforceable contract could /should be negotiated with the Riparian land owner ensuring DEFRA / EA / WSCC land drainage standards are maintained at nil cost to the ratepayer.	Comment	N	Noted: no action required	Riparian owners are reminded of their responsibilities, water courses are generally owned by private land owners (riparian owners). A leaflet 'living on the edge' is published to assist us in promoting ownership responsibilities. The first way to solve a problem will always be communication and negotiation. Costs are always sought if any actions are undertaken in private ownership.

C64		Also the considerable costs of reinstatement of flood damage would be avoided as of course would the awful grief and anxiety experienced by victims of flood damage . Residents at West Beach in the South of the Lancing Brook network now dread any rainfall , this never goes away but could / would be reduced by regular maintenance of outfalls ,silt traps , culverts , Riparian owners roads and watercourses on the South flood plain.	Specific area	N	Local Issue	Flooding is a natural consequence of heavy rainfall. If a 1 in 200 year rainfall event happened over any area in England, flooding would result because no drainage system is designed to take that amount of water. It is worth remembering that even a blockage free drainage system would still have be exceeded by flood waters in June 2012. Maintenance by the responsible individual or authority is crucial to maintain conveyance. The roads in west Beach Estate are in private ownership and responsibility lies with the owners.
C65	R25	Just been looking at the Wet Spot Map for BR and Felpham, noticed that the Downview Traffic lights area are not marked yet historically there is always surface water flooding there and east of the lights along Felpham Way.	Specific area	N	Local Issue	Information passed to the local drainage engineer at Arun District Council who has reviewed the mapping previously and will review the maps again in the future.
C66	R26	Obviously the Map for East Preston and other places is deficient in ditches that exist, and culverted ditches. For that matter probably outfalls	Specific area	N	Outside of Strategy Scope	The Local Strategy uses the best available mapping at the time of writing, the second generation surface water flood map produced by the EA. Not all river obstructions are marked on the model or the wet spot maps. Unfortunately the record of culverts at the local level is not complete and there is not the resource to map the country at this level of detail. Instead the best available data has been used. Some of this is based on assumptions about the channels, rate of drainage and amount of rainfall. While not all channels are modelled, the overall assessment and methodology is sound. The ground truthing of actual flooded areas from June 2012 in comparison to the theoretical map is evidence that the map is sound.
C67	R27	1. I don't think the purpose of the Local Strategy to be clear enough, as it seems very woolly at best.	Comment	N	Noted: no action required	The strategy follows the methodology set out by the Local Government Association
C68		2. The work programme looks as though it has already been decided upon, without a lot of thought for many of the areas that were affected by flooding for the first time because of the excessively huge amount of new building works, both homes and highways.	Comment	Y	Updated	The work programme consulted upon was only a snapshot of the works planned at the time of consultation. The programme is a living document and projects are added to the list as information becomes available
C69		3. It looks as though Bersted has not been mentioned in the 'Bognor Regis & Felpham' parts of the Strategy – why not, when so many properties in Bersted suffered flooding for the first time? Again, I must suspect the building of new homes & the white elephant of the so-called 'relief road'. A lot of properties, including the local Junior School were unusable for over 6 months – some for over a year – because of the flooding.	Specific area	N	Content already included	The problems that the reader raises are acknowledged, and, are explained fully on page 42 of the West Sussex Flood Report published in December 2012. Bersted is mentioned on Page 20 of the Local Strategy, and, the area has an investigation action on the work programme listed in Appendix D (Appendix D can be viewed on the West Sussex County Council website). With the storm return period for this event well in excess of the normal design capacity for the surface water system, the area appears to have flooded from hydraulic overloading. The recommendation for the future is for a joint project to investigate the current state of the water course and the best approach to manage the IDB water course.
C70		4. No, the Strategy is NOT easy to understand, despite an attempt at jargon-busting.	Language	N	Noted: no action required	No details to comment
C71		5. I feel the structure needs looking at again in the light of whole areas being omitted from the Strategy.	Comment	N	Noted: no action required	The strategy will be updated at the end of the consideration period 2013-18 and the current structure will be reviewed
C72		6. Largely there seems to be little logic in the way the Strategy has been formulated. Things that are missing include promises that roadside gullies will be regularly serviced in future, as this was a major factor in some areas, as the already blocked drains just could not cope. A better way of distributing sandbags needs considering, as too many residents were told to 'buy their own' & the builders' merchants' had also run out of sand – does no one check the weather forecasts to see if there is likely to be torrential rain so that supplies of sandbags can be made & the appropriate services put on standby.	Presentation	N	Noted: no action required	The Strategy has followed Local Government Association guidance as to what to include and what data to consider.
C73		7. I have no other information to offer, so there is no point in asking me for more.	Comment	N	Noted: no action required	-
C74		8. Until the Local Strategy has been revised I do not think it will be successful in its current form.	Comment	N	Noted: no action required	-
C75	R28	It was noted that the work programme contained details of projects such as the Littlehampton Flood Defence works which were already underway and that other projects lacked definitive timescales for completion.	Comment	N	Content already included	The work programme the consultation version was only be snapshot in time. The work programme with constantly be updated by the drainage strategy team throughout the year.
C76		The Committee noted that the County Council had recently announced details of three public drop-in events to promote the new Strategy for the County. Given the high level of flood risk in the Town, Members considered it would be beneficial if Littlehampton was included.	Comment	N	Noted: no action required	Unfortunately drop in sessions could not be arranged everywhere, and, three were opted for across the county. They were advertised widely in local press. The Bognor Regis session at the library was the closest to Littlehampton.
C77		Regarding the second point, I would be grateful if you could investigate the possibility of an event for the Town. Please note however that I am on leave for the following two weeks and I would therefore be grateful if you would copy in my colleague, Rosie Parfitt to you response so that she can update our Members in my absence.	Comment	N	Noted: no action required	Unfortunately drop in sessions could not be arranged everywhere, and, three were opted for across the county. They were advertised widely in local press. The Bognor Regis session at the library was the closest to Littlehampton.
C78	R29	In general I support the proactive measures outlined in the strategy. However I think there are some areas where there may be some room for further improvement.	Comment	N	Noted: no action required	-

C79		1) All the facts and factors one could wish have been considered in the report, but nowhere could I find these being drawn together to produce a list of areas designated as high priorities for future action/investment/investigation. I would have thought that this would be a useful addition to the executive summary or perhaps a short separate paper.	Presentation	Y	Updated	Reviewed text in the wet spot location chapter to make it more clear where the priorities are in West Sussex regarding investigation and investment. Added this information to the executive summary and an action plan developed for general actions.
C80		2) SUDS - there are many 'flavours' to SUDS. Unfortunately from bitter experience I know that developers will given half a chance use the cheapest option of soak-way drainage whether or not it is really appropriate to the situation. For example the main geology in the Burgess Hill area where I live is Gault Clay interspersed with ancient reverie deposits of mudstone/siltstone. The ability of these clays to absorb water depends on the degree of weathering to which they have been exposed, and the mudstone/siltstone acts as a conduit to take any absorbed water to lower levels where it is released at exposed surfaces. In this situation development on the upper levels of a clay slope should not use soak-ways as it will merely add to the surface water run-off at lower levels. Instead the slightly more expensive method of full water harvesting should be used. This latter has the two-fold benefit of both reducing flood risk as well as reducing water demand in an areas that has seen long-lasting drought restrictions.	Comment	N	Outside of Strategy Scope	A SuDS guide for developers is being produced in partnership with other local County Councils to influence developers designs. When SuDS Approving Bodies (SAB) are implemented, it will be their role to approve the suitable SuDS for that development in that area. Mapping will be available to the SAB. Officers will also visit site to approve the correct type of SuDS for the area. Currently there is no set date for the introduction of SuDS Approving Bodies.
C81		It would be helpful if your guidance on using SUDS methods could be expanded to encompass the SUDS guidance that was previously in the Government's Planning Guidance (now withdrawn). Again possibly an additional paper/appendix could be used. Without this I know too well that the pressures on the restricted numbers of building Inspectors will be such as to let through inappropriate schemes.	Comment	N	Outside of Strategy Scope	The SuDS guidance being developed is designed to be used in conjunction with other materials already published. The SuDS Manual is a principle supporting document.
C82		I can appreciate the difficulties of assessing surface water flooding risks, and what this means for local action plans, but I think that it would be helpful to have some form of mechanism to update and review such local issues.	Technical	N	Outside of Strategy Scope	The surface water mapping is being updated by the Environment Agency and release again in December 2013. The update process uses local drainage engineers expertise to edit part of the mapping and indicate a confidence level in the data.
C83	R30	Do you agree with the work programme? As shown, currently it is inadequate in this parish. Much of the research work and reports have yet to be produced and scrutinised by the parish so this report is, at best, partial and will not be complete until the following have been received and have been included within the works programme:	Specific area	N	Content already included	Currently on the work programme (Appendix D) of the Local Strategy, there are eighteen projects listed for the Middleton and Elmer areas. This is a focus area for West Sussex, reflected in the number of projects listed here.
C84		Ø The Yapton Road drainage report with specific reference to the opening up of the culvert under the A259 to allow a direct surface water discharge route to the Ryebank Rife. The Parish Council has requested sight of this report by 1st August 2013.	Specific area	N	Local Issue	Recent investigation has found no direct link between Yapton Road south and Yapton Road north, however, consideration will be given to this as part of the proposed junction improvement.
C85		Ø A meeting was held on 23rd May 2013, with the Residents Associations, covering Ancton Lodge Lane, Willowbrook and Lodge Close and was attended by, inter alia, Nick Gibb MP and Kevin Macknay, WSCC Drainage Strategy Team Leader. The latter agreed to arrange a WSCC Scoping Report of the drainage locally (utilising Opus) so that the extent of the drainage work needed could be ascertained. To date, that Scoping Report has not been seen and there is even doubt as to whether the work has commenced.	Specific area	N	Local Issue	A meeting has been held with local residents, and Opus have started investigation work and will present their findings in due course.
C86		The two areas cited above, together with Ancton Lane, form a very significant part of the drainage issues which exist in this parish so it is not possible for any report to be balanced and accurate without input from the two above mentioned reports. Once the reports have been received then the works programme can be assessed properly.	Specific area	N	Local Issue	Acknowledged
C87		Is there anything missing? There is a lack of clarity about funding. Whilst various funding streams have been established by WSCC, the interaction between them, who can apply and a clearly defined maximum timescale from application to granting/refusal of funding is lacking and needs to be tabulated within the report. There also needs to be one overall department, or individual, responsible for the allocation of the grants so that duplication and lack of clarity does not prevail and applicants can be clear about which tranches of funds are potentially available to them. Timescales of when remedial work is to start is also absent. At a very minimum, 'broad brush' start dates need to be included.	Presentation	Y	Updated	Funding section revised; additional information about how public groups can bid for money to reduce the impacts of flooding was added.
C88		Are you happy to be contacted for further information? The parish council will welcome very regular consultation about Local Flood Risk Management matters.	Comment	N	Noted: no action required	-

C89		Overall do you think the Local Strategy will be successful in reducing the flood risk? The question does not define the timescale over which it is being asked: Ø If it is defined as 1-2 years then the answer is no it will not be successful. Ø If it is defined as 10-15 years then the answer is probably yes, with the caveat that local and central government funding will be made available to undertake all the flood alleviation schemes identified.	Comment	N	Noted: no action required	-
C90		There is presently an urgent need to get on with remedying the worst flood risks locally i.e. Yapton Road (which is a strategic route), the Willowbrook/Ancton Lodge Lane/Lodge Close catchment (which is at the same level of risk today as it was in June 2012) and Ancton Lane.  If these matters can be resolved by the end of 2013 then we will be seeing some success and if a major rainfall event occurs in 2014 onwards the area will be in a better position – but only when these works are complete.	Specific area	N	Local Issue	Acknowledged
C91	R31	The attached map shows springs in Pulborough, and arrows indicate their direction of flow. The line of springs run for about a mile, and are situated near the brow of a low hill situated to the north of the A283 (Lower Street/Stopham Road). There is a pressure ridge near the brow of the low hill. Most of the centre of Pulborough has an impermeable geological layer around 10 to 15 feet below the ground surface, so any spring flow can occur from ground surface down to this level. Last year (2012) the springs were particularly active, which enabled a number of them to be more clearly identified.	Specific area	N	Local Issue	Forwarded comments to the local drainage engineer at Horsham District
C92		When the springs flow two distinct problems occur: a) where streams have been culverted (as around Sprio Close) spring water has no easy exit into the natural drainage system topographic lows, and the subsurface water level builds up. A well situated at the rear of 10, Lodon Road showed water levels no more than 2 inches below the road level in Sprio Close for much of 2012. Drainage in this area needs to be addressed urgently by all interested parties.	Specific area	N	Local Issue	Forwarded comments to the local drainage engineer at Horsham District
C93		b) When the springs flow, the water moves sand and silt from the subsoil, and this is taken down into the drainage system contributing to blockages in the system. Interestingly, residents on the South side of Lower Street have told the Parish Council that the risk of flooding from the springs to the North is greater than that from the Arun flood plain to the South.	Specific area	N	Local Issue	Forwarded comments to the local drainage engineer at Horsham District
C94		The key problem here is that existing drains are cleared infrequently, if ever. If the drain blocks then there are follow-on effects increasing the risk of flooding. Some drains that are effected by the springs do not appear to have been cleared at all over the last 2 years. (The drains along the North Side of Lower Street, in Potts Lane, and around Swan Corner are particularly problems). There needs to be a regular programme of drain clearance carried out on at least a 6 monthly basis if flood risk from springs is to be minimised.	Specific area	N	Local Issue	Forwarded comments to the local highways engineer at West Sussex County Council.
C95		In Pulborough the drainage and sewerage systems are connected, and it is not generally known where these connections exist. When drains block - because they are in areas where streams are culverted, or where springs carry sediment into them and they are seldom, if ever, cleared the consequences is that the drainage systems flow into the sewerage system, and this can then result in localised flooding. The above factors all need to be taken into account in assessing flood risk in Pulborough	Specific area	N	Local Issue	Forwarded comments to the local drainage engineer at Horsham District
C96	R32	By stating that it is the intention to inform communities about flood risk they may not have been aware of without the positive disclosures of the remedial measures immediately necessary, it will no doubt install a condition of increased insurance risk. Those residents will find a penalty over which they have now no control. The householders concerned have reason to require the associated preventative measures are engineered so that their existing premiums are well protected.	Comment	N	Content already included	It is the Governments position that authorities should publish their data on flood risk so that the public are aware of the risks that exist. Insurance companies will have their own data on flooding and use their own information. The new arrangement for flood insurance is yet to be agreed but should levy all insurance irrespective of whether property is in the flood plain or elsewhere.
C97		As expected the study catchment area is related principally to the central area of Littlehampton and mainly peripheral to the river. It comprises of the surrounding plains together with the sea front areas all of which have been the subject of the more recent incidents. Would you please make mention of the lesser isolated, but more susceptible areas now being recognised by reason of the current housing explosion. The diagrams identify new "wet spots" analysis in Wick and are categorised under the need for a "Complete drainage model for the Littlehampton catchment area".	Specific area	N	Content already included	Acknowledged. Referenced instances of isolated properties being at risk in chapter 1. Littlehampton is not exclusive as an area with more than average isolated properties at risk.

C98	R33	I am aware that my colleague Juliet Harris wrote to you (25/07/2013) with feedback from the Town Council's recent Planning & Transportation Meeting and raised a couple of questions in relation to the possibility of holding a public meeting/drop-in in the Littlehampton area?	Comment	N	Noted: no action required	Unfortunately drop in sessions could be arranged everywhere, and, three were opted for across the county. They were advertised widely in local press. The Bognor Regis session at the library was the closest to Littlehampton.
C99	R34	I have browsed your document and like most reports these days it is extensive but I am not sure if it will deliver its objectives. Will flood risk remain high in any governments priorities? Over the years we have seen highway budgets reduced annually in favour of other priorities. Too often well meaning and expensive strategies are worked up but end up collecting dust because adequate funding is not made available. Worse still money will be thrown at another proposal put forward by ministers that will supersede this one!!	Comment	N	Noted: no action required	The Work Programme (Appendix D) is the key to progress, regardless of Government changes. Funding has been reduced Nationally however more money is available for surface water projects, and the tools are in place to boost the current funding through partnership working, and via contributions. All risk management authorities are working towards implementing projects that reduce flood risk.
C100		Is Shoreham Port Authority not responsible for certain aspects of coast protection?	Specific Area	N	Content already included	Yes. As a landowner they maintain the harbour arms and the frontage, in front of the harbour.
C101		Where persons are responsible for providing and/or maintaining flood protection measures this responsibility must be enforced. Much flooding currently occurs as a result of unmaintained watercourses, gullies, surface water run off pipes and soakaways.	Comment	N	Content already included	Each owner of each water course has the responsibility to maintain it. Similar to each risk management authority that has a schedule of maintenance, each riparian owner should do the same. Pro-active communication is an important part of this maintenance, as it is often by reporting, investigation and subsequent awareness raising that problems are solved.
C102		Will local public consultation be undertaken, often resulting in the undermining of the expertise that has gone into designing and prioritising schemes?	Comment	N	Noted: no action required	Public consultation is a requirement of the majority of projects and strategies. The consultation may change the options but all solutions have to be technically robust in order to proceed.
C103	R35	So far as the flood map for the area which supposedly shows a once in 200 year flooding scenario, this is almost identical to the one we coloured in and sent off to the various authorities in 2012. The area you show as flooding is under water at least once a year, or whenever we suffer from surface water flooding. The map does not show the considerable flooding that occurs in Eastergate Lane.	Specific Area	N	Local Issue	The maps are unfortunately not inclusive of all topography, drainage and culverts that exist. The flood map of England and Wales is improving all the time (a new map will be issued by the Environment Agency 2013). The flooding outline will continually be reviewed and improved.
C104		I understand that property owners are responsible for their own flood defences, and again we have contacted all residents in Walberton who are at risk of flooding. We believe 60 properties are at risk in the parish. I believe it would help if the ditches alongside West Walberton Lane and Barnham Lane were dredged out to help the movement of water. Again this is the responsibility of the riparian owners, and I believe WSCC are the major landowners of most of the farmland along Barnham Lane and Eastergate Lane. The EA have the responsibility for keeping the Barnham Rife clear where it runs through our Parish.	Specific Area	N	Local Issue	West Sussex, District and Borough Councils and the Environment Agency take every opportunity to promote riparian ownership of ditches and enforcement of landowner duties. Each organisation also undertaken their own maintenance on an annual basis. This area is within the Aldingbourne Rife Study being undertaken. This study will highlight any improvements that can be made across the network within the Walberton area.
C105	R36	Without my perseverance Southern Water would not have investigated my flooding problem and no doubt the next time we had heavy rain in this area my house would have been flooded again. Any strategy on paper is fine as long as when it is called in to practice it works and based on personal experience with Southern Water then I am not sure that this will be the case.	Comment	N	Noted: no action required	Passed comments to the Southern Water project team member for information
C106		After the 2nd flooding I contacted Southern Water as to me there clearly had to be a reason as to why we had been flooded again. To be told that my flooding was caused by a 1 in 200 year occurrence was not helpful and clearly showed that my case had not been looked at properly as how can twice in 18 months be a once in a 200 year occurrence ?	Comment	N	Content already included	Passed comments to the Southern Water project team member for information. Details of the language around the probability of flood events are discussed in Chapter 1 of the strategy.
C107		As the owner of a property (6 Seaton Lane, Littlehampton, BN17 7LE) which experienced external and internal flooding twice in 18 months (Nov 2010 and June 2012) I would like to share my personal experience of dealing with Southern Water in an attempt to get them to a) acknowledge that there was a flooding problem in Seaton Lane, and, b) get them to investigate and rectify this problem.	Specific area	N	Local Issue	Passed comments to the Southern Water project team member for information
C108		Eventually Southern Water agreed to put CCTV down the sewer pipe which runs down the side of my house and not to my surprise they found that not only was there a blockage in the pipe but that it also had a hole and cracks in it. To be fair to Southern Water, once the issues had been identified they did work hard and cleared the blockage and mended the pipe and 13 months after the 2nd flooding the work was complete.	Specific area	N	Local Issue	Passed comments to the Southern Water project team member for information

C109	R37	Over the last few years the major rivers in the area have been allowed to naturally silt up and this has resulted in a diminished flow through inland areas of West Sussex particularly in the Henfield area. The time has come for more active management of the rivers as was the case in the past to avoid the inevitable flooding that we are now experiencing.	Comment	N	Noted: no action required	Maintenance is a balance to convey water and let wildlife flourish. Dredging (removing silt and material from below the river bed level) is now much less used by risk management authorities. This is due to the relative short term benefit received, the regular cost of the operation, conservation legislation, and, the effective use of other maintenance techniques. Where land is flat and silting occurs, regular maintenance of the ditches and culverts is preferred and has proved successful over wholesale major clearance. The rainfall event of June 2012 would inundate any drainage system and flood property. In general, while there were problems highlighted by the flooding, it was the volume of water that was too big, instead of capacity being too small due to silting. Regarding the EU, operationally, authorities are bound by European Law that protects the habitat. It is a criminal act to break this law. An example of action that has been taken is in Lancing, supported by funding from West Sussex County Council, where careful maintenance cutting and de-silting of culverts has been carried out. Regular maintenance is the focus, not the wholesale dredging.
C110	R38	Horsham area. I could not comment on the consultation as I could not see any reference to Horsham apart from the map	Specific area	N	Content already included	Horsham District is addressed on page 31.
C111	R39	Is the purpose of the Local Strategy clear? No it is not clear. The document is very long, and seems to concentrate mainly on the identification of areas at risk of flooding, and the division of responsibilities between different authorities. It is not really a strategy document, which I would have thought needs to identify some strategic aims and targets – that is to say what can consumers (payers of central government taxes, local council tax, water rates, householders, etc) expect to see achieved at certain future dates ( e.g. one year, three years, five years, ten years etc.) The document as it stands seems to be 'a throat-clearing exercise'.	Language	Y	Updated	Improvement to the work programme and prioritising the projects more clearly is acknowledged. An action plan has been included. The 4 strategic aims are clearly stated in the executive summary. West Sussex County Council are required under the Flood and Water Management Act 2010 to produce a strategy to state roles and responsibilities.
C112		The kernel of the outcome is in the 'work programme'. But once again this leaves much to be desired. First, the colour coding should be at the top of the document, it is only when the reader gets right to the end that it becomes clear that light blue means 'funds not secured'.	Presentation	Y	Updated	The next version of the published work programme will be updated to make it clearer.
C113		Second, the column headed "Time scale/priority" is unclear as it mixes two things (time scale and priority) but the entries only give a spread of years. It is therefore unclear whether this means how long the works will take to complete, or the date by which they should be completed. Why not simply put "Estimated date of completion"?	Presentation	Y	Updated	The next version of the published work programme will be updated to make it clearer.
C114		Third, the column headed "source" is unclear. It seems either to say WSCC Flood Report, or to give a set of initials. What do these mean? Is this a backward-look (not very helpful in a strategy document) as to where the identification of the flooding task came from?	Presentation	Y	Updated	The next version of the published work programme will be updated to make it clearer.
C115		Fourth, it is unclear what the column headed "C/B" means, and anyway it only contains about four entries. Could that column not be junked?	Presentation	Y	Updated	The next version of the published work programme will be updated to make it clearer.
C116		Fifth, the column headed "Co-funded" is not very useful. The reader needs to know who is/are the co-funder/s. Wouldn't it be better to have a column next to the "Lead" column, which is headed "Co-funder(s)"?	Presentation	Y	Updated	The next version of the published work programme will be updated to make it clearer.
C117		Sixth, the column headed "WSCC Objective" is unclear. Does it mean "WSCC Priority" or does it refer back to a previous document with qualitatively distinct objectives?	Presentation	Y	Updated	The next version of the published work programme will be updated to make it clearer.
C118		Finally, wouldn't it be better to have the final column headed "Estimated Date of Completion"?	Presentation	Y	Updated	The next version of the published work programme will be updated to make it clearer.
C119		Do you agree with work programme? Only in part. See my next answer.	Comment	N	Noted: no action required	-

C120		<p>Are there any significant flood risk areas not considered?  Yes. New developments. Chichester, for example, has a huge Local Development Plan which is currently out to consultation, some of which will occupy fields where ground water can currently drain away. Development may actually increase flood risk for adjacent properties.</p>	Technical	N	Outside of Strategy Scope	<p>For information with regards to the planning process in relation to flood risk, the Environment Agency provide technical advice to ensure that new development complies with all relevant policy and guidance, and that any assumptions made are reasonable. The District or Borough Council are responsible for granting or refusing planning permission, taking into account the guidance given to them by the Environment Agency. The council's engineers also have a role in checking the designs.</p> <p>Ultimately, however, it is the responsibility of the developer and their flood risk consultants to design a system that functions correctly, and does not increase the risk of flooding to third parties. The industry standard (also outlined in the Technical Guidance to the National Planning Policy Framework) is for surface water systems for new development to contain the 1 in 100 year storm event plus a climate change allowance, without causing flooding off site.</p>
C121		Is the Local Strategy easy to understand? NO – see above	Comment	N	Noted: no action required	-
C122		Do you agree with the structure? - See above	Comment	N	Noted: no action required	-
C123		<p>Is there anything missing?  Prospective climate change. Future input from e.g. Meteorological Office, and is any flexibility to changes in weather patterns possible within the plan?</p>	Comment	N	Content already included	<p>Climate change is referred to on pages 4, 38, 49 and 63. . Instead of accounting for future climate change, the models that give the map outlines simulate a large storm event in current day circumstances. For example, the surface water flood map simulates a 1 in 200 year probability rainfall event. The mapping therefore does not account for future climate change, but instead gives a prediction of a present day 'rare event'.</p>
C124		<p>Are you happy to be contacted for further information?  I don't really have any further information to give. But I do like to be kept informed of what is going on.</p>	Comment	N	Noted: no action required	-
C125		<p>Overall, do you think the Local Strategy will be successful in reducing flood risk?  I imagine so. But to quote Donald Rumsfeld, "There are known unknowns, and unknown unknowns." I think the strategic plan may need to be adapted to take account of the former, but I doubt whether there is anything you can do about the latter. You could also simplify the first part</p>	Comment	N	Noted: no action required	-
C126		<p>As one of those who chose the buy a home above the flood level I object having to continue to subsidise the insurance of those with properties in flood areas when they already benefit from properties that are on much cheaper land in the first place (as the land cost is some 50%+ of the total) and they have the amenity value of waterways nearby which I do not have. The subsidy should be the other way around. The Government and the Insurance Industry have this the wrong way around and the legislation has been sneaked in quietly without the true cost being provided. My solution would be for the extra cost of insurance being a tax on those that build these properties in the first place (and then they would not build there as it would hit their profit margins) and not in effect a tax on those like me who only buy responsibly above the flood level.</p>	Comment	N	Outside of Strategy Scope	<p>The reader raises the point regarding the latest suggestion between the ABI and Government to levy a fee on all insurance policies so that a fund is available for next national flood. The draft laws, currently being consulted (please see defray website) propose:  a levy-funded reinsurance pool for high risk households ( known as "Flood Re"), and, b), reserve powers to regulate the insurance industry by requiring insurers to each insure a certain share of a list of high flood risk properties (known as the "Flood Insurance Obligation").  Please comment on the draft laws via the defra website.</p>
C127	R40	<p>Nevertheless unless it becomes law that opposition to planning permission by the Environmental Agency on the basis of this report is a complete veto to the application then the study is almost worthless.</p>	Technical	N	Outside of Strategy Scope	<p>For information with regards to the planning process in relation to flood risk, the Environment Agency provide technical advice to ensure that new development complies with all relevant policy and guidance, and that any assumptions made are reasonable. The District or Borough Council are responsible for granting or refusing planning permission, taking into account the guidance given to them by the Environment Agency. The council's engineers also have a role in checking the designs.</p> <p>Ultimately, however, it is the responsibility of the developer and their flood risk consultants to design a system that functions correctly, and does not increase the risk of flooding to third parties. The industry standard (also outlined in the Technical Guidance to the National Planning Policy Framework) is for surface water systems for new development to contain the 1 in 100 year storm event plus a climate change allowance, without causing flooding off site.</p>

C128	R41	<p>The flood risk management Strategy seems a good document. However living on Henley Common, I do not seem to be covered. Midhurst wet map only goes up to Easeborne? Henley common is the North facing slope that drops down from the King Edward VII hospital. When the hospital was built the Pump House to collect the spring water and pump it to the Hospital was built off Whites lane. Thus surface water comes flowing down. The building of patios above us on the hill demands extra drainage to take away the surface water. In addition the drains have to be kept clear.</p> <p>Would like to see publicity on what action householders can and should take. When living in Bosham over the years I was flooded 6 times!</p>	Specific area	N	Noted: no action required	Henley Common is not in the top flood risk areas in the county, although it is acknowledged that flooding can happen outside of these areas identified by the strategy. the detail you raise about surface water flooding was passed to the local engineer so that they are aware, if not already, of the flow path you refer to. Bosham is a known flood risk area and has been identified within the strategy.
C129	R42	<ol style="list-style-type: none"> <li>1. Page 4 Foreword - 3rd para 6th line - replace "to risk" by "the risks"</li> <li>2. Page 15 2nd para, 4th line - add "the" between "in" &amp; "county"</li> <li>3. Page 17 2nd para , 3rd line - add "of" between "source" &amp; "the"</li> <li>4. Page 23 2nd para, 1st line - replace "are" by "area"</li> <li>5. Page 29 first para final line - remove apostrophe from "statistic's" - just a plural</li> <li>6. Page 30 line one - "There" should be "They"</li> <li>7. Page 30 line two - insert "to" between "map" &amp; "reflect".</li> <li>8. Page 38 third para final line - remove apostrophe from "Council's" - just a plural</li> </ol>				These edits will be made post consultation.
C130		<ol style="list-style-type: none"> <li>9. Page 40 9th responsibility of WSCC - should be "affect" not "effect"</li> <li>10. Page 40 11th responsibility of WSCC - repetition of third party or parties</li> <li>11. Page 41 5th responsibility of EA - replace "in a consistent manor" with "in a manner consistent"</li> <li>12. Page 44 3rd para, first line - for "owner's" the apostrophe should be after the "s"</li> <li>13. Page 44 4th para, first line - need apostrophe before the "s" in "Governments"</li> <li>14. Page 47, 3rd para 2nd line - replace "l" by "In"</li> <li>15. Page 48 2nd para, 1st line - - need apostrophe before the "s" in "Defras"</li> <li>16. Page 48 - should not the blue header be the 2010 Act not 2012??</li> <li>17. Page 56 1st para, 4th line - remove apostrophe from "indicators" - just a plural</li> </ol>	Language	Y	Updated	These edits will be made post consultation.
C131	R43	<p>Firstly we believe the flood plans published should use up-to-date data and include housing developments which have been in existence for over 14 years. Land earmarked for development should also be highlighted to indicate the high risks of permitting large scale building on a low lying city such as Chichester. The worst case scenarios (200 year events) are happening within a few years of each other, and the alleviation of flood risk should be contributed to by developers, in addition to social and highway contributions.</p>	Comment	N	Content already included	<p>The data used is the most up to date county wide data. Some newer data exists for specific areas of the county. The ordinance survey data held and used is that of the Environment Agency with permissions.</p> <p>Contributions from developers via the planning process will become much more common in the future as the public and planners demand more sustainable homes.</p>
C132	R44	<p>I have been asked to comment about the Local Flood Risk Management Strategy. I really don't have much to say about the document itself which seems fairly standard however I do have some comments about the supporting documents. The works listed in the appendix are interesting but without more information it's hard to understand exactly what's proposed – I hope this will all become clear.</p>	Comment	N	Noted: no action required	Some of the projects in the work programme have brief descriptions because they have not yet been scoped, and, may just be outline ideas for investigation. Other projects are well researched, having had investment already, and have detailed descriptions.
C133		<p>I do however question the accompanying map of MOS and Elmer which is the only area I have experience of. In the legend it says surface water flooding for a 1 in 200 year rainfall event which of course is true, however, we all know that a lot of those areas can flood during far lower storm events. I think this should be made clear, surely we are not just dealing with 1 in 200 year storm events only? A 1 in 30 year storm can be just as devastating for residents in my area.</p>	Technical	N	Content already included	Currently the surface water mapping chosen for analysis is the larger event, flooding expected from a 1 in 200 year storm. This gives a 'worst case' example to highlight areas at risk. Of course flooding can still occur from the 1 in 30 year storm, but affect a smaller area. The Environment Agency's new surface water mapping, available from the end of 2013, will show different size flood events. This will be available via the EA website. In general, investment goes to the areas at most risk. This risk maybe based on magnitude or frequency, therefore including those areas that flood regularly but to a lesser height.
C134		<p>Also the West Sussex Work Program Consultation, many of 'properties benefitting' are 0 – clearly not the case as whole communities will benefit from many of these actions. To my knowledge funding is generally based on formulas using how many properties are effected and at what intervals. I believe a completely accurate picture of the areas in question should be presented, – I notice all the maps I have looked at only show 1 in 200 year storm flooding - it is never a good idea to make important decisions based on partial information.</p>	Technical	N	Noted: no action required	The investigation, or scoping, projects on the work programme cannot yet say how many houses they will reduce flood risk to. After the investigation, it will be possible to suggest a number

C135	R45	"Do you agree with the work programme?" It is difficult to comment on areas where I have no knowledge. Now that I understand the proposed scheme for Angmering I agree with this work.	Comment	N	Noted: no action required	-
C136		"Is there anything missing?" 1) On several occasions throughout the document reference is made to working with individuals and local groups. It would be helpful if there was an indication of how these people can provide inputs.	Presentation	Y	Updated	The access to risk management authorities could be made clearer. Practical information on this link between the public and the decision makers is now included. A separate section is now included on communities and the public
C137		2) Although the consultation document makes reference to the importance of clearing ditches and other watercourses to reduce flood risk, there is no mention of a scheme to enforce this obligation. As this is the duty of the District and Borough Councils they should be asked to produce a programme to identify, inspect and enforce the clearing of watercourses to return them to their original profile and capacity. Parish Councils could help here with their local knowledge.	Technical	Y	Updated	Updated in action plan. In almost every case, enforcement with the land owner is not needed, as the riparian owner is often unaware that responsibility to clear a ditch is theirs. In cases where riparian owners have not maintained their land and are obliged to, communication is the best way to achieve results. Often a problem needs to arise to highlight the issue. Proactive communication is made by the Environment Agency - a 'living on the edge' leaflet available online on the EA website - explains rights and responsibilities of Riparian Owners. Environment Agency and West Sussex ditches are maintained to an annual schedule by their respective work force. Local Flood Action Groups can be instrumental in organising ditch clearance on riparian owners land. Felpham Action Group is a good example. Money has been made available via West Sussex County Council to instigate some of these local projects to help riparian owners maintain what is their responsibility. Local Flood Action Groups can be established by the community, and self-lead. They can be assisted by the National Flood Forum (NFF), and are supported by the Environment Agency as well.
C138		3) Regarding the river Arun, some dredging to return it to its original capacity would benefit a very wide area. This is a far more sustainable solution than constantly building higher walls and banks to counteract silt deposits.	Specific area	N	Local Issue	Maintenance is a balance to convey water and let wildlife flourish. Dredging (removing silt and material from below the river bed level) is now much less used by risk management authorities. This is due to the relative short term benefit received, the regular cost of the operation, conservation legislation, and, the effective use of other maintenance techniques. Where land is flat and silting occurs, regular maintenance of the ditches and culverts is preferred and has proved successful over wholesale major clearance. The rainfall event of June 2012 would inundate any drainage system and flood property. In general, while there were problems highlighted by the flooding, it was the volume of water that was too big, instead of capacity being too small due to silting. Regarding the EU, operationally, authorities are bound by European Law that protects the habitat. It is a criminal act to break this law. An example of action that has been taken is in Lancing, supported by funding from West Sussex County Council, where careful maintenance cutting and de-silting of culverts has been carried out. Regular maintenance is the focus, not the wholesale dredging.
C139		"Overall, do you think the Local Strategy will be successful in reducing flood risk?" Only if funding can be secured and the work is actually carried out. Otherwise it is just a collection of words!	Comment	N	Noted: no action required	If funding is not secured the projects will cue in the work programme until a time when contributions are forth coming or after other priorities have gone before. It is important that a future programme or pipeline of work is ready should funding become available.
C140	R46	Your plan of Wet Spot Analysis in the Wick area of Littlehampton does not recognise the presence of some old farm culverts beneath the new property developments off Courtwick Lane, and which were identified in searches at the time of purchase. One of these lies adjacent to my address in Kingfisher Drive and along the boundary to those houses served by Goldcrest Avenue.	Specific area	N	Local Issue	The Local Strategy uses the best available mapping at the time of writing, the second generation surface water flood map produced by the EA. Not all river obstructions are marked on the model or the wet spot maps. Unfortunately the record of culverts at the micro level is not complete and there is not the resource to map the country at this level of detail. Instead the best available data has been used. Some of this is based on assumptions about the channels, rate of drainage and amount of rainfall.
C141		This outlet is controlled by a "Balancing" pond, which since construction of the surrounding properties some 13 years ago has received no maintenance or clearance activity for which a programme of works is essential. I have drawn a blank over the numerous enquiries made of all the Authorities since the Developer left the site 6/7 years ago.	Specific area	N	Local Issue	This detailed information will be passed onto the local drainage engineer at Arun District, and, the Drainage Strategy Team so they are aware of the readers' comments. This information is useful at the local level to ensure the public's knowledge is passed on to the local drainage experts.
C142		The result, even with the general rainfall so far experienced, gives rise to ponding of some high proportions at the junction with New Courtwick Lane at the Kingfisher Drive end. With a flash flood event conditions would be disastrous. Additionally, the nearby development of 600 houses which removes the natural subsoil soakaway on the higher ground is likely to exacerbate such an event.	Specific area	N	Local Issue	This detailed information will be passed onto the local drainage engineer at Arun District, and, the Drainage Strategy Team so they are aware of the readers' comments. This information is useful at the local level to ensure the public's knowledge is passed on to the local drainage experts.

C143	R47	I am very disappointed to hear at the Planning and Transportation meeting at Littlehampton Town council tonight that you have decided not to do any drop in sessions for Littlehampton. Having that Littlehampton approximately a year ago suffered one of its worst floodings in years and that strategically the west bank is in constant danger of flooding as it is being attacked and corroded by 3 fronts I find that ignoring or by passing Littlehampton is unforgiveable and intolerable. I would kindly ask that you reconsider this position. I ask you to reconsider as we have some very well established business whom in some cases are also current land owners and investors in this specific area of Littlehampton. I am very sure that they would be interested to see and hear what you would have to say about the future flood risk management and that they would appreciate your time in doing so.	Specific area	N	Content already included	Unfortunately the drop in sessions could be arranged everywhere, and, three were opted for across the county. They were advertised widely in local press. The Bognor Regis session at the library was the closest to Littlehampton.
C144	R48	My comment would be that a longer term view should be included into the Flood risk plan. The consequences of sea level rise and the costs and protection levels required in even 50 years have not been adequately confronted, the Shoreline management plan does not do this and W.S.C.C. as the lead should address them as a matter of urgency. Long term thinking and planning often brings benefits earlier than expected.	Technical	N	Noted: no action required	Currently the work plan considers work that can be implemented in the 0-2 yr, 2-5 yr and 5-10 yr timescale. This is an aspirational target because funding cannot be secured beyond year 1. Other plans, such as the Shoreline Management Plan (SMP), inform the Local Strategy of the long-term policy, and of the appropriate immediate projects that are consistent with the long-term policy.
C145	R49	As a local resident I feel the document is constructive, detailed and clear. Having read the detail for flood risk in my area I am slightly more alarmed about flooding and I was not able to navigate the environment agency site to find the detail of what is being done in my area. However, in principle I feel the overall strategy is appropriate and reassuring to know that so many agencies are thinking about this serious issue.	Comment	N	Noted: no action required	The Environment Agency has a useful 'what's in my backyard' section where you can enter your postcode. It will show your local area and the flood zones. Later in 2013 the map will show the surface water mapping also.
C146		Can I suggest that all the local authorities seriously consider a planning application requirement for any new paving, driveways, patio etc to minimise the effect of surface water flooding from reduction in natural soak-away. This seems an easy "low hanging fruit" initiative that would at least reduce the rate of increase of non-permeable surfaces.	Comment	N	Content already included	Currently, the planning department use the Permitted Development Order to oversee the covering of permeable surfaces with impermeable surfaces. Permitted development - that is development with automatic permission, is allowed regarding paving if less than 5 square meters in area. If over 5 square meters, the owner does not require permission either, if they drain the impermeable area to a permeable surface. There is therefore a requirement to deal with adding impermeable surfaces to land, but there does not need to be any engineering or supporting maths to show it is adequate in any way. For more information, the planning portal 'portal interactive house' page, is a good place to find out more on what you can and cannot do as a property owner.
C147	R50	Page 9 With regard to "Achieving environmental, social and economic benefits, consistent with the principles of sustainable development": The Woodland Trust believes that woodland creation is especially important for water management because of the unique ability of woodland to deliver across a wide range of additional benefits – see our publication Woodland Creation – why it matters ( <a href="http://www.woodlandtrust.org.uk/en/about-us/publications/Pages/ours.aspx">http://www.woodlandtrust.org.uk/en/about-us/publications/Pages/ours.aspx</a> ). These include for both landscape and biodiversity (helping habitats become more robust to adapt to climate change, buffering and extending fragmented ancient woodland), for quality of life and climate change (amenity & recreation, public health, flood amelioration, urban cooling) and for the local economy (timber and wood fuel markets).	Comment	N	Noted: no action required	Acknowledged.
C148		Page 53 With regard to funding woodland creation as a tool for water management, it should be noted that woodlands deliver multiple benefits including health-related benefits.	Comment	N	Noted: no action required	-
C149	R51	... whilst we welcome your strategy document, we note that its major emphasis is related to surface water flooding, and we believe that the predicted threat to Arundel as set out in the Arundel Wet Spot Map which suggests that 215 properties are at risk from surface water flooding and only 15 properties are at risk from river and sea water flooding is an incorrect and misleading assessment. Indeed, recent informal discussions with the WSCC Highways Commissioning Manager and the WSCC Drainage Strategy Team Leader support this view, and confirm that your data not only takes little account of Arundel's existing flood defences, but that it is based on the EA's out-of-date (2008) data.	Specific Area	N	Local Issue	Arundel Town Council are referred to the comments already received and made by Jamie Fielding of the Environment Agency, and, Stuart Smith and Kevin Macknay of West Sussex County Council. The key thing to remember is that the strategy needs county wide data to analyse everywhere in the same way. The data in the strategy is correct, given the parameters explained. Different data sets do exist for the same areas, and they can give different answers, because they model different scenarios at different stages of the future. This is the principle reason for different property numbers at risk, because different parameters are used by the model.
C150		Instead, the EA's most recent Arundel flood risk assessment is dated 2012, it was conducted by the well known and highly respected consultants, Atkins, and the results were set out in the Lower Tidal River Arun Strategy (LTRAS) Consultation Document published in December 2012. We are therefore disappointed that the WSCC Strategy fails to take this latest data into account.	Specific Area	N	Local Issue	The strategy uses the best available county wide data at the time of production.

C151		On the other hand, we very much welcome your concentration on the surface water flood risks in the County, including the Arundel area, together with your proposals for their mitigation in the future. Also we applaud the setting-up of the Operation Watershed arrangements and we note the ongoing investment in a whole range of small flood alleviation schemes, which will undoubtedly help to protect many local communities from surface water flooding in the future. Indeed, we hope that Arundel will be able to benefit from such investment, particularly as there are a number of surface water problems in the more low-lying parts of the town.	Comment	N	Noted: no action required	-
C152		However, having said that, our prime concern is that the WSCC Strategy is equivocal as far as the alleviation of major tidal flood risk is concerned, and particularly that insufficient attention has been accorded to the LTRAS proposal in particular and the Government's "Partnership Funding" proposals in general. In Arundel's case, the LTRAS recommends that some £23m should be invested in Arundel's flood defences over the next 100 years, but says that only some 31% of the cost will be provided by central Government. Thus, if the recommended flood defence improvements are to be effected, then the remainder will need to come from "local" sources, under the leadership of WSCC, our Lead Local Flood Authority, which is also the major Risk Management Authority in West Sussex.	Specific Area	N	Local Issue	<p>Due to the new funding arrangements, many projects on the programme will have a funding gap. This is because their priority score is not high enough to achieve full funding. The majority of projects will need a contribution to progress, including the project at Arundel.</p> <p>Clearer prioritisation of projects needs to be shown in the work programme. This will elevate those projects that achieve the best return for the investment made. Revisions will be made to highlight the West Sussex priorities.</p> <p>Currently the funding gap at Arundel, along with many other locations, has not yet been filled. Funding for all projects on the work programme is something that all risk management authorities will be trying to solve in the short, medium and long term as flood defence grant money from Government reduces.</p>
C153		In view of the tidal flooding threat to Arundel, which will increase over time due to the impact of climate change and sea level rise, as well as the deterioration of the existing flood defences, we believe that there is a strong case for the balance of your Strategy to be amended to take account of the specific proposals contained in the LTRAS. In particular, it needs to take far more account of the guidance contained in the joint DEFRA/EA document: "Principles for Implementing Flood and Coastal Resilience Funding Partnerships" (2012), as well as the associated joint DEFRA/EA/LGA guidance document: "Partnership Funding and Collaborative Delivery of Local Flood Risk Management: A practical Resource for LLFAs" (March 2012).	Specific Area	N	Local Issue	The strategy gives a balanced and fair account of all flood risk in West Sussex. To focus on Arundel would give higher exposure to one town, and, not address the county in an impartial way. West Sussex will use the one to one feedback taken from the Arundel meeting held in September, and edit the document accordingly.
C154		The assembly of local funding from multiple sources over extended timescales in support of expensive flood defence proposals will obviously be a difficult task at the best of times, especially when many of the potential local contributors may either not be aware of the need or may be disinclined to do so. Thus, whilst the arrangements described in the WSCC Strategy may be adequate to accommodate relatively inexpensive short-term projects related to surface water flooding, Arundel Town Council believes that, as written, the Strategy is inadequate as far as defining the leadership roles and partnership responsibilities in relation to major flood defence projects. We understand that this is acknowledged by your Flood management Manager and his team, and so rather than offering a critique of the initial Strategy, we simply recommend that these wider implications be taken properly into account before the finalised Strategy is published.	Comment	N	Content already included	The roles and responsibilities are clearly stated, in line with legislation (the Floods and Water Management Act 2010). Page 38, the 'local context' section
C155		In summary, Arundel Town Council welcomes your initial West Sussex Local Flood Risk Management Strategy document, and we believe that it has the potential to make an effective contribution to the alleviation of flood risks in the County, especially those arising from surface water flooding. However, it is equivocal as far as the alleviation of major risks from tidal flooding is concerned, particularly in relation to schemes such as the LTRAS which will require significant local support under the Government's Partnership Funding policy. We therefore recommend that the Strategy is revised to take better account of the latter before the final version is published.	Comment	N	Content already included	LTRAS is mentioned on page 21 and 22, together with the other important strategies in West Sussex. To add descriptive information on each strategy would add significantly to this section.
C156	R52	My understanding of the strategy purpose is that it seeks to ensure that building in areas susceptible to flooding is carried out responsibly and to reduce flood risk. Additionally, the report clearly outlines the intention for working in partnership with councils, the Environment Agency, Highways Agency, Southern Water and other relevant departments and agencies. Although this is the ideal, in our experience the Highways agency have been very reluctant to cooperate in any dialogue or meaningful action, whilst the Parish Council and West Sussex CC have been interested in our situation and thinking of ways to solve the problems.	Comment	N	Noted: no action required	Acknowledged

C157		Will this new strategy help with enforcement to make the Highways Agency follow their role and responsibility which is set out on p43 of your report?	Comment	N	Noted: no action required	It is a requirement of the Flood and Water Management Act 2010 that risk management authorities corporate. It is proposed to invite the Highways Agency to the West Sussex Flood Group, the quarterly meeting of all risk management authorities, so that we can better engage across organisations.
C158		I agree with the work programme to the extent that of course it is sensible to ensure that as many people can be helped as possible, where improvements are taking place. Yet, I feel it is important to take note of the frequency of flooding and the depth of water in people's homes, irrespective of the numbers of houses affected, especially where there is a solution to the causes of flooding; such as a larger pipe and drains being maintained. Additionally, allocating at least a small amount of funding for some projects, and where possible, covering the entire cost of flood reduction works is very positive.	Comment	Y	Updated	The prioritised work programme will take into account the comments
C159		The local strategy is thorough and well thought through, although it is not that easy to find out specific information about different areas or certain issues; such as how priorities are determined. Further, some of the diagrams are not that easy to interpret. However, anyone that reads the report will certainly gain an understanding of the approach that WSCC in consultation with other groups is trying to take.	Presentation	N	Content already included	The priorities are ranked based on the best return (number of properties protected) for the investment made. Projects that are second in line will remain on the work programme for the following year, and provide the pipeline of work and the following years priority. Financial contributions can change the priority ranking. Should a lower priority scheme receive a contribution from a third party, it will be promoted and be carried out earlier.
C160		In terms of if anything is missing. I am concerned that Hammerpot near Angmering is not included. I understand that to be classed as a 'wet spot' at least ten properties and or businesses need to be affected from the risk of flooding. Hammerpot does not fall into this category. However, we are missed off the map for Angmering because it only shows south of the A27, much of the water that affects Angmering drains from north of the A27. There is major flooding from Patching to Swillage Lane, and Hammerpot. Hammerpot, Swillage Lane and Patching are all omitted nor do you show the A280 north of Patching junction where Seth Evans joinery has been flooded. The area of Clapham is covered in the Worthing map, but Patching is missed off from that map.	Specific area	Y	Local Issue	Rescale the map so that this area is included. Reference Hammerpot in the text in the Arun District section on page 31.
C161		It is my concern that small areas will be overlooked because flooding usually only occurs in 2-4 houses rather than 10. However, is there a way that you can address the wet spot maps to ensure that Hammerpot and Swillage Lane are at least on the map? Also it is of concern that on these maps some large areas of flooding are shown where there is no housing but other smaller places where people's homes are affected are not included. Our home has been flooded on four occasions within 31 years we are very anxious that Hammerpot should feature in your action plan.	Specific area	Y	Local Issue	Rescale the map so that this area is included. Reference Hammerpot in the text in the Arun District section on page 31.
C162		I think that the strategy will be able to reduce flood risk in some areas if there is the funding and enough support to make sure that an areas voice is heard but by no means will it benefit all people who have been flooded. Whilst it is important for all the agencies to work together, there is much benefit in seeking local knowledge from residents who have been affected by flooding and incorporating their ideas into your planning. First-hand experience of flooding provides valuable information.	Comment	N	Noted: no action required	Acknowledged.
C163		Finally, I do think that is essential that for any new housing development that SuDS are in place. It is reassuring that this is something you are seeking to address. However, of course the ideal is that developments, as far as possible, are built in areas away from flood plains.	Comment	N	Noted: no action required	Acknowledged.
C164	R53	A concern is that the risk of flooding to Littlehampton seems to be shown as only from the river and sea at the front of the report but refers to 'wet spot' flooding in Fig 5. Littlehampton is at risk of surface water flooding as was demonstrated in 2012. The drain system is not well maintained, many get blocked up easily.	Specific area	N	Content already included	Page 27 shows the properties at risk from surface water and those at risk from rivers / sea. Both are significant risks in Littlehampton, as it shown in figure 5 and written in the Chichester District summary on page 31.

C165		The serious risks from house building on flood plains should be far more prominent. Even if this falls outside the remit of the Local Strategy it should be an area of concern as if this continues it will have a serious impact over time on the existing built up areas. No building on flood plains should be allowed and this should be argued for much more strongly.	Comment	N	Outside of Strategy Scope	For information with regards to the planning process in relation to flood risk, the Environment Agency provide technical advice to ensure that new development complies with all relevant policy and guidance, and that any assumptions made are reasonable. The District or Borough Council are responsible for granting or refusing planning permission, taking into account the guidance given to them by the Environment Agency. The council's engineers also have a role in checking the designs.  Ultimately, however, it is the responsibility of the developer and their flood risk consultants to design a system that functions correctly, and does not increase the risk of flooding to third parties. The industry standard (also outlined in the Technical Guidance to the National Planning Policy Framework) is for surface water systems for new development to contain the 1 in 100 year storm event plus a climate change allowance, without causing flooding off site.
C166		Another area of concern is the increasing number of front gardens being concreted over to be made into car ports despite using porous surfaces is also having an impact with regard to surface water. This issue should also be addressed before the situation becomes critical.	Comment	N	Outside of Strategy Scope	Currently, the planning department use the Permitted Development Order to oversee the covering of permeable surfaces with impermeable surfaces. Permitted development - that is development with automatic permission, is allowed regarding paving if less than 5 square meters in area. If over 5 square meters, the owner does not require permission either, if they drain the impermeable area to a permeable surface. There is therefore a requirement to deal with adding impermeable surfaces to land, but there does not need to be any engineering or supporting maths to show it is adequate in any way. For more information, the planning portal 'portal interactive house' page, is a good place to find out more on what you can and cannot do as a property owner.
C167		You may or may not be aware that the East bank of Littlehampton will be undergoing some major structural changes within the next 6 months –ish on its Flood defences . All this work including raising east bank wall , and making promenade for walking and dinning is great and a massive positive step forward. However the biggest problem is that know one seems to be think about or supporting the west bank at Littlehampton	Specific area	N	Local Issue	The Environment Agency is the responsible authority for coastal and estuary flood risk management, having powers to undertake work. While the coastal defences on Littlehampton's East Bank are privately owned, the EA is leading on the project as the countries competent authority. There is a partnership contribution arrangement for funding of the East Bank from riparian owners and risk management authorities. The funding of the West Bank requires a similar arrangement.
C168	R54	Q1 Where is the flood risk within west Sussex ? Answer; Rope walk , west Bank , Littlehampton.	Specific area	N	Content already included	This area is represented within the Littlehampton wet spot.
C169		Q2 What should we invest in ? Answer ; to consult with the residents and business's , landowners and to discuss how you intend to alleviate the flood risks .	Comment	N	Noted: no action required	Consultation on the proposed work programme, and proposed flood risk reduction measures, is taking take here as part of this consultation. Projects on the work programme will have their own consultation period before build.
C170		Q3 Where should we invest ? Answer ; Rope walk , west bank. As I stated earlier within this email the east bank is having its flood defences done. However west bank is not , with high tides and added pressures of rising tides due to possible future flood waters coming down the arum and spring tides west bank is under serious threat of flooding more so now than ever before . Now with the new flood defences being installed later this year and the proposals afoot to narrow the river Arun's mouth this will have a major detrimental effect on west bank .If the current very limited flood defences that are in place to protect the business's do not hold then rope walk, its business's , its residents are going to be under some seriously deep flood water.	Specific area	N	Local Issue	The deteriorating defences will need to be addressed in the short to medium term future, and improved to the new level of predicted sea level rise. The way that projects are funded means that a relatively small contribution from central Government will be made to the defence on the West Bank. The partnership contribution arrangements will be key to the future improvement made to the West Bank.
C171	R55	I write to you in desperation. On 11/6/12 my building flooded (2 semi detached properties) in Hook Lane, Rose Green, the first time in over 60 years of local knowledge (parts of property over 200 years old). As Hook Lane Rose Green was exceptional nothing has been done. My neighbours and I had to leave our properties for over 5 months for repair. W.S.C.C. proved twice that the mains drain outside our properties is badly blocked but we are at the bottom of the pile to get it cleared as we are just one building at risk. On Saturday 24/8/13 we had intense rain for a couple of hours and my conservatory re-flooded. Over the last 15 months I have begged you to clear the drains to no avail. We are scheduled to be cleared within 2 years of 11/6/12 so there is plenty of time to go. I am now using my own money to have gully's, soakaways and sump pumps put in to help me. As we are just one property we appear to have no voice. Can something be done please before we are re-flooded again? I look forward to hearing from you, Sue Glover	Specific area	N	Local Issue	Drainage improvement works have since been completed on Hook Lane.

C172		We looked at the West Sussex Work Programme and found no mention at all of Tasman Close and Rustington and our beach located outfall. What does that mean? As you can see, and I'm sure you know, we were on the attached Schedule - have we missed something? With respect to the Strategy Document the obvious pieces that interest us are all the ones that refer to Surface Water Flooding and the outfall problems.	Specific area	N	Local Issue	Rustington is a wet spot however individual roads will not be referred within the strategy. It may be the case that not all wet spots have projects. In many areas investigations are required first to assess the flood risk. Improvement works to the outfall at Tasman Close will be funded under Operation Watershed and therefore not shown in the works programme.
C173	R56	On Page 31 - ADC - ' tide locking and under capacity or blockages within the drainage network' ... apply. Page 37 - Sections 3 & 4 apply Page 40 WSCC- interesting points Page 44 If Rustington Parish Council had not acted as quickly and efficiently as they did, by purchasing and delivering sandbags, we would have experienced water damage. Page 45 - Strategic Leadership and Power to reduce surface and groundwater flooding- interesting insight. Page 46 - Duty to Investigate, 2nd Para- 'The process highlighted various weaknesses in the drainage management and drainage infrastructure itself ...' WS flood asset register - both paragraphs.	Comment	N	Noted: no action required	Acknowledged.
C174		The document provides a useful strategic view of the Flood Risks within the County and of the statutory responsibilities of the principle public bodies but there are a number of areas where further detailed explanation and clarification is required. Assessing Risk What is the acceptable level of risk? Flood risk within the document is assessed at a 1 in 200 year or 0.5% event in the Flood Risk Strategy yet the Association of British Insurers has stated that it requires a less than 1% event to provide cover so there is an inherent anomaly in the documents strategic overview of acceptable risk. This needs to be resolved or the maps expanded to incorporate the 1% risk alongside the 0.5% risk	Technical	N	Content already included	The mapping used to assess flood risk considers the return period and annual probability as set out on page 25. The surface water flood risk map currently does not assess a 1 in 100 year storm event. Improvements are being made to the mapping, using more return periods, this is to be release in December 2013 by the Environment Agency.
C175		Community Engagement The document makes a number of statements about involving local communities ... the document does not set out how this community engagement will operate. This should be included within the document.	Presentation	Y	Updated	This will be made this clearer in the document. Improved the section on community involvement, and added a separate section on community and public involvement. The main routes in are through the National Flood Forum, to check if a Local Flood Action Group existing in the area, contact the Communities and Economic Development Teams within West Sussex County Council, or, contact your local Parish Council to offer ideas or your services.
C176	R57	Sustainable Drainage Systems (SuDS). The document does not seem to recognise that SuDS are not a universal solution and will not work where the ground water is near or at surface level yet they continue to be promoted as an effective solution. It would therefore also be helpful for clarification of where accountability and the liability will lie in the event of SuDS being approved where they are clearly ineffective and result in additional flooding, damage and increased insurance. It would be helpful if these points were acknowledged and clarification given on how the approval process will work. If the County Council are responsible for the maintenance of SuDS then this would seem to carry a considerable risk that public authorities will pick up a significant long term liability.	Technical	Y	Updated	Added some additional detail in the SuDS section cover the readers' comments. Correct SuDS techniques need to be employed to suit local drainage conditions
C177		There is already evidence that planning applications are being granted by the District Council without effective knowledge of the impact of ground water flooding and without enforcement of conditions. The document contains a passing reference to planning being undertaken by District Councils (Town and Country Planning) but it fails to provide a strategic view of how planning policy and decisions might proactively seek to reduce existing and future flooding problems. Some of the sites identified in Aldingbourne, Eastergate and Barnham parishes have been flooded 3 times in the last twenty years and some sites experience problems (e.g. with foul water) whenever there is heavy rain. This creates misery for householders and difficulty selling homes.	Comment	N	Outside of Strategy Scope	For information with regards to the planning process in relation to flood risk, the Environment Agency provide technical advice to ensure that new development complies with all relevant policy and guidance, and that any assumptions made are reasonable. The District or Borough Council are responsible for granting or refusing planning permission, taking into account the guidance given to them by the Environment Agency. The council's engineers also have a role in checking the designs.  Ultimately, however, it is the responsibility of the developer and their flood risk consultants to design a system that functions correctly, and does not increase the risk of flooding to third parties. The industry standard (also outlined in the Technical Guidance to the National Planning Policy Framework) is for surface water systems for new development to contain the 1 in 100 year storm event plus a climate change allowance, without causing flooding off site.

C178		With climate change possibly bringing wetter winters we expect, for example, to see a strategy of: avoiding development which could reasonably be believed to potentially impact on or exacerbate flooding in areas of known flood history, unless it can be shown there is no practicable alternative site, and requiring developers to set aside sums to indemnify businesses and householders for the costs of remedial works and higher insurance in the event of future flooding if development is permitted in these areas, alongside provision of flood risk management schemes such as SuDS.	Comment	N	Noted: no action required	This view is supported by West Sussex County Council. Sustainable drainage is promoted within the county, as are SuDS, and the need for developers to build in drainage to designs from conception.
C179	R58	I would like to ensure that three regular flooding points on the A259 in Southbourne Parish are included in the flood strategy. These points are :- i) at the roundabout adjacent to St John's Church, Southbourne ii) adjacent to Chichester Caravan supply shop, Nutbourne iii) adjacent to the Esso garage in Nutbourne	Specific area	N	Local Issue	Passed comments to the local drainage engineer in Chichester District so that they are aware of this detail. The drainage engineers will review the surface water flood risk map in the future.
C180	R59	1) Action Plan Spreadsheet Although listed under your references as Shoreham & Lancing area, I feel Lancing should be listed in its own right as an area on your action plan spreadsheet. These are two quite discreet areas:- - Lancing has flood plain groundwater and surface water issues because of lack of fall across the flood plain in the Lancing/Shoreham Gap. From the Manor Roundabout to the Shoreham tidal sluices, the fall is only 1 in 2000 across that 2 mile stretch compared with the ideal norm of 1 in 100. Most of the area is rated by the EA as a 1:200 risk of river and coastal flooding but a 75% risk of surface and groundwater flooding.	Specific area	N	Content already included	The flood risk in Shoreham and Lancing are linked by the floodplain, the coastal and river risk, meaning that they are part of one flood cell and often assessed together. It is acknowledged that the surface water and ground water risk in Lancing could be separated and assessed separately, however, in terms of investment, being linked to Shoreham does not in any way hide the risk. The Appendix D work programme (available on the West Sussex County Council website) shows that the North Lancing Surface Water Management Plan (SWMP) is a priority for future funding. The SWNMP will identify specific improvements and different options for works.
C181		It's a highly sensitive area as was proved with the Christmas flooding event because of lack of ditch/culvert/street drainage maintenance for probably over a decade. It really does need to be treated as an individual area and should be shown as so on your spreadsheet. Another key factor, a 2 mile stretch of the A27 drains into the same ditch network as the local street drainage plus the drainage from the South Downs and all ground/surface water for the whole area generally. On the south side, I understand the A259 also drains into the through the West Beach estate.	Specific area	N	Content already included	Shoreham and Lancing have been grouped together due to their proximity and nature of flood risk from fluvial and coastal water. It is true that North Lancing is susceptible to surface water issues. A Surface Water Management Plan is on the work programme for North Lancing, to investigate and propose improvements for this area.
C182		The status of the flood plain drainage affects north, west and south of the flood plain and the Shoreham Airport directly through the Lancing Brooks network which is the drainage network common to all areas. A problem in North Lancing when there is ground water inundation can directly affect the areas south of the flood plain.	Specific area	N	Content already included	Acknowledged. A Surface Water Management Plan is on the work programme for North Lancing to investigate the drainage and propose improvements
C183		Shoreham – I'm personally not close to the issues for that location, but I understand they are far less affected by flood plain drainage issues on that east side of the Adur River. I do know that there were quite bad drainage and sewerage issues in the Christmas wet period in a number of places. I believe coastal and river flooding are more of a risk, but I'm sure Ken Argent could update you on those. So, for the above reasons, I really believe you should treat Lancing as a location/area in its own right.	Specific area	N	Content already included	Shoreham and Lancing have been grouped together due to their proximity and nature of flood risk from fluvial and coastal water. It is true that North Lancing is susceptible to surface water issues. A Surface Water Management Plan is on the work programme for North Lancing, to investigate and propose improvements for this area.
C184		2) Flood Risk Management Strategy This report only comments on flood events as at June 2012. With the severe drainage issues over Christmas both here and across the county, would it not be more relevant revise the comment to cover up until the Dec 2012/Jan 2013 when these more recent and significant flooding events took place. Your action plan spreadsheet looks like it takes this later period into account, but from the narrative it's not apparent.	Comment	Y	Updated	Included reference to the '2012' flooding where appropriate, and specifically refer to the June flooding in relation to the flood report and recommendations from it. The December 2012 event was a much smaller event, and, will not be added to the 'major' events referred to in the counties history. Under 30 houses internally flooded in December compared to over 800 in June which is the reason for the different references.
C185	3) A more detailed plan by location? I realise that the county plan is written on a 'macro' basis. Would I be right in assuming you will be doing detailed plans which 'drill down' deeper to cover the very specific drainage needs of each area? I realise that across the county, this is a large undertaking, but ultimately any agreed activities will obviously have to be managed at that level to cope effectively with each area's issues.	Technical	N	Noted: no action required	This is correct. The 'drilling down' is done by the projects on the work programme in Appendix D. They are prioritised, and will identify the specific improvement work to be undertaken.	

C186		If this is the case, for Lancing area, West Beach (south of the flood plain and represented by Geoff Patmore), North of the plain (represented by myself), west of the plain (represented by the Mash Barn Estate Association and the Barfield Park Residents) and Shoreham Airport (south east of the flood plain) – whilst they all collectively are directly affected by the drainage status across the area of the plain, they individually have different issues which are pertinent to their own area. I've seen Geoff Patmore's comments to you which highlight specific problems for the West Beach location. Area specific plans would need to cover these very local areas in Lancing to be able to manage the remedial works/strategic actions.	Specific area	N	Content already included	Acknowledged. A Surface Water Management Plan is on the work programme for North Lancing to investigate the drainage and propose improvements
C187		4) Lancing North Area (Lancing Manor SE Residents Network) On the north area which our Network represents, the main issue has been total lack of ditch/culvert/street and sewer maintenance for many years. This lack of maintenance caused the inundation of gardens/properties/sewers from just prior to Christmas and for another 6/8 weeks. What compounded it further, apart from weeks of heavy rain was the A27 improvement drainage works for 3 months pre Christmas along the very stretch which drains into the northern part of the ditch network. The outfalls serving the A27 were also blocked which caused road flooding (as you probably saw on the regional TV news). 2 outfalls from the A27 at the Withy Patch are still blocked, the Highways Agency informed at a recent meeting, which requires more investment to reroute drainage direct to the Adur.	Specific area	N	Content already included	North Lancing and Shoreham Wet Spot has been identified as a priority area and will be amongst the first areas to be considered. A Surface Water Management Plan (SWMP) is listed on the work programme to be carried out covering this area. The plan will identify the issues and investigate the drainage, suggesting options for improvements. The defined improvements can then be approved at the discretion of the Flood Group, made up of risk management authorities. Any improvements made in this area will would be carried out after prioritisation with other improvements across West Sussex.
C188		According to a Royal Haskoning report done 18 months ago, there is no quantification of the outfall volumes from this trunk road or any of the other sources which use the flood plain for drainage. I assume that on an area specific strategy you would be establishing calculations to obtain this information. Phase 2 of the programme will surely require this to create an effective enhancement to what exists presently to reduce drainage risks across the whole of Lancing.	Specific area	N	Local Issue	Acknowledged. A Surface Water Management Plan is on the work programme for North Lancing to investigate the drainage and propose improvements
C189		For our northern area and that west of the flood plain, remedial works have been progressing since March. WSCC as you know, supported most capably by the Adur technical team, have been progressing this under the Operation Watershed initiative. There are still some ditch lengths to desilt and still some problems of access to overcome which Ken Argent can advise upon. The current deadline for completion looks like the end of September. Hopefully, we will not be experiencing this Winter what we experienced last.	Specific area	N	Local Issue	Acknowledged
C190		4) Missing Stakeholder Mention I would say that in your Action spreadsheet, although mentioned in the narrative, I see no mention of Southern Water. Like the Highways Agency and the EA, they are a key stakeholder on the drainage front in Lancing and I'm sure elsewhere. For instance, here in north Lancing over the Christmas event we had loss of sewerage with inundated faulty sewer runs. As agreed with WSCC, Southern Water took the lead to tanker for 6-8 weeks to contain the severe drainage problem. Their excellent support avoided an out and out absolute disaster for the residents. They have since repaired 70% of the faulty sewers to prevent future inundation. I'm sure the same applies elsewhere and they should appear on the spreadsheet as do the other two mentioned above.	Presentation	Y	Updated	Improve the Appendix D (available online at the West Sussex County Council website) work programme to account for the work that Southern Water have already completed. The Southern Water representative on the project team will also review the work programme to ensure that it is a proper and accurate representation of their programme.
C191		The Flood Risk document was clear and I found it straight-forward but I am unclear what will actually be done to reduce the risk from flooding and when it will be done.	Presentation	Y	Updated	An Action Plan has been included. The work programme in Appendix D (available online at the West Sussex County Council website) is the list work to be undertaken in the future to reduce or investigation flood risk. The work and wet spots are being more clearly prioritised. The priority will be chosen by the risk management authorities based on the data, past floods and the existing programme of work.
C192	R60	The document was useful in identifying areas at risk. However I would like to have seen more data about areas that area at greater risk than the 1 in 200. I live in Barnham and therefore am very much aware of the problems. Our road often acts as a storm drain clearing runoff water and the contents of surcharging sewers. This happens when we experience very heavy rain or in winter with heavy rain when the ground is already saturated.	Technical	N	Outside of Strategy Scope	The next generation of mapping will give you the detail that you request. This will be released by the Environment Agency later in the year (December 2013) on the EA website. It will give a breakdown of the different zones of risk, for smaller more regular flooding as well as the larger event that has been used in the local strategy (the 1 in 200 year event). The newer mapping will supersede the mapping used in this Local Strategy; however, the data is expected to be significantly different to what has already been mapped.

C193		One of my concerns is that Arun District Council continues to grant planning permission for development in areas that are most at risk. For example the development at Brooks Nursery in Barnham Road was allowed but no mention was made of the fact that the problem there is ground water flooding. My point is that further development will just make the problem worse and there is nothing that can be done about it if housing goes in before the infrastructure has been upgraded. My other concern is that Southern Water have known about the problem with the sewers in this area but seem incapable of preventing ground water infiltrating the system and causing sewerage flooding. One children's playground in Barnham experiences this on a regular basis. Although I find the document interesting and useful for data I don't believe it will be able to reduce the risk of flooding in my area.	Specific area	N	Outside of Strategy Scope	For information with regards to the planning process in relation to flood risk, the Environment Agency provide technical advice to ensure that new development complies with all relevant policy and guidance, and that any assumptions made are reasonable. The District or Borough Council are responsible for granting or refusing planning permission, taking into account the guidance given to them by the Environment Agency. The council's engineers also have a role in checking the designs.  Ultimately, however, it is the responsibility of the developer and their flood risk consultants to design a system that functions correctly, and does not increase the risk of flooding to third parties. The industry standard (also outlined in the Technical Guidance to the National Planning Policy Framework) is for surface water systems for new development to contain the 1 in 100 year storm event plus a climate change allowance, without causing flooding off site.
C194	R61	On the 24th of August some homes here were flooded for a second year running after one and a half hours of rain. In your report, there is very little mention of Littlehampton and no works are planned for this area at all. However, many residents suffered in the flood event here in 2012 and your register has over 2,800 residents of Littlehampton at risk from surface flooding. This week the local Gazette reported an up-grade will begin to the pumping station near the Coastguard Tower. This is meant to help clear these extreme rain events more quickly. Residents and property owners are reporting to our group that these rain events would never worry them in previous years, but now the drains overflow so quickly we wonder if the water table is now much higher in the long term There are reports of Groundwater flooding coming in and this aspect is of most concern for us. This is a 'significant risk area' that has not been considered as you seem to have no proper data.	Specific area	N	Local Issue	Three projects that require funding are listed on the work programme (Appendix D, available on the West Sussex County Council website) for Littlehampton. The total cost of these projects, if funded, will approach £20 million. Three other modelling or investigation projects are also on the work programme for Littlehampton. These projects may lead to more work depending on what they recommend. Littlehampton is marked as a wet spot with significant risk of flooding (see page 27: Littlehampton wet spot, and, Littlehampton and Clymping wet spot). Together they comprise of some 2865 properties in areas susceptible to flooding. As the reader correctly states, Littlehampton is at risk from ground water, surface water, tidal and fluvial water. It is worth noting that last year saw unprecedented rainfall, and so, one would expect exceedance of drainage systems.
C195		On closer examination of your 2011 Main Flood Risk Booklet, it is evident that data is very patchy and no uniform process had taken place to record any flooding in this County The Environment Agency have very few bore holes with data here, and claim it is not a problem in this town although this statement is contradicted by Defra in 2008 who state that all of Littlehampton is a 'Groundwater Emergence Zone'. Although there should be Groundwater flood risk mapping this year by EU directive, it has not yet happened. Therefore, This report has very little relation to the reality of our situation. Large housing figures are planned on the Downs to the north of Littlehampton and we await the drainage plans for these. We think more pressure on the aquifer here is unsustainable and unsupportable. Please add a Hydrogeological Study to your plans for this area, so that we will no longer be in the dark as to the real situation for this town.	Technical	N	Content already included	Ground water is assessed in the report using the surface water flood map (as mentioned on page 29) and is addressed on page 20. Ground water flooding is difficult to map, however we do know the locations in West Sussex where it occurs regularly. There is no easy solution to ground water flooding due to its nature. Groundwater flooding occurs naturally. The Environment Agency does warn the public about rising groundwater levels and the risk of groundwater flooding (warning areas include the households at the top of the River Lavant catchment, Chilgrove, Eastdean and surrounding area). Boreholes are used to monitor water table levels.  Southern Water are responsible for approving water supply to new development. The water company will confirm whether supply and infrastructure is sufficient or will need investment. In terms of planning and new development, new development must happen, and, will be located by the planning processes in place that are controlled by the District and Borough Councils. The Strategic Flood Risk Assessment document was undertaken to ensure new development is built in safe areas.
C196	R62	A I note reference working together as a collective and comments like prevent inappropriate development etc, yet when it comes to "when building on a flood plain or in an area susceptible to flooding .... this Strategy will guide Planning Authorities to seek contributions from developers. Does this mean principles are wavered in the light of potential incoming cash?	Language	N	Noted: no action required	New development must fully comply with National Planning Policy and any Local Planning Policy, to be acceptable. If proposed development does not comply with National and Local Planning Policies it will be refused planning permission (regardless of any contributions offered). There are strict rules and guidelines that must be met to ensure that contributions towards these schemes are appropriate
C197		B I also note it clearly states it will not be possible to reduce flooding risk to every property! Also that WSCC will use SUDS and develop is towards WSUD in the longer term. Surely SUDS plus existing gravity fed water courses fully restored will have a greater immediate impact than some five year strategic idea.	Technical	N	Content already included	It is the intention that SuDS together with water courses will provide improved drainage to all areas. The SuDS part of the Floods and Water Management Act 2010 is not yet enacted. West Sussex are working jointly with other neighbouring authorities to promote SuDS with developers.
C198		C I note that WSCC Strategic Flood Risk Plan refers to management groups and management boards, neither of which make any reference to Parish representation from the community. Though it has to be said there is actually one reference on one line in the whole 67 page report of the existence of Parish Councils.	Comment	N	Content already included	Parishes are mentioned on page 29, 43, 44 and 67. Additional information on the representation that parishes offer to these groups will be added, and, that the Parish plays a pivotal role in arranging grass roots projects and making the link between organisations and the public.

C199	D I note that in Chapter 2 IDB's have a duty towards sustainable development. How do you propose to police this and police riparian owners' responsibilities when there is no mention anywhere of flood wardens or water bailiffs?	Comment	N	Noted: no action required	The risk management authority would get involved after knowledge has come to light about a blockage or other problem with a water course owned privately. The authority would not necessarily pro-actively walk water courses, other than to undertake scheduled maintenance of assets. Risk management authorities have permissive powers to undertake works for flood risk management purposes. The same authorities do not have duties to police ditches and channels pro-actively. Riparian ownership responsibilities will be made clearer in the document. Enforcement teams exist within the County Council to take action as a last resort, if all communication and processes has failed. It is usual for an issue to reach this stage. Flood Wardens are involved via the Multi Agency Flood Plan and local emergency response plans (owned by Parishes and Town Councils) that exists across the County, they are generally members of the public that would play an important role of disseminating flood alerts or warnings within a community to ensure other householders are aware.
C200	E The Flood Strategy talks about developing a local Asset Register right up until 2016. As you say, you started it in April 2011, what is the percentage progress to date?	Explanation required	N	Outside of Strategy Scope	The Flood and Water Management Act 2010 enacted this part of the legislation in 2011, so, West Sussex was required to produce it in 2011. The work is currently completed on an excel spread sheet, however the national computer software will not be available until 2016 when it will be free of charge to the County Council. The data will then be transferred over. It is a living database that risk management authorities can add to and interim software solutions are being considered.
C201	F The document also talks about new development, and achieving water sensitive urban design, but this is in the long term. Are all current developments still SUDS compliant? And following this, why aren't Parish Councils involved in the approval of this in their own community in respect of flooding?	Technical	N	Outside of Strategy Scope	Until the SuDS section of the Floods and Water Management Act is enacted, SuDS are not a requirement in any development; however the County Council is working with neighbouring authorities on a developers guide to encourage SuDS pro-actively before the legislation comes in. In some developments developers are already using SuDS.
C202	G Your document says that current planning laws direct planning away from flood risk areas and make reference to a sequential test and an exception test. So how will you therefore demonstrate that development permitted in a flood risk area provides sustainability benefits to the community? Can you cite such an example?	Technical	N	Outside of Strategy Scope	For information with regards to the planning process in relation to flood risk, the Environment Agency provide technical advice to ensure that new development complies with all relevant policy and guidance, and that any assumptions made are reasonable. The District or Borough Council are responsible for granting or refusing planning permission, taking into account the guidance given to them by the Environment Agency. The council's engineers also have a role in checking the designs.  Ultimately, however, it is the responsibility of the developer and their flood risk consultants to design a system that functions correctly, and does not increase the risk of flooding to third parties. The industry standard (also outlined in the Technical Guidance to the National Planning Policy Framework) is for surface water systems for new development to contain the 1 in 100 year storm event plus a climate change allowance, without causing flooding off site.  An example of sustainable drainage employed in new development is the use of dual function SuDS, that for 99 per cent of the time are local open space or amenity areas but contain run-off during storms.
C203	H Under the heading "Response, Rescue and Recovery", why do the triggers for multi agency response not recognise potential input from Parish Councils? Basically I see this as WSCC trying to control and orchestrate much but without making reference to their first line troops, namely Parish Councils.	Comment	Y	Updated	Added Parish and Town Councils to list of those involved in the rescue and response section. Promoted the Parish and Town Council section on page 44 in the document to make it feature more prominently. The Parishes play a key role and make a significant contribution in the coordinated response and support for local residents.
C204	I Please note in Chapter 3, page 54, there is a grammatical error on the line which commences "using this funding process, some project will fully funded ....."	Language	Y	Clarity/Language	Acknowledged.
C205	K I notice from the seven page Work Programme that within Chichester, namely the Parklands area, and Fishbourne, specific packages of work are priced and scheduled, but this information has never been conveyed by WSCC to FPAG (Fishbourne Parish and Parklands Residents Association Flood Prevention Action Group).	Specific Area	N	Local Issue	The West Sussex Flood Report, publishing in response to the June 2012 floods, put forward a list of actions to be undertaken when funding was available. These actions in Appendix D, the work programme, are taken from the Flood Report, produced by West Sussex County Council, in partnership with other risk management authorities. It may have been the case that the FPAG were not directly contacted about these actions. Please contact the Drainage Strategy Team if you would like to discuss further.

C206		J The term Watershed Funding appears for the first time in the entire report at Fig 10 on page 54, but the term has never been used before and explained.	Presentation	Y	Updated	Acknowledged. I will add this to the glossary of words
C207	R63	We believe only showing culverts greater than 50m does not show the whole picture. There are also river obstructions that are not shown on the map.	Technical	N	Outside of Strategy Scope	Acknowledged. The detail of analysis that can be achieved with a national scale model is limited. The culverts and lack of detail sub 50m also limits the picture of the cause and real situation. In order to assess the whole country, a broad brush approach is required to modelling, in order to assess a wide area. This data is the best currently available. This will naturally be blurry and miss detail in some places. The cost of micro model for every location would be too high, however, improved modelling is underway and will be released by the EA later in 2013.
C208		The map of Angmering could be made to include the A27 and associated pinch points under the road	Specific Area	Y	Updated	Re-scaled the map of Angmering to include the A27.
C209		The causes of flooding in Angmering need to be fully understood by the Council	Specific Area	N	Content already included	An investigation is currently on the work programme (for £750,000) for Angmering to find the best course of action regarding flooding. This will inform West Sussex County Council as to the best course of action.
C210		The mapping seems to show inaccuracies regarding the Black Ditch, and marks the channel as a culvert in one section.	Specific Area	N	Content already included	The strategy uses the best available county wide data at the time of production. The culvert will be investigated and updated if appropriate.
C211		Significant drainage works are underway on the A280, Angmering seek assurances that the problem is not being moved downstream to Angmering	Specific Area	N	Local Issue	The recent work carried out on the A280 will not put additional water into the local watercourses.
C212	R64	Regarding Littlehampton West Bank, most of our commercial property is below mean high water and would flood twice a day were it not for the flood defences. The defences are woefully inadequate and consist of a series of wooden boards silted into concrete posts either side to form a simple king pile and slat arrangement.	Specific Area	N	Local Issue	The Environment Agency (EA) has permissive powers to undertake work on the coast, estuaries and main rivers to manage flood risk. The tidal river flood defences on Littlehampton's East Bank are privately owned by a number of different parties. The EA lead on this project as the country's competent flood risk authority. There is a partnership contribution arrangement for funding of the East Bank from Arun District Council and West Sussex County Council. The funding of the West Bank will require a similar arrangement.
C213		Last year we flooded as the defences were overtopped and one was removed by some fishermen to make moving their nets to their vessels easier.	Specific Area	N	Local Issue	-
C214		The regeneration of the west bank is critical to the existing homes and businesses as I may help fund the flood defences cost, until then this area needs to be assisted in carrying out its own maintenance and improvements. Over 130 homes and businesses in Rope Walk alone will be destroyed if there is tidal flooding and this needs to be reflected in the numbers	Specific Area	N	Local Issue	The deteriorating defences on Littlehampton's West bank will need to be replaced in the future to meet the required standard of protection. The way that flood defence projects are funded means that only a relatively small Flood Defence Grant in Aid contribution from central Government can be expected. This sum is calculated on the lifetime benefits of the project. Achieving partnership contributions will be key to the future improvement made to the West Bank.
C215	R65	I have looked through the report on the flooding last year, but I do not see much information on how Southern Water managed the situation after the rain had fallen. I live near the junction of Kingsway and Queensway in Aldwick. There the surface water drainage flows to a local outfall on the beach. Surprisingly that system coped well with the heavy rain, but later water starting welling up from the Southern Water sewers. Southern Water have a pumping station on Kingsway, nearer Barrack Lane and my first thought was that the pump there had gone out of action. When I put this to Southern Water, they replied that fortunately none of their pumps had failed.	Specific Area	N	Local Issue	Much of this information is in the 2012 flood investigation report published on West Sussex County Council website. With regard to the wastewater pumping station there were no issues and it performed as it was designed during the June 2012 flooding. The station had been refurbished prior to the June 2012 flooding. The work installed two new dry well submersible pumps, and replaced the older style spindle pumps.
C216		Their pumps are sophisticated and the rate of pumping can be varied. However when I suggested that they had cut back on the rate of pumping at Kingsway to favour other parts of their system, they neither confirmed nor denied it. I take it therefore that this is what happened. In other words the flooding on Kingsway was the result of decisions by Southern Water. This may have been unavoidable, under the circumstances, but firstly it should have been recorded in the flood report.	Specific Area	N	Local Issue	Much of this information is in the 2012 flood investigation report published on West Sussex County Council website. With regard to the wastewater pumping station there were no issues and it performed as it was designed during the June 2012 flooding. The station had been refurbished prior to the June 2012 flooding. The work installed two new dry well submersible pumps, and replaced the older style spindle pumps.

C217		Secondly it would seem that Southern Water may have been unaware of the consequences of lowering the rate of pumping at Kingsway. Thirdly, if that is so, then Southern Water does not have a sufficient understanding of its own system – the precise levels etc - and how it reacts to very heavy rain and varying rates of pumping. Fourthly there ought to be mechanisms to prevent water flowing down the sewers to lower ground and there bubbling up from the manhole covers.	Specific Area	N	Local Issue	Any suggestion that the flow rate was down rated to protect other parts of the system is unfounded and is not practice undertaken by Southern Water. The only issues that were reported to us during and after the event in Kingsway, were unusable sanitation and overflowing manholes in the highway. Given the amount of rain that fell during that period, it is inevitable that there will be some hydraulic overloading of the sewerage system.
C218	R66	Why is there a difference between the March 2010 fact sheet numbers at risk in West Sussex, and, the figures quoted in the local strategy document. The figure is nearly four times that 2010 estimate. 108,700 properties vs. 28232 properties	Explanation required	N	Content already included	The assessment made in 2010 by the Environment Agency did not count properties at risk from surface water flooding (it just counted properties at risk from the rivers and the sea). Since 2010 surface water flooding has been modelled and added to the total figure. There is a technique used to count address points within the flood maps. This technique counts the properties as described on page 25 and 29. Currently this count is the best county wide assessment. Improvements to the models are being made all the time, new generation mapping will supersede this mapping in December 2013 when the Environment Agency release the latest maps. The new maps will further refine the maps in this strategy, although the changes in many places will be minimal.
C219		Page 16 states that over 90,000 residential properties are at risk. That is over one in four of the total of 346,860 properties in West Sussex. The 2010 figure was only 8%. Some explanation of the figures is required.	Explanation required	N	Content already included	Nationally, the figure is 1 in 6 properties at risk of flooding, or 16.67% of properties. The figure for West Sussex is therefore more than average when compared to the rest of the country. The coastal, estuary, river, groundwater and surface water risk described in the report supports this level of risk in West Sussex. The numbers include those properties above ground level, flats, that are indirectly affected but that would not have water in their homes.
C220		Forecast of increased population and properties: startling statement in the SEA page 43, the South East Plan allocates 74,600 homes per year to be built in West Sussex. There must be some error here due to the related population growth figure that would come with this.	Language	N	Clarity/Language	I believe this to be a typing error. Acknowledged. I will make this edit to the final document.
C221		It does seem that the strategy could give greater weight to Building Regulations and their role in flood prevention. Page 12 needs to be improved to reflect Building Regulations role, and, a mention on page 42/3 as a function of second tier authorities. Building Regs stems from the Buildings Act 1984, separate to the planning function. Given this role and these standards for West Sussex their local interpretation and enforcement would seem to be important as part of the overall strategy.	Technical	Y	Updated	Acknowledged. There is an additional paragraph to add additional information about Building Regulations on page.
C222		Flood risk to infrastructure: Some emphasis should be given to those private individual properties that will be protected in the public interest. While individual properties may not attract funding, individual building may - hospitals, infrastructure, railway etc. The SEA gives greater attention to this than the main document. The SEA states more about hospitals than the main report. Importance of the Worthing Hospital and investment in protection is highlighted, a comparison with Arundel's defence investment is made.	Comment	Y	Updated	Additional information in Chapter 3 to the section on funding, and highlight that individual public buildings are assessed differently to individual private properties. Hospitals, schools and other critical infrastructure can attract significant contributions from central Government, based on the damages that the asset could incur over a period of time.
C223		Railways and Roads : The SEA and not the strategy points out the effect of floods on railway stations. A mention of the importance of the Pulborough station is surely worth while as the lines cross the flood plain on the causeway. Landslips following heavy rain can also cause road and rail disruption. Roads are mentioned in the SEA but perhaps the M23 deserves a mention in the Strategy, as it flooded in Dec 2008, when three railway stations in the Crawley area were also shut.	Comment	Y	Updated	Acknowledged. Importance of critical infrastructure included within the strategy.
C224		Water Bodies representing Risks : As well as the risk of flooding from large reservoirs page 22) perhaps a mention should be made to the risks from other smaller bodies of water of semi-static water such as former mill and hammer ponds, decorative dams and local natural ponds. There are a fair number of these in the county and some present risks, not least because there are dwellings on the dry side of some of these. Presumably these are the responsibility of the land owner and will be early candidates for designation	Comment	Y	Updated	Acknowledged. Inclusion of smaller water bodies within the strategy to be updated.
C225		Wet Spots : the approach is clearly very useful as page 29 indicates the details in figure 5 (pages 25-28) and the detailed wet spot maps (Appx B) represent a great deal of work which all will find very valuable. It is worth noting that wet spots vary greatly in size, but the diameter of the spots on the map on page 24 does not reflect this. Worthing has one large wet spot for 10,400 properties, more than the whole of Chichester District combined (6868). It is misleading to suggest that the wet spots are weighted in Chichester given that Chichester is 6th of the seven districts in terms of wet spot numbers at risk.	Presentation	Y	Updated	To be reflected in the local strategy.

C226		Nearly half of all wet spot properties (48.5%) fall within just four wet spots. Worthing and Crawley contribute to this weighting. The weighting should be mentioned with the strategy.	Presentation	Y	Updated	To be reflected in the local strategy.
C227		The total of properties at risk on page 16 is 108,700 so presumably 45% of at risk properties are not in Wet Spot and 49 of the 53 wet spots have, in total less than 30% of the total properties at risk. Page 29 says the wet spots identified across the county are linked to actions in the work programme. But the work programme needs to reflect adequately the incidence of risk, as defined on page 15A.	Technical	N	Noted: no action required	The number and location of projects identified on the work programme will not necessarily match the risk as projects will not necessarily cover the whole wet spot area. In some areas there are no projects or investigations. This will highlight to risk management authorities where future investment should be made.
C228		Arundel defences are estimated at 9.2 million to benefit 192 properties, so, at 70,000 cost each. Expenditure on this scale will not necessarily map to the larger wet spots, these numbers will make the cost of works inconceivable in Crawley or Worthing for example.	Comment	N	Noted: no action required	Cost per home statistics vary massively between risk management authorities, depending on the type work being undertaken. For major sewer improvements the cost can be as high as £200,000 per home. On the other end of the scale, property level protection averages at £4000 per property (flood doors, water proof air bricks etc). Flood Warning for properties is a cheaper option still, when other management options are limited. This £70,000 per home calculation at Arundel will not necessarily map over to other locations.
C229		Number of bodies involved : There does seem to be a large number of organisations involved. It is not clear how the LFRs (page 22) and the LF Groups (page 29) fit in to the picture, though the position of IDBs (page 10,12) is being clarified.	Comment	N	Noted: no action required	It is acknowledged that the Flood and Water Management Act 2010 does define responsibilities better than before, however there are a number of risk management authorities. Working together is paramount, and the work programme and quarterly meetings between all authorities will allow close working. With everyone involved and signed up, West Sussex can make the process work successfully.
C230		This multiplication of agencies leads to many plans and strategies . For instance the glossary states the CFMPs give an overview of the flood risk across each river catchment, while page 50 states that there are 121 river catchments in West Sussex. If FMPs are prepared for each river catchment that is a very large body of work indeed. Is some simplification possible within the that statutory framework.	Comment	N	Outside of Strategy Scope	Streamlining and simplifying across organisations is happening. The work programme (Appendix D) is beginning to do this by bring together different work streams into one list. The European Regulations are also being used to unify our joint approach, as work needs to be collectively reported to Europe.
C231		MINOR DRAFTING POINTS - pages 6 and 7 of the feedback, contains amendments to the document itself.	Language	Y	Clarity/Language	Acknowledged and kindly received. Included in edits to the final document.
C232	R67	I continue to be particularly concerned about the flood risk to Angmering where I have lived for many years. Angmering has suffered devastating flooding in the past and is subject to significant development pressures. Thus my response will include reference to West Sussex County Council's (WSCC's) report of November 2012 into the June 2012 flooding, the Strategic Flood Risk Assessment (SFRA) by Arun District Council (ADC), the Lower Tidal River Arun Strategy (LTRAS) by the Environment Agency (EA) along with my personal experience.	Specific Area	N	Local Issue	-
C233		I am pleased that, on your first page numbered 15, you describe the equation that flood risk equals the likelihood of flooding multiplied by its impact along with a description of the source – pathway - receptor approach. It is important to appreciate and remember this concept and all new development should be located in the safest possible locations to avoid flood risk.	Comment	N	Noted: no action required	-
C234		On your second page numbered 15 I would have liked to have seen mention of Angmering included for 2012 along with a further mention of Angmering with regard to the dreadful flooding of April 2002.	Comment	N	Noted: no action required	Unfortunately it is not possible to include all affected areas in each description of a particular flood event. Angmering is noted as being at risk and is one of the ten priority wet spot areas.
C235		On page 22 under main river flooding you mention the LTRAS being undertaken by the EA. It is essential that WSCC and the EA work together and involve the community through Angmering Parish Council (APC).	Comment	N	Noted: no action required	Comment passed to the LTRAS Environment Agency lead in the Partnership and Strategic Overview Team.
C236		On page 30 you explain the numbers of properties at flood risk on your "wet spot" maps. On page 35 you present these figures for, I believe, England as a whole. It strikes me that, from your information, in Angmering surface water flooding is a much greater relative problem than in England as a whole. Is the information for these two locations (Angmering and England) compiled in the same way?	Specific Area	N	Noted: no action required	The properties at risk counts use the same mapping and are taken from the same model. Relatively Angmering does have a high surface water risk

C237	On page 36 you mention a "catchment and coastal cell approach". It is most important that you do this for Angmering which means considering the whole of the Black Ditch catchment. You also say that "Authorities must seek to avoid passing risk on to others without prior agreement." I am aware that Clapham / Patching experienced flooding problems in June 2012. I note that drainage works have been recently undertaken on the A280 there and would ask whether these works might increase the rate of flow downstream. If these works do increase rates of flow downstream they could further increase the flood risk to Angmering.	Specific Area	N	Noted: no action required	The recent work carried out on the A280 will not put additional water into the local watercourses. A flood risk investigation study is proposed at Angmering, and is on the work programme. It does not yet have funding but the Environment Agency are keen to progress work here. Angmering is also a priority wet spot for West Sussex County Council.
C238	On page 37 you mention multiple benefits. In considering the major flood risk to Angmering I formed a view many years ago that the most economic solution would be the provision of flow balancing through upstream storage. This is based upon the conclusion that the cause of the problem is that the culverted section of the Black Ditch has inadequate capacity to convey the water that flows from upstream and off the land more locally. This would then mean that even if the rates of flow from Clapham / Patching do increase they will not increase flood risk to Angmering and downstream of Angmering.	Specific Area	N	Noted: no action required	The flood risk at Angmering would be reduced if the arrival of surface water and fluvial water at the culvert mentioned was staggered. The fluvial flow and surface water flow together can exceed the capacity. Partnership funding, and potentially use of the active communities fund via West Sussex County Council, could help initial progress of the project at Angmering. The Environment Agency would lead the project, listed on the work programme, although contribution is not yet unknown from central Government (Flood Defence Grant in Aid). For more detail about the project please contact the Environment Agency West Sussex Partnership and Strategic Overview Team.
C239	On page 44 you discuss the responsibilities of riparian owners. I feel you should also mention the responsibilities of what might be called occupiers of land and locally I have in mind highway authorities. A textbook such as "Flood Defence Law" by William Howarth provides information on this and I have particularly in mind the cases of Bybrook Barn Garden Centre Ltd v Kent County Council and Potter and Others v Mole valley District Council and Another. I would assume that this is the basis upon which WSCC could ultimately require the Highways Agency to resolve the problems experienced north of the A27 trunk road at Hammerpot associated with the culverted ordinary watercourse under the A27. I am not certain what works are being undertaken there but it does seem to me that the issues, although a bit complex, are pretty obvious.	Technical	N	Outside of Strategy Scope	West Sussex County Council are currently working with the Highways Agency to resolve this issue.
C240	With regard to the problems in the village centre along Water Lane from Dappers Lane through to the village hall I believe, as I said above, the problem is the inadequate conveyance capacity of the culvert system that is substantially under the highway. The water then escapes from the culvert through manhole(s) and flows along the road surface. The highway in question is the responsibility of WSCC and I would expect WSCC as the local highway authority to address this issue. Rather than enlarge this culvert I believe the most economic solution is to provide flow balancing through upstream storage as mentioned above which would achieve multiple benefits. I attach two photographs of water escaping from a manhole on the culvert in Water Lane in June 2012 and another showing Water Lane flooded in April 2002.	Specific Area	N	Local Issue	Angmering is one of West Sussex County Councils priority wet spots and as a result will be amongst the first considered as the first joint programme (of all risk management authorities) progresses. Options can only be considered after an initial study has been undertaken. Upstream storage is likely to be one of the options, as well as diverting excess flows elsewhere, or modifying the culvert arrangement. It is difficult to foresee the outcome of this investigation, however the ultimate decision on whether to progress with an option will rest with the Flood Group, the group of different risk management authorities. The joint funding, at the time of writing, has not yet been agreed, but to cost benefit for a project does look to stack to stack up. The authorities will be working hard to reduce flooding in Angmering and across the West Sussex on a priority basis over the lifetime of this strategy.
C241	On page 47 under ordinary water course consents you mention that Consent is refused if the works would result in an increase in flood risk. On page 48 you mention the enforcement powers that WSCC has on ordinary watercourses. On page 49 under planning control you mention that flood risk should not be increased as a result of development. I find all of this reassuring.	Comment	N	Noted: no action required	Acknowledged.
C242	On page 48 you also mention actions as a result of the June 2012 flooding in West Sussex. I have seen this report and am greatly concerned that it neither includes Angmering as a "cluster area" nor does it give adequate weight to the terrible severe and widespread flooding we suffered in June 2012 along with earlier flooding. I understand now that the number of flooding reports in Angmering that WSCC has did not reach WSCC's threshold. Is it possible to have a copy of the list of properties WSCC believes flooded in June 2012?	Specific Area	N	Noted: no action required	The June 2012 Flood Report focused on the worst hit areas. Although flooding was reported in Angmering, only 7 properties were reported as affected by flooding. The cluster with the lowest property count within the report was Barnham at 16 properties affected.
C243	The map "Angmering wet spot" shows theoretical flooding. What is particularly important to those of us who live in Angmering is the real flooding that actually happens. I would remind you that this particularly happens along Water Lane from Dappers Lane through to the Village Hall in Station Road, north of the Hammerpot and elsewhere. I feel your strategy should concentrate on those areas where there are properties that actually flood so that something can be done to reduce the risk.	Technical	N	Noted: no action required	The wet spot maps give an indication of the low spots in the urban areas, they do not outline any project boundary. The individual projects on the work programme drill down and consider the options for management. It is worth noting that whilst properties that have flooded in recent times remain a priority, there are areas at risk which have not flooded (due to where rainfall occurred) where flood risk management options are considered because of the level of potential risk.

C244		The map shows that Angmering experiences both surface water and fluvial flooding. At times one sees surface water flowing south along the surface of Dappers Lane. I attach a photograph of such flooding in April 2002.	Specific Area	N	Local Issue	Acknowledged.
C245		The particular problem that the centre of Angmering suffers from is, in my view, a consequence of inadequate conveyance capacity of culverts. On your map I think all culverts should be indicated and not just those greater than 50 metres long and that all of these culverts should be marked as "artificial obstructions" with a red dot. I suspect the length of the culvert in the Bybrook Barn case was less than 50 metres long. I think the length culverted along Water Lane and down to the village green needs to be looked at again to ensure your map is correct. The downstream end of this is behind the village hall and the upstream end is at the trash screen at the bottom of Weavers Hill. There is a length shown culverted at Avenals Farm and whether this is culverted needs to be checked.	Specific Area	N	Local Issue	The maps are unfortunately not inclusive of all culverts that exist. The mapped infrastructure of England and Wales is improving all the time however due to the nature of development and changing record management systems, not all river obstacles will be present. I have passed on your information to the relevant team in the Environment Agency who hold the data on this.
C246		Besides having a map of the community of Angmering as you have done it would be useful to also have one that includes the upstream catchment that affects us. In this way it would be clear that, depending on what drainage works have been undertaken at Clapham / Patching, they may have the potential to affect Angmering.	Specific Area	N	Local Issue	Scale of the map for Angmering changed so that a wider area is covered.
C247		Is the purpose of the Local Strategy clear? I see that WSCC has produced this to demonstrate that it is meeting its responsibilities under the FWMA2010. I would have found it much more useful if it had concentrated on real flooding numbers and not theoretical flooding numbers. As I understand it the fluvial flood outlines ignore the presence of flood risk management infrastructure. The surface water flood map outlines seem credible based upon topography but include areas I have not known to flood. Concentrating on more limited areas where there is a real, rather than just theoretical, probability of flooding would have allowed the work programme to be better targeted.	Technical	N	Noted: no action required	Prioritisation of wet spot locations and projects on the work programme will be better clarified in the published version of the Local Strategy. Areas located in mapped risk areas may only have escaped flooding due to where particular rainfall events fell, as such we consider both those areas which have flooded historically but also those with the potential to flood.
C248		Do you agree with work programme? I answer this clearly in the context of Angmering. If the real rather than theoretical probability of flooding was recorded I think the work programme would be prioritised differently. Clearly I think the problems of existing flood risk in Angmering should be addressed rapidly and not in two to five years because they have been with us for so long.	Specific Area	N	Local Issue	Acknowledged.
C249		Are there any significant flood risk areas not considered? I don't really know but as I said earlier if the document had concentrated on real rather than theoretical flood probability it could have been much more specific in communities such as Angmering.	Specific Area	N	Local Issue	Acknowledged.
C250		Is the Local Strategy easy to understand? I have some knowledge of the subject and found it quite easy to follow. We have several documents now including the WSCC report into the June 2012 flooding, the LTRAS by the EA and the ADC SFRA.	Comment	N	Noted: no action required	-
C251		Is there anything missing? As explained earlier I feel you should mention the responsibilities of what might be called occupiers of land and locally I have in mind highway authorities. I feel that the implications of the case of Bybrook Barn Garden Centre Ltd v Kent County Council could mean that some flooding problems associated with inadequate culverts could be addressed through the highway's budget. I have asked this question of WSCC previously with regard specifically to the culvert that runs under Water Lane but have not received an answer.	Comment	N	Noted: no action required	West Sussex believe the culvert to be Environment Agency responsibility, as this part of the Black Ditch is classified as main river. The investigation proposed on the work programme will study the best options for management.
C252		Overall, do you think the Local Strategy will be successful in reducing flood risk? Yes but only if it focuses on those areas where flooding is realistically likely to happen unacceptably often resulting in unacceptable flooding to people and property. It is essential that all should work together and all should meet their legal obligations and that the local community is involved because of residents' local knowledge.	Comment	N	Noted: no action required	Acknowledged.
C253	R68	Kingston Parish Council requests that a separate report on our Parish is provided instead of the Parish being split between the reports on Ferring Coast and Rife and on East Preston. A search of the document does not show any reference to Kingston at all although it is shown within the maps themselves. Please could a separate report be provided and recognition given to the Parish of Kingston which will assist our community in understanding the Strategy and its relevance.	Specific Area	N	Local Issue	The parish of Kingston is bordered by other wet spot locations - Angmering, East Preston and Ferring. The level of risk in Kingston is assessed as being outside of the top 50 highest risk locations in the County.