



Ponteland Flood Alleviation Scheme: Consultation Feedback Report

V1 May 2019

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1. Introduction

The purpose of this consultation was to gather feedback from the public on options for reducing flood risk as part of the Ponteland Integrated Flood Alleviation Scheme.

This first round of consultation had three aims:

- to give members of the public who live, own land or property, work in, or regularly visit Ponteland the opportunity to share their views on the list of potential options;
- to gather information about flooding in Ponteland with us that we may not already have, as well as potential environmental or recreational opportunities we could provide as part of the scheme;
- to gather ideas on how we can manage various parts of the scheme such as materials management, funding and construction.

The comments received have been used to shape the development of a flood scheme for Ponteland. Our response to the comments we have received through the consultation have been included at the end of each section.

2. How we ran the consultation

We ran a formal consultation for 5 and a half weeks from 15/01/2019 to 22/02/2019.

The online consultation was hosted on our Citizen Space consultation platform (LINK), with an information document and an online survey.

We also held a public a community drop-in event from 2:30 pm to 6:30 pm on Wednesday 23 January 2019 at Ponteland Memorial Hall, Ponteland. The event was attended by over 40 local residents of Ponteland.

Hard copies of the questionnaire were also distributed at the community drop-in event with postal return envelopes, and responses were accepted by email.

We promoted both the online consultation and the public community drop-in event using a number of methods including:

- a letter drop to over 400 properties at risk of flooding in Ponteland,
- local media, which included coverage from the Hexham Courant and Morpeth Herald
- social media
- through our Environment Agency social media channels, sending promotional posters to local businesses and by notifying other stakeholders including Ponteland Town Council, Northumberland County Council and Northumbrian Water.

We received 11 replies to the online consultation. In addition we have collected comments as part of discussions with residents at the community event and also received an additional email submission.



Env Agency Yorks&NE

■ © EnvAgency YNE - Jan 30

Residents in #Ponteland have until 22 February to respond to a consultation about #flood protection options for the town to ensure the community is protected from the #River Pont and surface water flooding. The consultation can





Env Agency Yorks&NE @ @EnvAgencyYNE - Jan 22

Ponteland residents are invited to come along to a drop-in event taking place between 2.30pm and 6.30pm tomorrow at the Memorial Hall, Darras Road to find out more about #flood protection options for the town. Read more: gov.uk/government/new...



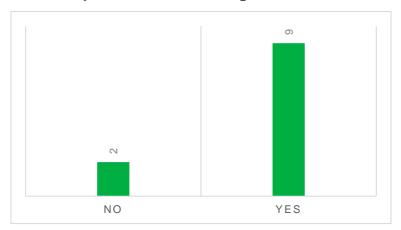
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4. Summary of Online Consultation Responses

We received 11 responses to the online consultation.

Flood Risk

Q1 - Do you have experience of flooding in Ponteland?



Q2 - If Yes, was this flooding from the river over topping or from surface water (drains being unable to cope)?

Comments received in response to Q2

Generally from the river over topping, although I do think surface drains should be kept cleared more frequently to reduce surface water.

Both

River over topping through supermarket car park (now Waitrose).

surface water drains 2000 and 2008 5 Church Flatt

surface water

Both of the (1 in 100y) floods in 2000 and 2008 will have had a combination of both factors. Unusually heavy flow of water leaving the river at Waitrose combined with unsatisfactorily cleared drains and gutters.

Both

River flooding approximately 15 years ago

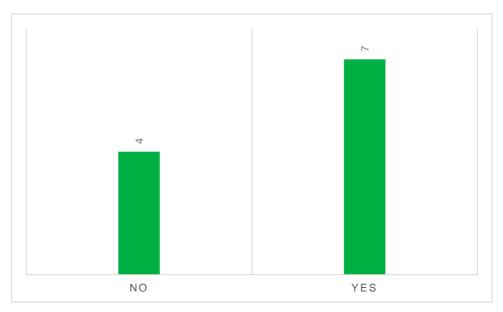
Drains being unable to cope - Nov 2000 River over-topping - Sept 2008

We received 9 qualitative responses to this question.

Q3 - Were you previously aware of the flood risk in Ponteland before this consultation?

All respondents to the questionnaire indicated they were previously aware of the flood risk in Ponteland.

Q4 - Are you currently signed up for a flood warning in Ponteland?



You can sign up to receive flood alerts and warnings in Ponteland online at https://www.gov.uk/sign-up-for-flood-warnings or by calling Floodline on 0345 988 1188.

How we are using your comments - Flood Risk

There was clearly a great deal of flooding experience and knowledge amongst both the responses received and members of the public who attended our drop in event.

From the comments raised in **Question 2**, there were no flood events higlighted that the Environment Agency were unaware of. These events and the data we collected as a result have been used to calibrate our modelling. Two themes raised by multiple respondents, in addition to the fluvial (form the river) flooding were:

- Drainage there were concerns raised about the clearance of drains. These comments have been shared with Northumberland County Council.
- Surface water in response to these comments, and discussions with stakeholders, we are now doing some further modelling work with NWL to understand the onset of surface water flooding, and identify any opportunities to work with NCC or NWL to further reduce this.

As well as a universal knowledge of flooding amongst responders, it was useful to sign-up residents to our flood warning service at the event.

Scheme Appraisal and Development

Q5 and Q6 - Do you support a scheme to reduce flood risk in Ponteland?

All respondents to the questionnaire indicated they were in support of a scheme to reduce flood risk in Ponteland.

Comments received in response to Q6

Obviously, flood risks to properties and businesses within the village should be protected as much as possible with perhaps stricter building controls as to where new buildings could be sited.

Protection of life and property.

Any scheme which reduces the risk of flooding would be beneficial

To allow flow of traffic through the main street and protect properties.

Raise all defences sensibly. Surely this is the only thing that improves our protection from flooding now and in the future.

Moved to Paddock Hill after the most recent flooding of the estate. Reasons:

- property risk
- counter potential effects of new building in the area, including schools and sports centre
- climate change
- concerns about adequacy of flood bank, river dredging, local restaurants' residual waste etc.

This is a bit of a silly question. Nobody wants to be involved in a flood. Greater care and inspection of the drains on the A696 particularly on Bell Villas may assist the general cause. I understand the modern modelling methods have much improved the flow of the river and may need to be enhanced.

Each scheme has advantages so no one option is a clear leader (despite my answers to Q6). For walls and embankments, a more engineered, heavy engineered scheme looks like needing less maintenance - an increasing vulnerability due to continual reduction of EA budgets and resources.

Now live in close proximity to the river.

To reduce the risk of flooding.

To minimise the devastating effects caused by flooding in general

From my 2 previous experiences of flooding in Ponteland, and living in Mayfair Gardens with close proximity to the Pont, I whole-heartedly support all efforts to reduce the possibility of future inundations.

Q7 - After reading the overview of options being considered, please rank each of the options in order of your preference, 1 being most preferred and 7 being the least preferred.

10 of the 11 respondents provided a response to this question,

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
Respondent 1	1	3	2	4	5	7	6
Respondent 2				2		1	
Respondent 3	2	5	7	3	1	4	6
Respondent 4						1	
Respondent 5	3	4	6	5	2	1	7
Respondent 6	6	4	7	5	3	1	2
Respondent 7	3	5	2	4	6	7	1
Respondent 8	7	3	6	5	1	2	4
Respondent 9	6	5	7	1	2	3	4
Respondent 10	3	5	4	2	6	7	1

The comments received also included further comments from the 10 of the 11 respondents to the questionnaire.

Comments received in response to Q7

I am not qualified to assess the merits of the different schemes being considered. Therefore, I have not answered Q 7.

Will the influence of Prestwick Carr be considered as part of the Risk. The 1947 scheme to lower the 'Carr Cuts' and dredge the river Pont from Ponteland to the point where the Carr joins the Pont appears to have exacerbated the frequency of flooding in Ponteland.

I am sure that whatever you do will be in the best possible aesthetic taste so I do not have any concerns on this.

Having worked as a Chartered Civil Engineer in the Northumberland county council bridges section at the time the Ponteland Bridge was strengthened some 30 years ago I would comment as follows:

The bridge is obviously a pinch point in terms of getting water through Ponteland.

Whilst I was not involved in that bridge strengthening scheme I was aware of what standard working practises were at that time.

I suspect that the invert of the bridge may well have been raised as part of that scheme to protect the bridge piers. At that time NCC did some very simple catchment area calcs to decide cross sectional area required for throughput under bridges.

It is clear the bridge could now not be sensibly raised to give a bigger cross sectional area. I think that a feasabilty study should be carried out to see if the invert could be reduced across a proportion of the bridge. Obviously pier stabilty will need to considered. Thats doable.

Would the Pont then find its earlier lower profile with some simple dredging help. A 200-300mm lowering of the invert would have a huge impact in terms of capacity through the bridge. It would also have a net effect of raising the embankments by that amount, therfore reducing costs to rebuild.

The bridge file held with NCC will show what was done and when.

- 1. The options shouldn't be mutually exclusive.
- 2. We are all aware of the threat of global warming now is the time to prepare for this. The only really acceptable option is raising all defences.

Given the consultations, and raised expectations, I expect some informed actions to reduce flood risk and surface water levels. Concerns at this stage are that new building could make matters worse and that government will not fund the necessary changes.

Do we really need it??

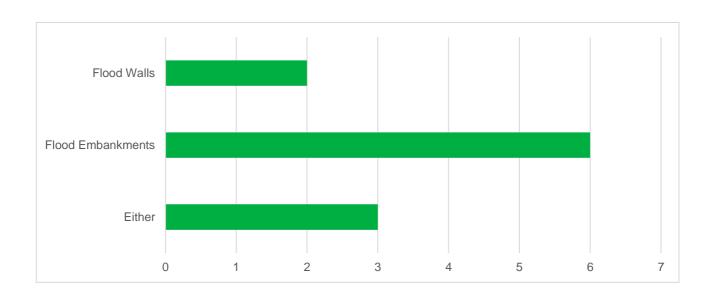
If so, you are the experts, I'll follow you!

It's encouraging to see a range of options and a shame if several of them could not be used in a scheme. The ecological solutions upstream should be strongly supported, as should continuing consultations with farmers/landowners.

The time frame for work to be carried out and completed Maintenance issues

Only to say a big 'thankyou' for all the work that has been put into preparing the options, and involving the public in presentations and publications.

Q8 - If we need to replace existing embankments, would you prefer to see embankments or walls?



Q9 - If trees have to be removed to enable a flood alleviation scheme and can't be replaced in the same area, do you have suggestions about where you would like to see them planted?

Comments received in response to Q9.

No preferences.

no preference

Replace them in a slightly different area.

Lets not get too hung up on trees. Whilst we should be sensitive to tree removal flooding is the top consideration by some way.

no particular views. Trees are important but nowhere near as important as protecting people's homes. Their loss should not stand in the way of necessary protection works.

Away from housing estates towards the edge of the village.

Upon completion of the new schools/leisure complex across the road from the river, there have been trees that have been 'culled'. Replacement, if needed, in this area would be pleasing.

In a location that has a connection with the town park, so they can be enjoyed as an amenity. Different planting solutions including coppicing and water flow attenuation / flow reduction would be great.

Ponteland Park Callerton Lane

In Ponteland Park, or the grassed area beside the tennis courts.

How we are using your comments - Scheme Appraisal and Development

All participants supported the need for a scheme. As well as themes discussed in Question 2 above, respondents also raised:

- The desire to defend Main Street from flooding this is not a likely outcome of the scheme, as the focus of our funding is defending residential properties but we will use our modelling to understand the onset of flooding in this area and plan our incident response accordingly.
- New development the scheme will not be able to accommodate future development in the
 design of assets (but will consider climate change.) As discussed below at Q10, the role of the
 Environment Agency is to make recommendations so that any development doesn't make
 flooding worse.

We asked respondents in **Question 7** to rank each of the potential options in order of preference. We have used the median average of these scores to understand which of the options are more favourable.

	Option 1: Sustain: Replace embankments with similar design	Option 2 Sustain: Replace embankments with walls, potentially set back	Option 3 Sustain: Replace walls with similar design	Option 4 Sustain: Replace walls with improved design	Option 5 Climate change: Upstream storage	Option 6 Climate change: Raise all defences	Option 7 Surface Water Options
Median Average Ranking	3	4.5	6	4	2.5	2.5	4

Responses to question 7 told us there was a strong preference to raise all defences in Ponteland to counter climate change in the future. Amongst the solutions to sustain the current standard of protection the preference was for replacing walls with an improved design. These preferences will be taken into account in selecting the preferred option, along with economic and technical considerations.

In the comments regarding question 7, several themes were raised:

- Prestwick Carr this is outside the area of this FAS, and the drainage hasn't been shown to worsen flooding in our modelling.
- Bridge as a pinch point we will include the feasibility of invert reduction when we look at
 options to raise all defences. It is an interesting solution to explore with NCC, as the bridge's
 owners.
- Climate change this is indeed a serious issue for Ponteland. Our modelling shows that in the next 20-50 years climate change will increase the frequency and severity of flooding in Ponteland, and this will form part of our business case preparation.
- Support for combination of options this is always part of our approach, apologies if the style of question made it seem as though only one option could be delivered.

Question 8 revealed a slight preference for embankments only over walls combined with either solution – the final solution needs to be agreed with both landowners as well as meet planning constraints and maintenance budgets. Once the solution is finalised we will share this with the public.

Tree replacement location suggestions in **Question 9**, to Ponteland Park or to areas at the edge of the village were useful and will be considered once our tree removal plans are developed.

Your Ideas

Q10 - Our initial assessments of the defences in town suggest that there are opportunities to deliver improvements to the environment. Do you have any suggestions?

Comments received in response to Q10

No - I leave it to those qualified to assess and advise.

It would be nice to see the area around Ponteland Bridge looking something like it did in 1950's - people picnicking- children fishing! And perhaps continue the walk along the river bank from Waitrose, behind the shops to Callerton Lane.

The river has not been dredged for many years and if this was done then the fish population might increase.

as outlined earlier

The footpath crossing the earth bund connecting Eland Edge with the centre of the village near The Diamond, appears to be a weak point where ingress of water from a flooded River Pont into the housing estate seems possible. This needs to be looked at.

- Rejection of house building on green belt land in the flood risk areas.
- Raise embankments and flood bank mounds
- Dredge the river near estates.

Force NCC to take better care of the drains on Bell Villas and Maria St. Any inspection, at any time will several drains that are and have been ineffective for ages.

The first, performance, requirement is to deliver 1:100 standard to all properties and improve on this standard. Modern engineering solutions can also look to good, e.g. decorative gabions and sheet pile claddings.

Ban any building/development on the flood plain

Regular Maintenance of a clear water course

We have concerns over the build up of plants/silt and general detritus thrown or washed downstream particularly by the Diamond Public House

We note that the riverbed has been cleared slightly further upstream

No

Q11 - If we get full approval and funding, construction is expected to take 1-2 years. How can we minimise disruption to you and to Ponteland during this period?

Comments received in response to Q11

This would be important, necessary work so we must just work around anything that takes place.

Phase work - if it can be done economically. And smaller plan/ wagons again within financial limits. Appoint a responsible contractor with good environmental and sustainability track record.

Use the land behind the Rialto restaurant to work from.

Consult with stakeholders once you have worked out the best and appropriate solutions.

By ensuring that there is adequate advance publicity and by maintaining alternative convenient pedestrian routes.

- Communication website, flyers to keep residents informed of current and forthcoming work.
- Drop-ins to help the above
- Heavy traffic movements that avoid start and end of school times.

Very difficult for those who can only travel through Ponteland by car. Those of us who manage to move our legs will probably be unaffected.

Keeping everyone informed and included is the key. In 2011, when Northumbrian Water provided new surface water pumping system to Eland Haugh their project engineer was open, receptive and when needed straight talking.

By Keeping residents informed of intention

Good Signage

Avoid peak times to keep traffic disruption to a minimum

Road closures affording access only to residents and businesses, and schools. Advance warning of where and when work will be undertaken.

Q12 - Please tell us any other comments or ideas you have about the scheme below.

Comments received in response to Q12

I am sorry I will not be able to attend at Ponteland Memorial Hall on 23rd January as away on holiday. I have read the proposals listed and am pleased with the work done recently, in particular near Ponteland Bridge.

Apart from the R. Pont and Callerton Burn I also have concerns about the upkeep of Fairney Burn. Between the Sports Centre grounds and the A696 there are all sorts of obstacles to maintaining a decent flow - branches which inter-mesh and then get filled with debris such as cans, balls, polythene, leaves, overhanging vegetation, weeds, etc. If we experience heavy water flow such as much rain or snow melt this causes the Burn to get very full and overflows in several places. The construction work which is now taking place for the new schools may well exacerbate this situation still further. Can steps be taken to improve the area mentioned above in particular, to avoid this area getting worse?

Ensure all outflows have efficient and well maintained penstocks.

Any improvement will be of benefit.

Very pleased that ongoing improvements are being considered.

- Buy-in from local councillors, MP is needed to add weight to the proposals.
- Ponteland house building in the area is a major risk to further flood problems reassurances about the influence of the environment agency would help will this.
- It will be good to see action take place celebrate the work as it is being done e.g. local newsletters, paper, TV.

See 10 above. The gulleys need to be cleaned more regularly and then examined to confirm that they are running clear!

Earth embankments are prone to settlement and imperceptible performance reduction. I discussed at the session the issue of Northern Powergrid's Eland Hall sub-station, and it's vulnerability in relation to flood defence. The former distribution company made it clear they did not intend to flood proof or relocate it. When Northern Powergrid recently upgraded the HV supply to Ponteland they reconfirmed this. Three pieces of critical foul and surface water equipment depend on the sub-station providing an uninterrupted supply. The building has received no attention since the date of the letter attached.

Utilise the local free monthly magazine- The Ponteland News

Utilise the village notice boards (E.g. Merton Hall)

Regular updates

None

How we are using your comments - Your ideas

Question 10 raised several themes of possible improvements for the scheme to deliver:

- Dredging a number of respondents suggested we clear the river of sediment and vegetation in a range of places. Our maintenance budget for Ponteland is targeted in areas where improving conveyance will reduce the risk of flooding. We have cleared the area upstream of Ponteland Bridge in 2018, which was noted by residents at the drop in. We have no plans to do this work downstream of the Bridge, as this will not reduce the risk of flooding the throttle of the bridge is what controls levels, rather than conveyance downstream.
- Maintenance of drains as discussed earlier, these comments have been shared with NCC.
- Development control the Environment Agency is a statutory consultee for all development that might impact on our flood defences. We always require new house building to not increase run-off from sites, but can't prevent building all together. Where homes are being built in a flood zone, we also recommend they are resilient against flooding – these recommendations are then adopted by NCC Planning.

In response to **Question 11**, your suggestions for compound locations and phasing of the scheme have been noted, and will be shared with our contractor as we work to plan construction of the scheme. Communication during the scheme, particularly about road closures or traffic impact, will be necessary and the specific channels mentioned will also be suggested to the contractor when we're closer to actual construction.

Thank you for the suggestions for publications and noticeboards for communicating our next event. Responses to **Question 12** also mentioned the substation at Eland Hall. Unfortunately, there are no plans to upgrade this and the current Northern Powergrid classification of the asset doesn't support this. We have assumed no upgrades to the substation when modelling surface water. Comments about maintenance on the Fairney Burn have been shared with colleagues in the Environment Agency's Asset Performance and Field Operations teams.

5. Additional Responses

In addition to responses to the online consultation, we also received a submission via email (see Appendix B) which will be considered in the development of a suitable option.

At the community event held on 23 January, we spoke with a number of local residents of Ponteland. From these discussions we identified the following themes which we will consider further:

- Future development and how it is considered in modelling
- Ongoing maintenance of defences
- Links with Northumbrian Water pumping station and NEDL sub-station
- Groundwater

6. Next Steps

The responses from this consultation will be used to inform the development of a shortlist of options and the selection of a preferred option to support an Outline Business Case (OBC) application.

It is our intention to hold a further round of consultation with residents of Ponteland to discuss a preferred option in summer 2019.

Would you like to find out more about us or your environment?

Then call us on

03708 506 506 (Monday to Friday, 8am to 6pm)

email

enquiries@environment-agency.gov.uk

or visit our website

www.gov.uk/environment-agency

incident hotline

0800 807060 (24 hours)

floodline

0345 988 1188 (24 hours)

Find out about call charges (www.gov.uk/call-charges)

Environment first:

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Appendix A - Online Responses

	have of flooding d?	was this rom the river ing or from ater (drains ble to	re of re this	currently or a flood Ponteland?	pport a duce	port a educe - Please any sons for ise above		ng the overview er of your prefer					
Respondent No	Q1 Do you have experience of floin Ponteland?	Q2 If Yes, was this flooding from the rover topping or frosurface water (draibeing unable to cope)?	Q3 Were you previously awar the flood risk in Ponteland befor consultation	Q4 Are you curr signed up for a warning in Pont	Q5 Do you supl scheme to redu flood risk in Ponteland?	Obviously, flood risks to Obviously, flood risks to	Sustain: Replace embankments with similar design	Sustain: Replace embankments with walls, potentially set back	Sustain: Replace walls with similar design	Sustain: Replace walls with improved design	Climate change: Upstream storage	Climate change: Raise all defences	Surface Water Options
1	Yes	Generally from the river over topping, although I do think surface drains should be kept cleared more frequently to reduce surface water.	Yes	No	Yes	Obviously, flood risks to properties and businesses within the village should be protected as much as possible with perhaps stricter building controls as to where new buildings could be sited.							
2	Yes	Both	Yes	Yes	Yes	Protection of life and property.	1	3	2	4	5	7	6
3	No		Yes	Yes	Yes	Any scheme which reduces the risk of flooding would be beneficial				2		1	
4	Yes	River over topping through supermarket car park (now Waitrose).	Yes	No	Yes	To allow flow of traffic through the main street and protect properties.	2	5	7	3	1	4	6
5	Yes	surface water drains 2000 and 2008 5 Church Flatt	Yes	Yes	Yes	Raise all defences sensibly. Surely this is the only thing that improves our protection from flooding now and in the future.						1	
6	Yes	surface water	Yes	Yes	Yes		3	4	6	5	2	1	7
7	No		Yes	Yes	Yes	Moved to Paddock Hill after the most recent flooding of the estate. Reasons: - property risk - counter potential effects of new building in the area, including schools and sports centre - climate change - concerns about adequacy of flood bank, river dredging, local restaurants' residual waste etc.	6	4	7	5	3	1	2

	have of flooding	nis river rom rains cope)?	a previously flood risk before this		ort a ce flood I?	oort a educe flood sland? - s know any sons for se above	Q6 After reading the overview of options being considered, please rank each of the options in order of your preference, 1 being most preferred and 7 being the least preferred.						
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8	Yes	Both of the (1 in 100y) floods in 2000 and 2008 will have had a combination of both factors. Unusually heavy flow of water leaving the river at Waitrose combined with unsatisfactorily cleared drains and gutters.	Yes	No	Yes	This is a bit of a silly question. Nobody wants to be involved in a flood. Greater care and inspection of the drains on the A696 particularly on Bell Villas may assist the general cause. I understand the modern modelling methods have much improved the flow of the river and may need to be enhanced.	3	5	2	4	6	7	1
9	Yes	Both	Yes	Yes	Not Answered	Each scheme has advantages so no one option is a clear leader (despite my answers to Q6). For walls and embankments, a more engineered. heavy engineered scheme looks like needing less maintenance - an increasing vulnerability due to continual reduction of EA budgets and resources.	7	3	6	5	1	2	4
10	Yes	River flooding approximately 15 years ago	Yes	No	Yes	Now live in close proximity to the river. To reduce the risk of flooding. To minimise the devastating effects caused by flooding in general	6	5	7	1	2	3	4
11	Yes	Drains being unable to cope - Nov 2000 River over-topping - Sept 2008	Yes	Yes	Yes	From my 2 previous experiences of flooding in Ponteland, and living in Mayfair Gardens with close proximity to the Pont, I whole-heartedly support all efforts to reduce the possibility of future inundations.	3	5	4	2	6	7	1

Respondent No.	Q7 Do you have any thoughts, comments or concerns on the options that we are considering?	Q8 If we need to replace existing embankments, would you prefer to see embankments or walls?	Q9 If trees have to be removed to enable a flood alleviation scheme and can't be replaced in the same area, do you have suggestions about where you would like to see them planted?	Q10 Our initial assessments of the defences in town suggest that there are opportunities to deliver improvements to the environment. Do you have any suggestions?	Q11 If we get full approval and funding, construction is expected to take 1-2 years. How can we minimise disruption to you and to Ponteland during this period?	Q12 Please tell us any other comments or ideas you have about the scheme below.
1	I am not qualified to assess the merits of the different schemes being considered. Therefore, I have not answered Q 7.	Either	No preferences.	No - I leave it to those qualified to assess and advise.	This would be important, necessary work so we must just work around anything that takes place.	I am sorry I will not be able to attend at Ponteland Memorial Hall on 23rd January as away on holiday. I have read the proposals listed and am pleased with the work done recently, in particular near Ponteland Bridge. Apart from the R. Pont and Callerton Burn I also have concerns about the upkeep of Fairney Burn. Between the Sports Centre grounds and the A696 there are all sorts of obstacles to maintaining a decent flow - branches which intermesh and then get filled with debris such as cans, balls, polythene, leaves, overhanging vegetation, weeds, etc. If we experience heavy water flow such as much rain or snow melt this causes the Burn to get very full and overflows in several places. The construction work which is now taking place for the new schools may well exacerbate this situation still further. Can steps be taken to improve the area mentioned above in particular, to avoid this area getting worse?
2	Will the influence of Prestwick Carr be considered as part of the Risk. The 1947 scheme to lower the 'Carr Cuts' and dredge the river Pont from Ponteland to the point where the Carr joins the Pont appears to have exacerbated the frequency of flooding in Ponteland.	Flood Embankments		It would be nice to see the area around Ponteland Bridge looking something like it did in 1950's - people picnicking- children fishing! And perhaps continue the walk along the river bank from Waitrose, behind the shops to Callerton Lane.	Phase work - if it can be done economically. And smaller plan/ wagons again within financial limits. Appoint a responsible contractor with good environmental and sustainability track record.	Ensure all outflows have efficient and well maintained penstocks.
3		Either	no preference			Any improvement will be of benefit.
4	I am sure that whatever you do will be in the best possible aesthetic taste so I do not have any concerns on this.	Flood Embankments	Replace them in a slightly different area.	The river has not been dredged for many years and if this was done then the fish population might increase.	Use the land behind the Rialto restaurant to work from.	

Respondent No.	Q7 Do you have any thoughts, comments or concerns on the options that we are considering?	Q8 If we need to replace existing embankments, would you prefer to see embankments or walls?	Q9 If trees have to be removed to enable a flood alleviation scheme and can't be replaced in the same area, do you have suggestions about where you would like to see them planted?	Q10 Our initial assessments of the defences in town suggest that there are opportunities to deliver improvements to the environment. Do you have any suggestions?	Q11 If we get full approval and funding, construction is expected to take 1-2 years. How can we minimise disruption to you and to Ponteland during this period?	Q12 Please tell us any other comments or ideas you have about the scheme below.
5	Having worked as a Chartered Civil Engineer in the Northumberland county council bridges section at the time the Ponteland Bridge was strengthened some 30 years ago I would comment as follows: The bridge is obviously a pinch point in terms of getting water through Ponteland. Whilst I was not involved in that bridge strengthening scheme I was aware of what standard working practises were at that time. I suspect that the invert of the bridge may well have been raised as part of that scheme to protect the bridge piers. At that time NCC did some very simple catchment area calcs to decide cross sectional area required for throughput under bridges. It is clear the bridge could now not be sensibly raised to give a bigger cross sectional area. I think that a feasabilty study should be carried out to see if the invert could be reduced across a proportion of the bridge. Obviously pier stabilty will need to considered. Thats doable. Would the Pont then find its earlier lower profile with some simple dredging help? A 200-300mm lowering of the invert would have a huge impact in terms of capacity through the bridge. It would also have a net effect of raising the embankments by that amount, therefore reducing costs to rebuild. The bridge file held with NCC will show what was done and when.	Either	Lets not get too hung up on trees. Whilst we should be sensitive to tree removal flooding is the top consideration by some way.	as outlined earlier	Consult with stakeholders once you have worked out the best and appropriate solutions.	Very pleased that ongoing improvements are being considered.

Respondent No.	Q7 Do you have any thoughts, comments or concerns on the options that we are considering?	Q8 If we need to replace existing embankments, would you prefer to see embankments or walls?	Q9 If trees have to be removed to enable a flood alleviation scheme and can't be replaced in the same area, do you have suggestions about where you would like to see them planted?	Q10 Our initial assessments of the defences in town suggest that there are opportunities to deliver improvements to the environment. Do you have any suggestions?	Q11 If we get full approval and funding, construction is expected to take 1-2 years. How can we minimise disruption to you and to Ponteland during this period?	Q12 Please tell us any other comments or ideas you have about the scheme below.
6	 The options shouldn't be mutually exclusive. We are all aware of the threat of global warming - now is the time to prepare for this. The only really acceptable option is raising all defences. 	Flood Embankments	no particular views. Trees are important but nowhere near as important as protecting people's homes. Their loss should not stand in the way of necessary protection works.	The footpath crossing the earth bund connecting Eland Edge with the centre of the village near The Diamond, appears to be a weak point where ingress of water from a flooded River Pont into the housing estate seems possible. This needs to be looked at.	By ensuring that there is adequate advance publicity and by maintaining alternative convenient pedestrian routes.	
7	Given the consultations, and raised expectations, I expect some informed actions to reduce flood risk and surface water levels. Concerns at this stage are that new building could make matters worse and that government will not fund the necessary changes.	Flood Walls	Away from housing estates towards the edge of the village.	 Rejection of house building on green belt land in the flood risk areas. Raise embankments and flood bank mounds Dredge the river near estates. 	 Communication - website, flyers - to keep residents informed of current and forthcoming work. Drop-ins to help the above Heavy traffic movements that avoid start and end of school times. 	 Buy-in from local councillors, MP is needed to add weight to the proposals. Ponteland house building in the area is a major risk to further flood problems - reassurances about the influence of the environment agency would help will this. It will be good to see action take place - celebrate the work as it is being done e.g. local newsletters, paper, TV.
8	Do we really need it?? If so, you are the experts, I'll follow you!	Flood Walls	Upon completion of the new schools/leisure complex across the road from the river, there have been trees that have been 'culled'. Replacement, if needed, in this area would be pleasing.	Force NCC to take better care of the drains on Bell Villas and Maria St. Any inspection, at any time will several drains that are and have been ineffective for ages.	Very difficult for those who can only travel through Ponteland by car. Those of us who manage to move our legs will probably be unaffected.	See 10 above. The gulleys need to be cleaned more regularly and then examined to confirm that they are running clear!

Respondent No.	Q7 Do you have any thoughts, comments or concerns on the options that we are considering?	Q8 If we need to replace existing embankments, would you prefer to see embankments or walls?	Q9 If trees have to be removed to enable a flood alleviation scheme and can't be replaced in the same area, do you have suggestions about where you would like to see them planted?	Q10 Our initial assessments of the defences in town suggest that there are opportunities to deliver improvements to the environment. Do you have any suggestions?	Q11 If we get full approval and funding, construction is expected to take 1-2 years. How can we minimise disruption to you and to Ponteland during this period?	Q12 Please tell us any other comments or ideas you have about the scheme below.
9	It's encouraging to see a range of options and a shame if several of them could not be used in a scheme. The ecological solutions upstream should be strongly supported, as should continuing consultations with farmers/landowners.	Flood Embankments	In a location that has a connection with the town park, so they can be enjoyed as an amenity. Different planting solutions including coppicing and water flow attenuation / flow reduction would be great.	The first, performance, requirement is to deliver 1:100 standard to all properties and improve on this standard. Modern engineering solutions can also look to good, e.g. decorative gabions and sheet pile claddings.	Keeping everyone informed and included is the key. In 2011, when Northumbrian Water provided new surface water pumping system to Eland Haugh their project engineer was open, receptive and when needed straight talking.	Earth embankments are prone to settlement and imperceptible performance reduction. I discussed at the session the issue of Northern Powergrid's Eland Hall sub-station, and it's vulnerability in relation to flood defence. The former distribution company made it clear they did not intend to flood proof or relocate it. When Northern Powergrid recently upgraded the HV supply to Ponteland they reconfirmed this. Three pieces of critical foul and surface water equipment depend on the sub-station providing an uninterrupted supply. The building has received no attention since the date of the letter attached.
10	The time frame for work to be carried out and completed Maintenance issues	Flood Embankments	Ponteland Park Callerton Lane	Ban any building/development on the flood plain Regular Maintenance of a clear water course We have concerns over the build up of plants/silt and general detritus thrown or washed downstream particularly by the Diamond Public House We note that the riverbed has been cleared slightly further upstream	By Keeping residents informed of intention Good Signage Avoid peak times to keep traffic disruption to a minimum	Utilise the local free monthly magazine- The Ponteland News Utilise the village notice boards (E.g. Merton Hall) Regular updates
11	Only to say a big 'thankyou' for all the work that has been put into preparing the options, and involving the public in presentations and publications.	Flood Embankments	In Ponteland Park, or the grassed area beside the tennis courts.		Road closures affording access only to residents and businesses, and schools. Advance warning of where and when work will be undertaken.	None

Respondent	Q13a How did you find out about the consultation?	Q13b How did you find out about the consultation? If Other, please tell us how here	Q14 On a scale of 1-5, how useful did you find the consultation document?	Q15 Did you attend our public event?	Q16 On a scale of 1-5, how useful did you find the public events?	Q17 How well do you feel your views were listened to by our staff at the community event?	Q18 Please tell us any other comments, feedback, or concerns about the consultation event below.	Q19a What is your interest in Ponteland and the scheme?	Q19b What is your interest in Ponteland and the scheme? - If other, please tell us here	Q20 Can we publish your response?	Date Submitted
1	Flyer through your door		3	No	Not applicable	Not applicable	Please see my comments under section 12.	Resident (Homeowner)		Yes	2019-01-17 16:09:26
2	Parish Council		4	No	Not applicable	Not applicable		Resident (Homeowner)		Yes	2019-01-21 10:34:49
3	Flyer through your door		4	Yes	4	5 (I felt listened to)		Resident (Homeowner)		Yes	2019-01-24 12:39:34
4	Other (please state below)	Chance conversation with a friend. I did not see it advertised anywhere.	5 (very useful)	No	Not applicable	Not applicable	I don't know if it was well attended but I knew nothing about it until a friend of mine mentioned it last week.	Resident (Homeowner)		Yes	2019-01-24 15:31:40
5	Flyer through your door		5 (very useful)	Yes	5 (very useful)	5 (I felt listened to)	Well done.	Resident (Homeowner)		Yes	2019-02-01 10:59:14
6	Flyer through your door		4	Yes	4	4		Resident (Homeowner)		Yes	2019-02-06 11:38:16
7	Newsletter		4	Yes	4	4	Very helpful staff. Early stages so it will be interesting as to how the next steps take shape. Now expectations are raised, I hope positive plans can be shared again after this consultation.	Resident (Homeowner)		Yes	2019-02-06 11:52:27
8	Parish Council		4	Yes	5 (very useful)	5 (I felt listened to)	Kiwi lady appeared very knowledgeable.	Resident (Homeowner)	Town Councillor	Yes	2019-02-07 09:26:14
9	Flyer through your door		5 (very useful)	Yes	5 (very useful)	5 (I felt listened to)		Resident (Homeowner)		Yes	2019-02-07 09:38:10
10	Flyer through your door Word of Mouth Other (please state below)	Open session at the memorial hall in Ponteland	5 (very useful)	No	5 (very useful)		Unfortunately for us a Family commitment prevented our intension to attend the event on that date. Maybe a couple of different dates for the event would've been a good idea	Resident (Homeowner)		Yes	2019-02-20 11:24:06
11	Flyer through your door		5 (very useful)	Yes	5 (very useful)	5 (I felt listened to)	None	Resident (Homeowner)		Yes	2019-03-07 11:54:46



Appendix B - Email representation

From: REDACTED

Sent: 23 January 2019 20:35

To: REDACTED

Subject: Re: You might want to attend this

Dear Vanessa Collins, Project Manager for the Environment Agency. REDACTED for Ponteland town Council, NWL and All copied in CC, Bcc,

I attended the Environment Agency Consultation at the Memorial Hall 23/02019. I attach my appraisal from Feb 2016. dated but still relevant.

The option proposals are outlined in;

https://consult.environment-agency.gov.uk/north-east/ponteland-flood-alleviation-scheme-consultation/

<u>Ponteland Flood Alleviation Scheme Consultation - Environment Agency - Citizen</u> Space

Overview. We are consulting on the proposed list of options for reducing flood risk in Ponteland. Following the consultation, we will use this information combined with other factors such as technical constraints, landowner views and economics to help us select either a single preferred option or a combination of options to then implement.

consult.environment-agency.gov.uk

with three available documents:

Ponteland FAS - Options Report January 2019

which are focused on short term refurbishment and renewal as opposed to any new long term schemes.

It was confirmed that funding is not available for long term expensive projects.(or needed?)

It was also discussed that a Ponteland Bypass across a flood plain would not find any viable foundations at Eland Haugh Inner or Outer as a "fen".

I have pointed out most issues, however I have referred the EA representative to my Ponteland Flooding Appraisal document sent to the Ponteland Town Council, which I attach as the EA are currently improving a new computer model on dynamic flows and flood heights.

I agreed at the consultation that the level of flood protection at 1%AEP was effective, however increased Climate change will bring increased storm events, not least through time the existing infrastructure needs refurbishment in places.

I pointed out that the Ponteland flood system topology and infrastructure limits any further raising of embankments or walls.

Some flood walls do not have the 600mm freeboard addition raised height due to

restricted bridge soffit levels.

Those same low bridge soffits cause the Ponteland fluvial flooding as backflow ponding as the main reason for historic fluvial flooding in Ponteland, mostly in combination as snow melt events. To be replaced by more "Thunder Thursdays"!

That means the only viable increased mitigation are as flow restriction, and a stop to any further increased hard surface area runoff housing development, otherwise the current mitigation and flood defences are negated

However it is the pluvial surface water incapacity of watercourses Fairney Burn, Callerton Burn, and Birney Hill watercourse, and roads that is probably of most significance. Not least Small burn that has confluence impact at Berwick hill.

Any other mitigation can only be by flow restrictions (coffer dams, Sustainable drainage buffer lakes, and underground tanks, aswell as general SUDS restricted surface flow drainage mitigation.

There is also the issue of the super-elevation on sharp bends in the river that may need refurbishment and bolstering that only computer modelling using dynamic flow can identify.

I also pointed out the catchment issues of Fairney Brun, Callerton Burn, Birney Hill watercourse and freshwater surface water road gulley incapacity in storm events, aswell as over 400 photos taken at critical peak level in storm events and the 8 year flood cycle that may be decreasing to 10 year cycles.

Ground water ponding at back of new primary School Darras Hall. watercourse at back of Darras Hall as inundation along its course north to River Pont.

All as identified as significant ground floor flooding threat by 400 photos sent to myself by residents, and highlighted within my attached as numerous and long term (decades!) historically unresolved and unaddressed.

Climate change as Global warming could reduce snow build up flood events, countered by more violent storm events, and when there is snow, faster deluge melts.

All of which I attach not least already with Ponteland Town Council PTC.

As Ponteland Integrated Flood Risk Scheme, I include NWL who have also significantly contributed excellent and effective flood solutions where I live.

I raised the issue of illegal combined sewage outlet as raw sewage in the fresh water Emergency Outlet at Foxcovet lane discharge as current investigation by NWL (multiple issues). Ponteland Park fauna and flora will appreciate that to be reduced, not least less visits to the vet for poisoned dog Walkers dogs, and children that continue to "plodge" with their dogs around that polluted outlet on Foxcovert lane. Washing machines that allow connection to fresh should be banned not least what should be clean fresh air at that Foxcovert bridge is polluted by OMO smells(or am I showing my age!)

I raised the same issues at the Easternway/railway Walk/Callerton Burn sewage build up in an ESO rear gardens of Meadow Court again assumed as a NWL issue and their ongoing multiple tracing investigation. Not least some combined sewers need to be separated on the West road.

As pluvial incapacity inundation road gulleys is a greater issue for Ponteland than fluvial, those combined sewers then incapacitate fresh, and then incapacitate as ponding inundation, and to incapacitate the Ponteland main NWL sewage Pumping station

(Diamond) although its ESO into the Pont moved further downstream and upward to mitigate backflow from the river Pont in storm events.

At the consultation, I raised the whole of the Ponteland Catchment issue from Great Whittington Matfen, level of Whittle Dene take off, to Berwick Hill confluence of Small Burn, Fairney Burn, River Pont and the Blyth. That as aggregate cumulative backflow ponding to Fiarney Burn from Berwick hill also excarbated its zero gradient to incapacitate Eland Haugh Est and Fairney Edge. The main concern is the large hard surface catchment within Darras Hall, Birney Hill watercourse, Callerton Burn, Fairney Burn), and Dissington Limestone Lane collective discharge then in surface field overflow down into the Pont.

The lack of any significant funding curtails proposed options to refurbishment and renewal only, with no increased mitigation from expensive new schemes, (or needed?) not least any future housing developments need to be avoided as excessive unsustainable over development that in turn causes further exacerbated surface water runoff incapacity, and negates any current and future EA proposals aswell.

Although my attached flooding appraisal is outdated, and requires a full revision/proof read, those issues remain in those diagrams and photos taken at critical peak times and also allows extrapolation for any computer modelling (difficult) to define realistic actual water rise, and lowering rates per hour. Yes I have them already! Not lest the double phasing event between upstream Matfen deluge and downstream Darras deluge peaks interplay.

I suggest that avoidance of peaks alignment is of most significance to keep separate. So any Ponteland Integrated Flood Risk Scheme has that as first priority

It used to be slow down Matfen restricted flow and speed up Darras flow to avoid peak alignment. Currently that can be between 2 and 6 hours depending on who gets the clouds and rain first. Th Environment gauge measuring stations are excellent data for appraisal of that prime issue.

However speeding up Darras catchment flow probably exacerbates the deluge.

I resend my original Flooding appraisal document that was partially referred to in the Neighbourhood Plan but not used directly, on all Ponteland River Pont-other Watercourses storm event impact from Fluvial-Pluvial issues to **Vanessa Collins Project manager Environment Agency** who already have my 400+ photos from storm events 1990 onwards.

On a personal Site specific refurbishment, I ask the Environment Agency to refurbish/repair the damage done by inappropriate telegraph poles dog sign placed into the Ponteland Park flood embankment by PTC Councillor, that was subject to a Environment Agency enforcement officer warnings as illegal damage and compromised flood protection integrity.

I consider the current existing Ponteland Flood mitigation defence system as an excellent fit for purpose installation, however future housing developments (not least non-viable

construction Ponteland Bypass and required bridge) will increase fluvial catchment and pluvial surface run off ponding for Ponteland which will negate all that effort.

regards

REDACTED

please forward to relevant residents.

Although Feb2016 as dated interpretation and requiring proof read, my attached flooding appraisal for the whole of Ponteland is still accurate.

PTC within their Neighbourhood Plan have also received similar to my attached original Ponteland Flooding Appraisal document on flooding.