



Humber Officers Group

20 August 2018

10:00am – 12:30pm

Brough Business Centre, Skillings Lane,



Agenda

Item	Time	Lead
Introductions and apologies	10:00am	P. Winn
Minutes and matters arising from the last meeting	10:05am	P. Winn
Appraisal update	10:10am	P. Winn
Humber Extreme Water Level project	10:30am	J. Ray
Planning, local plans and site allocations	10:45am	C. Brown
Break	11:00am	
Funding and investment	11:05am	L. Marshall
Other workstream updates	11:25am	P. Winn
Capital programme and pipeline	11:35am	C. Brown
Engagement	11:45am	L. Hopton
Security, classification and use of data	12:05pm	L. Marshall
Liaison Forum	12:15pm	A. Farndale
AOB	12:25pm	P. Winn
Close	12:30pm	



Actions from the previous meeting

Action	Owner
Include 'infrastructure' in the objectives to demonstrate links into Industrial Strategy, etc.	L. Marshall
Amend wording on Option 12 to highlight it will only be used in conjunction with another option	H. Todd
Request Jacobs prepare a report to present the long-list appraisal process	H. Todd
Clarify within the short-list option description document what components part of long-list options have been taken forward to the short-list options	EA
Consider case studies and ways to illustrate short-list options pathway	EA
Reword to ensure section on habitat compensation is addressed earlier to make clear it is a legal requirement	Jacobs
Input date for next Programme Board and send out to attendees	EA
Send out data request for Humber Landscape and Investment Study	A. Farndale
Progress Memorandum of Understanding	LA Officers

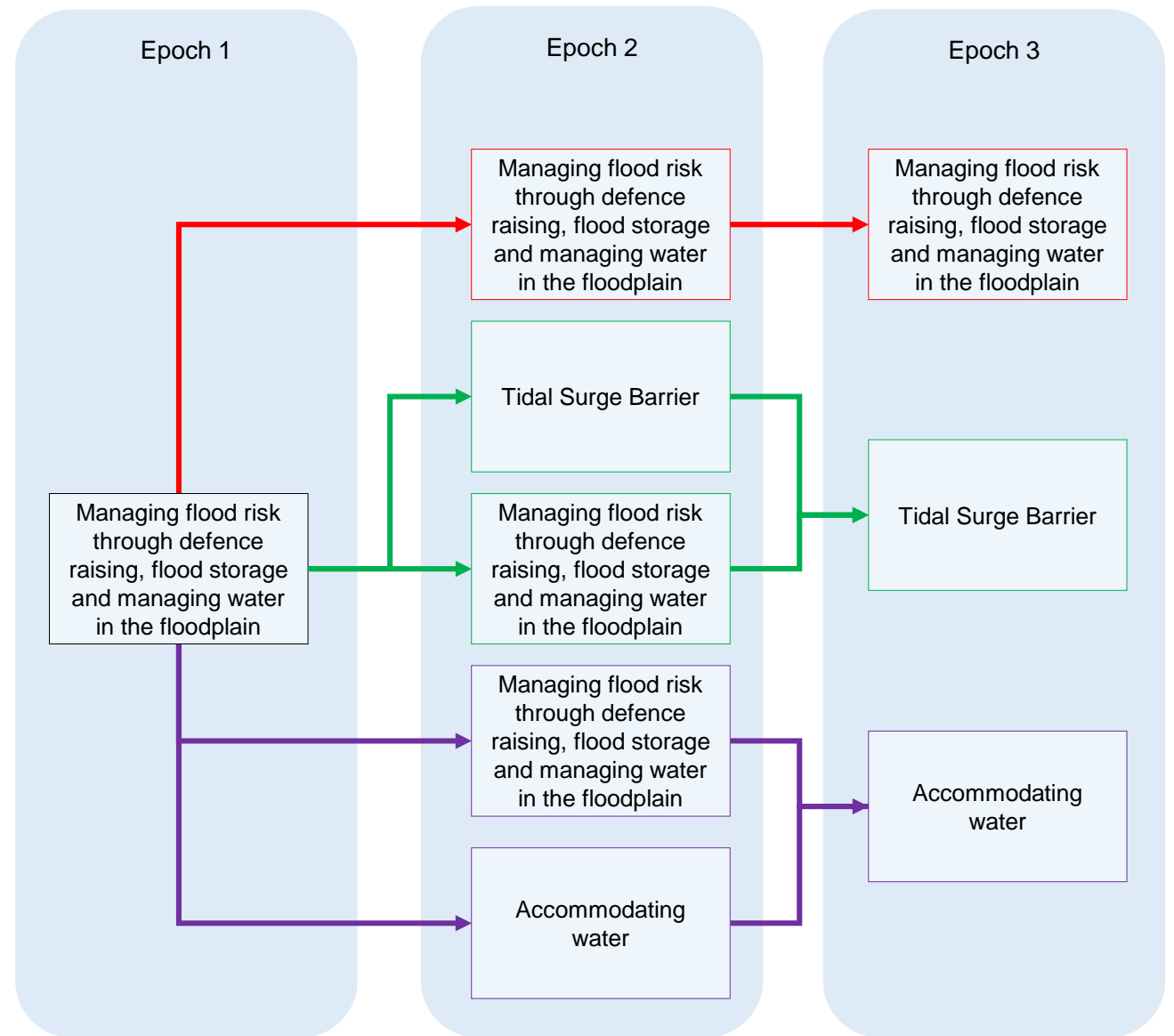


Appraisal update



Short-list of options

- Do Nothing (baseline)
- Do Minimum (baseline)
- Long-list option 3 (baseline)
- **Short-list option 1**
- **Short-list option 2**
- **Short-list option 3**



Short-list assessment process

- Short-list assessment work is now beginning.
- First step is beginning short-list development modelling (has previously been called 'exploratory' modelling), but at the same time refining the options themselves.
- Which model or models to be used during the next stages still being decided (LISLOOD and a modified version of the Upper Humber model are strong candidates, HEWL will not be available in the short-term, and isn't well suited to doing option assessment work involving large numbers of model runs).
- Next stages of the modelling work should start in September.
- A paper is being prepared that describes the long-list to short-list process.



Management approaches to be assessed

- Flood storage
 - Defence raising (to understand the impacts of displacement of risk)
 - Habitat change
 - Accommodating Water
 - Barriers
-
- We also need to start thinking about the 'adaptive pathways' approach, and what would trigger the shift to a barrier for example, and the modelling that needs to be done to underpin future decision-making.



A 'managed adaptive approach': future decision points

- The HSCR is taking a 'managed adaptive approach' to the delivery of flood risk management works.
- Rather than setting out how flood risk will be managed over the next 100 years, the approach recognises that this will be influenced by future changes, and instead identifies points at which the Strategy should be reviewed.
- There are a number of changes or anticipated changes which may influence the future direction of the Strategy. A single or combination of projected or realised changes could influence the strategic approach to managing flood risk.



Changes which will influence future review

- Changes in risk as a result of:-
 - Climate change
 - Economic and land use change
 - Social change
 - Geomorphological changes
 - Environmental change
 - Defence deterioration
 - Improved understanding of risk

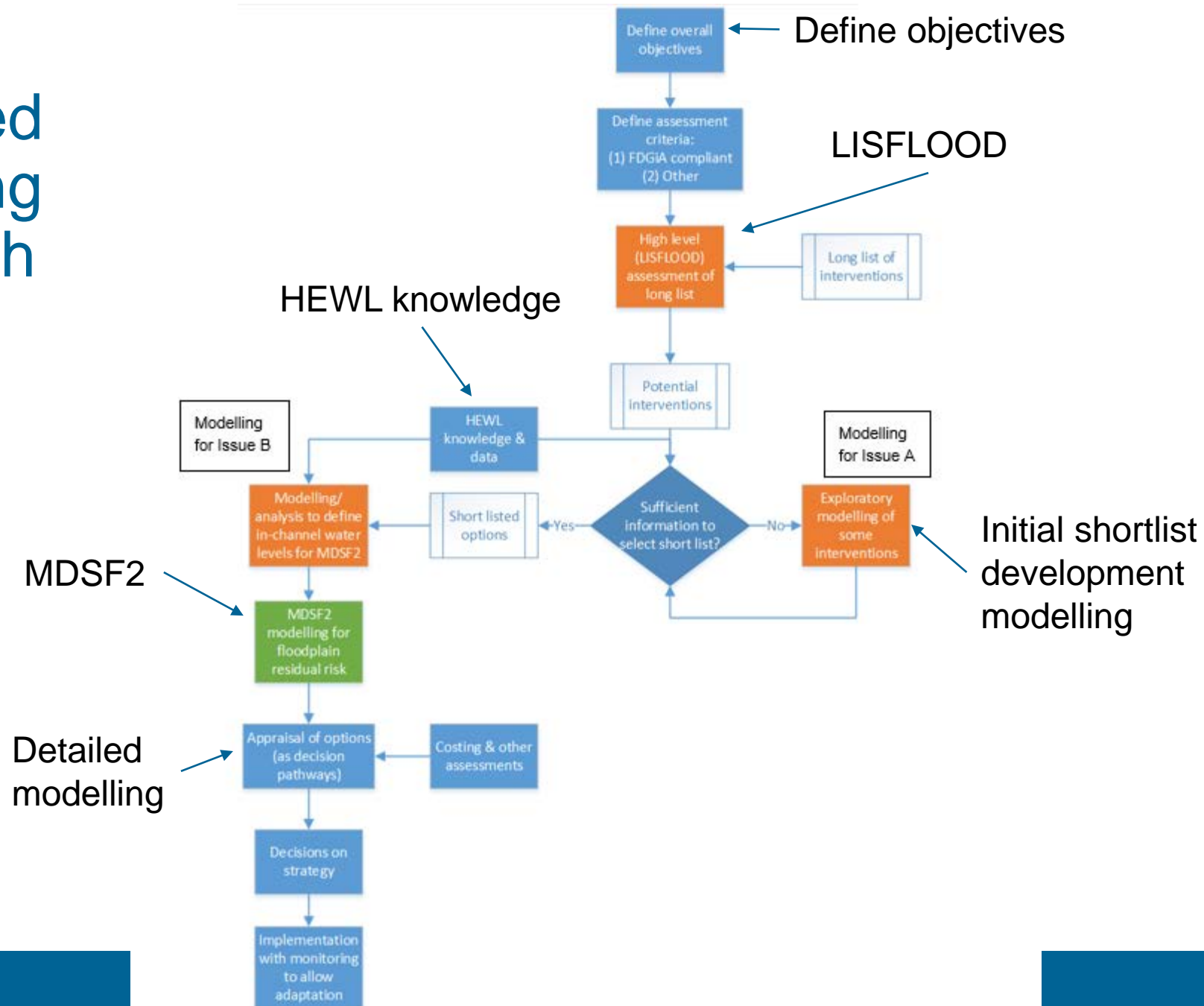


Changes which will influence future review

- Changes in the deliverability of options as a result of:-
 - Increase or decrease in available funding and investment.
 - Development and growth opportunities.
 - Changes in land use including changes in attitude towards alternative uses of land.
 - Engineering advancements and innovations that could significantly affect the cost of implementation (up or down).
 - Legislative change.
 - Appraisal of flood risk management schemes (including changes to the Green Book).



Proposed modelling approach



Definition of ‘*locally important infrastructure*’ for the HSCR:

For the purposes of managing tidal flood risk we suggest as a definition of “*locally important infrastructure*”:-

Infrastructure that if flooded

- would lead to fundamental impacts on community wellbeing
- would affect the ability to manage, respond to and recover from a flood.



Types of locally important infrastructure

- The types of locally important infrastructure we propose to consider in the HSCR are therefore:
 - Fire stations
 - Police stations
 - Key health infrastructure (eg hospitals and ambulance stations)
 - Strategic drainage infrastructure, e.g. major pumping stations
 - Strategic telecommunications exchanges
 - Railway lines, stations and associated infrastructure
 - Strategic water supply and waste water treatment infrastructure e.g. large treatment works
 - Strategic gas network infrastructure
 - Electricity infrastructure, e.g. grid and primary substations
 - Major roads and roads identified as key evacuation routes



Taking account of infrastructure in short-list (SL) option appraisal

- Economics methodology utilises the Environment Agency's National Receptor Database (NRD) to identify receptors at flood risk.
- NRD will be used to identify and value flood risk to all flood susceptible receptors so will include all infrastructure, not just locally important infrastructure assets.
- Differences in risk to identified locally important infrastructure could be used as a factor in SL appraisal where there are measurable risk differences between the SL options.



Humber Extreme Water Level project

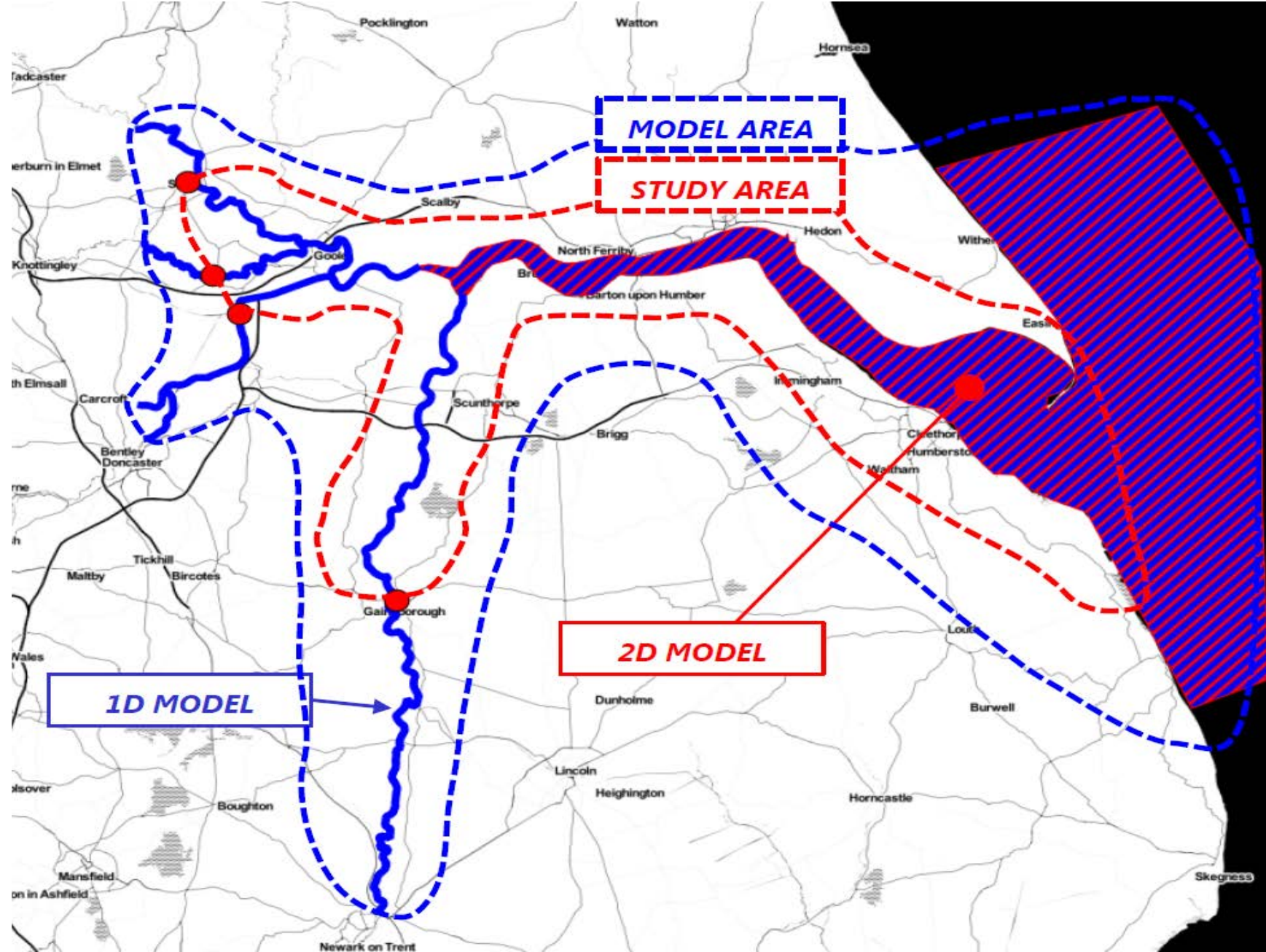


Contents

- Study Area
- Deliverable and Sample Output
- Current Status/ Programme

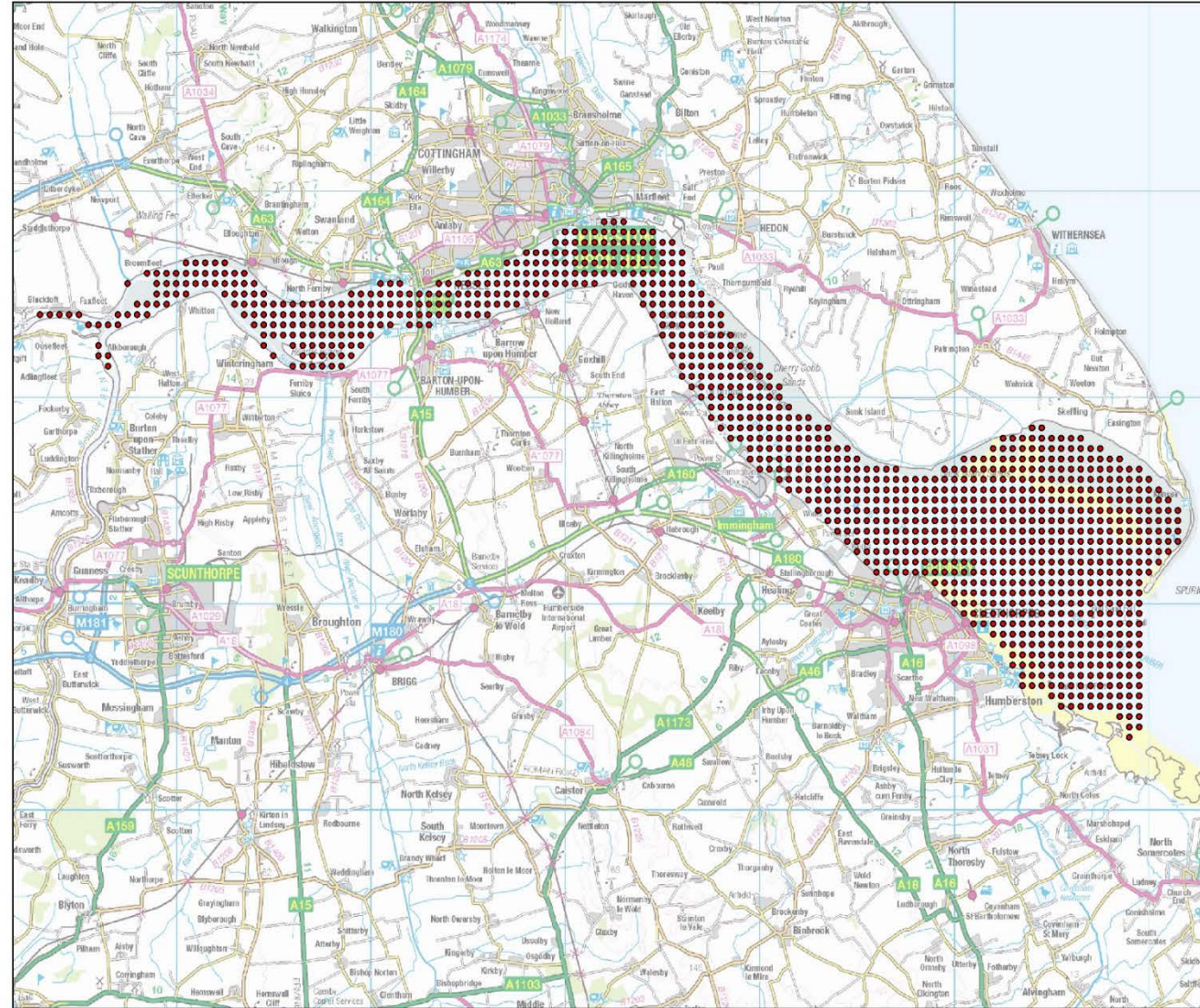


Study Area



Humber Estuary Water Level Extent of DRAFT Levels as of August 2018

Extent



Scale 1:200,000



Model Node Points

Identify

Identify from: <Top-most layer>

JECs_AEP_1_in_200_years

- 1921
- 1922
- 1923
- 1924

Location: 500,500.000 424,000.000 Meters

Field	Value
FID	1920
Shape	Point
F 1	1921
AEP	1:200
LocationID	1087
Depth	-2.90872
Easting	500500
Northing	424000
Variable	Water Level
Pair_1	4.76
Pair_2	4.77
Pair_3	4.78
Pair_4	4.79
Pair_5	4.8
Pair_6	4.81
Pair_7	4.82
Pair_8	4.83
Pair_9	4.85
Pair_10	4.86
Pair_11	4.87
Pair_12	4.88
Pair_13	4.89
Pair_14	4.9
Pair_15	4.91
Pair_16	4.92
Pair_17	4.93
Pair_18	4.94
Pair_19	4.95
Pair_20	4.96

Identified 4 features

Created by the Partnerships and Strategic Overview Team, Lincoln

© Environment Agency copyright and / or database rights 2018. All rights reserved. © Crown Copyright and database right. All rights reserved. Environment Agency, 100026380, 2018.

Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk



Data Format

Joint Probability Analysis Water Level/ Wave Height

90 matching pairs for each Annual Exceedance Probability

Identify from: <Top-most layer>

JECs_AEP_1_in_200_years

- 1775
- 1776

Location: 508,500.000 426,000.000 Meters

Field	Value
FID	1774
Shape	Point
F1	1775
AEP	1:200
LocationID	1007
Depth	-3.51341
Easting	508500
Northing	426000
Variable	Water Level
Pair_1	4.55
Pair_2	4.56
Pair_3	4.57
Pair_4	4.58
Pair_5	4.59
Pair_6	4.6
Pair_7	4.62
Pair_8	4.63
Pair_9	4.64
Pair_10	4.65
Pair_11	4.66
Pair_12	4.67
Pair_13	4.68
Pair_14	4.69
Pair_15	4.7
Pair_16	4.71
Pair_17	4.73
Pair_18	4.74
Pair_19	4.75
Pair_20	4.76

Identified 2 features

Identify from: <Top-most layer>

JECs_AEP_1_in_200_years

- 1775
- 1776

Location: 508,500.000 426,000.000 Meters

Field	Value
FID	1775
Shape	Point
F1	1776
AEP	1:200
LocationID	1007
Depth	-3.51341
Easting	508500
Northing	426000
Variable	Wave Height
Pair_1	0.82
Pair_2	0.81
Pair_3	0.81
Pair_4	0.81
Pair_5	0.8
Pair_6	0.8
Pair_7	0.8
Pair_8	0.8
Pair_9	0.79
Pair_10	0.79
Pair_11	0.79
Pair_12	0.79
Pair_13	0.78
Pair_14	0.78
Pair_15	0.78
Pair_16	0.78
Pair_17	0.78
Pair_18	0.78
Pair_19	0.77
Pair_20	0.75

Identified 2 features

Current Status

- DRAFT results available for estuary – downstream of Trent Falls.
- Will NOT be released as they will change when
 - Tidal rivers are completed – proving to be technically challenging.
 - Tie up with national Coastal Flood Boundary dataset level at Immingham.
- Unlikely to have full set of data published until early 2019.
- Please talk to us if you have concerns in the interim.
- Process for future updates (ie UKCP18) being considered.



Planning, local plans and site allocations



Planning, local plans and site allocations

We would like to get your initial views on:-

- the key elements/issues of alignment
- how we make sure this alignment happens



Initial ideas of key elements/issues of alignment / the reasons for doing this

- Using Local Plan ambitions to inform flood management options as part of HSCR appraisal and subsequent programme development.
- Humber Strategy preferred options / expected pathways are embedded in Local Plans – e.g. promoting enhancements, safeguarding where relevant.
- Opportunities for alignment / integrated infrastructure delivery and investment are identified.
- Ensuring that in doing the above the Local Plan / the way we consider growth in the Strategy remains consistent with national and local planning policy.
- **Understanding how Strategy supports Local Plan and growth will inform regional case for investment (link to future growth / economics activity and Funding & investment strategy).**



Ideas of how we make sure this alignment happens

- Develop a timetable of development of plans alongside the HCSR programme.
- Develop an action plan and agree ownership of actions in line with above timeline (some areas will be part of existing workstreams, e.g. SA).
- Officers Group take ownership of ensuring progress of this plan – regular reporting to be fed into the group.



Funding and Investment



Funding and Investment Strategy



Approach (1)

- *Baseline*: lessons learnt, scope potential sources of funding, limitations - update as flood options develop.
- *Scale of potential funding & investment*: link funding info with flood management options.
- *Develop Humber funding principles*: e.g. paying for environmental mitigation; maintenance, ways of working.
- *Funding Choices*: short, medium and long-term – likely sources, gap.
- *Local Funding Mechanism*: Is it justified? Identify and evaluate funding / financing ideas ; identify preferred funding choices.



Approach (2)

- *Compliance (& enhancement)* - scale of funding needed to deliver environmental compliance and enhancement
- *Flexibility in Grant in Aid* – maximising GiA as far as possible.
- *Identify barriers requiring national action* – to delivering agreed approach.
- *Future growth and investment potential* – value to future economy and industry from Humber Strategy.
- *Future insights* - future opportunities, emerging national policy, 25 year env plan.
- *Funding Strategy* - drawing together all the activity, action plan S/M/L term.



Next Steps

- Start work needed to inform short-list appraisal
- Receive feedback from you
- Scope discussions
- Finalise approach
- Engagement Planning



Update on other workstreams



Economics

- There is renewed work on the future approach to Benefit Apportionment for the HSCR project. We will probably use an overlaying of flood outlines to determine relative risk approach, drawing to an extent on previous work done for Hull.
- We are starting to look at how Natural Capital can be played into the Economics assessment, and at the way the Ecosystems Services assessment will be undertaken.
- Growth - v2 of growth paper, will write to/discuss with LA Directors.



Environmental

- A new project that extends the 2016 Landscape and Investment Study (principally to cover the additional strategy areas) has just been approved, and will commence shortly.
- A new assessment of the extent of habitat loss is under way, basically a new review of the historic Lidar records. This should deliver a much more reliable measure of losses since the 1990s, and as a result, better inform our future habitat creation planning.
- A national coastal squeeze has started. This aims to deliver a nationally agreed definition of CS and best approaches for assessing it.
- A WFD Good Ecological Potential workshop was held in July.
- Natural Capital / Ecosystems Services starting to be looked at.



Engineering

- A study into geotechnical and geophysical information on defence and ground materials is proceeding.
- The future monitoring approach is being considered. The HSCR project is ultimately to deliver a new Monitoring Strategy, but aspects of the work will be brought forward to ensure that our ongoing monitoring is re-targeted as soon as possible, and that it helps underpin the development of the overall strategy.



Capital programme and pipeline



New Project Programme

- The Project Programme is being reviewed. We are concerned that we need better tools for tackling and managing the work being done, especially to help limit the tendency for its overall length and the time to completion to extend.
- There will be consideration of the programme at individual workstream level, as well as at overall project level.
- The scope will be refined as part of the process.
- The work should be completed by the end of September.



Next Capital Programme and Pipeline

Summary Table

Area		Up to 2021	2022-2027	2028+
East Mids	TPE (£k)	440	2,350	660
	GiA (£k)	440	2,350	660
	OM2	250	459	236
Lincs	TPE (£k)	20,240	40,810	20,950
	GiA (£k)	8,860	31,714	12,950
	OM2	153	7829	170
Yorks	TPE (£k)	61,603	47,142	223,459
	GiA (£k)	59,958	27,827	148,106
	OM2	36,616	3,216	27,266

Post 2021 Total:

TPE	£335,371,000
GiA	£232,607,000 (therefore funding gap: over £100,000,000)
OM2	39,176



Engagement



Engagement

- Priorities for the next few months:–
 - Website
 - Initial engagement with rural and agricultural communities
 - Wider awareness-raising that the review is underway
 - Preparation for first round of consultation
- To do this effectively we need to do it as a partnership.
- Seeking to develop links with your comms teams and to understand capacity.
- There will be an engagement plan, a media plan, and principles for communication and engagement, to be agreed by all partners.



Security, classification and use of data



Data and Information management

- We need to articulate our approach to information management for the project.
- Critical issue for us to get right.
- As we move into a more 'data intensive' stage of the project it becomes more important.
- We would like to produce a protocol for data and information management.
- Any initial views and ideas to inform this?
 - Are there data / information protocols that you work with, which will affect the project? (beyond FoI).
 - Any ideas, examples from your authority?



Liaison Forum



Liaison Forum planning

- Wednesday 26 September 2018 at Brough Business Centre.
- Proposed items for agenda:-
 - Feedback on long-list to short-list appraisal process following workshops back in March.
 - Sustainability Appraisal criteria.
 - Humber Landscape and Investment Study Phase 2 – involvement.
 - Engagement
 - Raising awareness of the HSCR
 - Engagement with the agricultural community



AOB



Close

Thank you for attending



Activity	Information needed (INFORM ENGAGEMENT)	Output/Deliverables (INFORM ENGAGEMENT)
<p><i>Baseline:</i> Scope sources of funding income, limitations and proposed change</p> <p><i>Scale of potential funding & investment:</i> Link funding Matrix with flood management Options</p>	<p>Where is PF around the Humber currently from? Including business contributions, links with e.g. IoA and other specific activity.</p> <p>W/S - Flood risk modelling outputs - geography at risk and damages assessment; beneficiaries</p>	<p>Baseline funding matrix (updated twice to take account of Short List and Preferred Options); test with businesses</p> <p>Conclusions paper – sources and scale of funding, and short term (6 year?) funding plan – <i>scope for further work if PSO are amenable?</i></p>
<p><i>Funding potential from future growth</i> - as a result of tidal FCRM</p>	<p>Which sectors would tidal FCRM benefit?</p> <p>Best ways of capturing unlocked potential?</p> <p>W/S - modelling, risk S/M/L term</p>	<p>Growth paper and subsequent deliverables</p> <p>Paper on unlocking growth potential.</p>
<p><i>Funding principles</i> – explore existing examples, including compliance elements</p>	<p>Feedback on principles</p>	<p>Draft paper, revision following feedback - Strategy.</p>
<p><i>Funding Choices-</i> S, M & L Term – likely sources, gap, how do we fill the gap, actions.</p>	<p>Feedback – what other local mechanisms have been considered.</p> <p>W/S modelling and economics outputs – what’s at risk, what GiA is available, magnitude of gap</p>	<p>Funding Discussion paper (Complete) - funding ideas and potential criteria to assess these.</p> <p>Paper justifying need for local funding mechanism (if required). Decision: principle to explore local mechanism</p>
<p><i>Compliance (& Enhancement)?</i> - scale of funding needed to deliver environmental compliance, draw on matrix & ideas for Local Mechanisms</p>	<p>Environmental evidence base – what’s required</p>	<p>Funding Strategy/HFRMS describes how compliance will be funded. (integrated?)</p>
<p><i>Local Funding Mechanism - (if gap)</i> - evaluate funding ideas and short list; financing options. Preferred approach</p>	<p>Feedback - confirmation on principle of local funding mechanism</p>	<p>Paper: Preferred approach to local funding mechanism; funding; financing; principles for accessing it; action plan for setting it up - short term,</p>
<p><i>Flexibility in partnership funding</i> - Stretch</p>	<p>SDA</p>	<p>SDA</p>
<p><i>Barriers requiring national actions</i> – to deliver agreed approach</p>	<p>Outcomes of earlier work</p>	<p>Paper to leaders/programme board. Some actions may be reflected within Funding Strategy.</p>
<p><i>Funding Strategy</i> – draw together all the activity</p>	<p>Engagement/comms tools</p>	<p>Draft and final Strategy, non technical summary..</p>

