

Subject: Fairbourne Technical Group **Present:** Reuben Woodford (NRW)
 Greg Guthrie (RHDHV)
 Mike Phillips (UWTSD)
 Mark Roberts (CES)
 Kerry Keirle (WG)
 Tom Mclean (WG)
 Rob Williams (YGC)
 Lisa Marshall (YGC)
 Steffan Williams (YGC)

Author: Steffan Williams

Date: 04.10.16

Location: Fairbourne Village Hall

Apologies: Louise Pennington (NRW)
 Ben Hext (NRW)
 Alun Osbourne (YGC)
 Tony Thomas (UWTSD)
 Philip Bennett- Lloyd (JBA)

Item No	Action	By who	Date
1	<p>Welcome, introductions and apologies</p> <p>Apologies received from Louise Pennington, Ben Hext, Alun Osbourne, Tony Thomas and Philip Bennett-Lloyd.</p>		
2	<p>Fairbourne: Moving Forward – Technical Group Context</p> <p>Greg Guthrie gave a descriptive background of the situation surrounding Fairbourne thus far coming to the conclusion that the SMP2 has highlighted the need to be in a situation where there isn't a need to manage defences in 40 years' time, (2054). One of the key issues that the technical group is set up to do is to examine in more detail the sensitivity of this timescale and what actions may be required to meet such a timescale for change, while maintaining the security of the village in the interim.</p>		
3	<p>Governance and Terms of Reference</p> <p>Lisa Marshall explained that Project Governance is under review and that JBA Consulting's next bulletin would focus on this aspect – due to be released in early 2017. All other issues regarding the Project Governance are discussed in the Project Board meetings.</p>		
4	<p>CES – Shingle Bank Presentation</p> <p>Mark Roberts has been involved in UAV surveying of the beach at Fairbourne over three years with the latest being on the 15th of September. MR was able to show the group via a projector, examples of the high resolution and extremely accurate models of the beach the drone surveying was able to achieve. A suggestion was made that future UAV surveying should be carried out in tandem with Alun's (GC) beach survey to gain comparable data sets. Beach profiling is an incredibly difficult process to predict accurately but the UAV surveys being carried out by CES and GCs in-house surveys are helping in that endeavour.</p> <p>RW – Although NRW have some funding for beach survey work this offers little ability to undertake extensive beach monitoring in Fairbourne or elsewhere. As part of the recent Friog Corner beach replenishment works</p>		

	<p>NRW commissioned CES to undertake a drone/beach survey. It is only through collaborative working with Gwynedd that we will be able to sustain a progressive understanding of beach processes that affect the defence structures here.</p>		
5	<p>Managing Future Flood Risk – Critical Questions</p> <p>Fluvial situation:</p> <ul style="list-style-type: none"> • RW firstly explained that flooding from surface water was GC’s remit. Management of flood risk from main rivers comes under NRW’s remit, with additional responsibility for Internal Drainage District channels in Fairbourne. Management of flood risk from ordinary watercourses and from groundwater in general is GC’s remit. The complexity of the flood risk situation in Fairbourne demands that obvious co-operation would be required to address any future flood risk issues. • A bypass channel on the Afon Henddol, instigated as part of the Fairbourne tidal scheme (2012) ensures high flows are prevented from impacting directly on the village. There are no telemetry linked gauges within any main river channels in Fairbourne at present, however this option is under investigation to aid monitoring of flows. • Due to the flat nature of the terrain, Fairbourne is highly sensitive to fluctuations in channel flow and surface water and sustaining channel capacity, particularly within the main carrier channel of the Henddol is critical. Perceptively there can be difficulty in differentiating between raised water levels in channels from tidal lock or back up due to excessive reed growth in channels. • Groundwater level monitoring is key. Rob Williams explained that GC have a year’s worth of data so far which is currently being processed, but no historical data of the area. MP suggested that it could be possible to correlate the current years’ worth of groundwater data with historical sea and tide levels to get an estimate of historical ground water. GG stated that there could possibly be too many variables in play to achieve this. <p>MP suggested that the key questions that the technical group was formed to answer should have been answered as part of the development of the SMP2 and that Fairbourne residents have lost out because of this.</p> <p>GG defended the development process of the SMP2 stating that the policy “has got us where we are now”, and dealing with the issues facing the village. MP is not convinced that the real time-scale is as the SMP2 predicts and that insufficient academic research highlights this.</p> <p>GG acknowledged that time-limiting the SMP2 has raised issues and that there are clear uncertainties regarding the rate and how extreme climate change is likely to be in the future, but delaying the implementation of the policy was not an option, in terms of planning for change. With regards to Fairbourne, clearly there wasn’t sufficient communication with the community at first but that has now changed and the project is breaking new ground with community engagement at the forefront.</p>		
6	<p>Way Forward</p> <p>KK suggested a model is required which incorporates all the currently available data and could be updated as and when new data is acquired showing Masterplan progress.</p> <p>RW – Is there a case to delay modelling until acquisition of a more</p>		

	<p>meaningful set of groundwater data/and revised sea level rise scenarios is achieved? There is potential reputational risk/risk of further blight to community if evidence is produced then revised – post 2020?</p> <p>A suggestion was also made that NRW receive direct funding from WG to monitor the fluvial aspect of the project rather than coming through FMF as a streamlined initiative. GG, RW and LM prefer the current FMF funded agenda as it provides reassurance to the community of a WG backed community engaged project.</p> <p>MP stated that there is enough data present to be able to work with – but that there is a need for it to be analysed and interpreted.</p> <p>A cross-organisation understanding on every aspect is needed which the Flood and Coastal Change Risk Pathways should provide:</p> <ul style="list-style-type: none"> • Groundwater • Fluvial and surface water risk • Flood risk from the Estuary • Coastal Change • Coastal Overtopping <p>MP and UWTSD are to assess the coastal aspect of the project by looking into the current beach surveys, historical wind records and sea levels with the aim to be able to produce a presentation of early findings by mid-December.</p> <p>NRW are to continue to assess and monitor the fluvial aspects regarding the Afon Henddol and relating water channels whilst co-operating with GC's continued monitoring of groundwater levels.</p> <p>RW – NRW will continue to consider the technical initiative required to satisfy the requirements of the FMF project in terms of understanding evolving and future tidal and fluvial flood risk at the requisite level of detail. As discussed, NRW will hold a meeting with MP to consider a modelling rationale and bring issues for discussion to the next technical group meeting.</p> <p>RW would try and make available the technical appendixes supporting the appraisal for the embankment improvement work. GG volunteered to review these to establish what information may already be available.</p>	RW / GG	Timescale to be agreed once information was available
7	<p>Any other business Nothing was raised.</p>		
8	<p>Date of next meeting MP to assess resource availability to potentially arrange a progress presentation in mid-December. Therefore the next meeting could be arranged in tandem with this on Lampeter campus of UWTSD.</p>	MP	ASAP