

**MINUTES OF DURLSTON HEAD TO HURST SPIT SMP2  
ELECTED MEMBERS FORUM MEETING #04  
BOURNEMOUTH LIBRARY - MONDAY 22<sup>nd</sup> JUNE 2009**

**Present:**

Cllr. Mark Anderson (MA)	Bournemouth Borough Council (Chair)
Cllr. Robert Lawton (RL)	Bournemouth Borough Council
Dr. Dave Harlow (DH)	Bournemouth Borough Council
Geoff Turnbull (GT)	Bournemouth Borough Council
Kevin Rodda (KR)	Bournemouth Borough Council (Minutes)
Cllr. Fran Carpenter (FC)	New Forest District Council
Andrew Bradbury (AB)	New Forest District Council
Steve Cook (SC)	New Forest District Council
Steve Woolard (SW)	Christchurch Borough Council
Cllr. Sally Derham-Wilkes (SDW)	Christchurch Borough Council
Richard Edmonds (RE)	Dorset County Council
Cllr. Andrew Starr	Purbeck District Council
Greg Guthrie (GG)	Royal Haskoning
Justin Ridgewell (JR)	Royal Haskoning
Mike Garrity (MG)	Borough of Poole
Clive Smith (CS)	Borough of Poole
Dave Robson (DR)	Borough of Poole
Cllr. Peter Adams (PA)	Borough of Poole
Neil Watson (NW)	Environment Agency

Item No	Action
1.	<p><b>Apologies:</b> Cllr. Mike Duckworth (Christchurch) Mike Goater (Purbeck) Tara-Leigh Eggiman (Royal Haskoning)</p>
2.	<p><b>Minutes of the Last Meeting</b></p> <p>The minutes of the previous meeting on 18th May were approved, with MA seeking confirmation of the commencement time for the meeting on 24th August 2009, following conflicting times in DH's correspondence. (See Item 5 later in these minutes)</p>
3	<p><b>Workshop</b></p>
3.1	<p><b>Review of high level Policy Development Zones (PDZ)</b></p> <p>GG presented Haskoning's work so far on the SMP2, with a PowerPoint slide show. This commenced with an area breakdown, between Durlston Head and Hurst Spit, and mentioned that there will be additional issues to be approached within those areas. Input requested from all in attendance to be all inclusive.</p> <p>The SMP2 is a long term plan, not an immediate policy. Need to plan and manage for 100 years, taking into account the large scale and the smaller local area detail, and the predicted rise in sea levels.</p> <p>There is also a need to consider the changes in future society, which will happen as a result of the decisions that are made for the SMP2.</p> <p>The features need to be sustainable - we could 'do nothing' and walk away from sea</p>

defences.

There is a need to manage and maintain the expected coastal changes.

Bournemouth Beach has an economic viability - in itself it generates income for the town.

Poole Harbour is an important waterway for shipping and coastal operations (fishing, boating etc.)

The coastal area being considered is very complex, with prominent cliffs at the east and west extents, and centrally, and ocean floor ledges, open harbours and littoral drift.

Investigate links and interdependency and also isolation

Long term - erosion. The erosion line will be a smooth curve from Sandbanks to Highcliff - with Hengistbury Head lost. This would be the estimated coastal shape 500 years from now.

But this future shape is protected by the current Hengistbury Head feature.

The SMP2 works on the projected erosion rate for the next 100 years

The SMP3 in 2019 will look at the next 100 years from that date and from the erosion line in 2019 - 10 years on from today's line

Haskoning estimate that in 100 years time, the Hengistbury Head feature will be diminished to such an extent that it will have no effect on the coastal erosion, and after a further 50 years, it will have completely disappeared.

GG presented 3 scenarios:

(a) If Hengistbury Head is not defended, then there will be a need to defend Bournemouth Seafront at Point House Cafe - the most eastern part of current development.

Christchurch Harbour will be non-existent and therefore abandoned, with both Mudeford and Stanpit also lost.

(b) There could be defences for Mudeford and Stanpit, and also Point House Cafe, with no protection at Hengistbury Head, which could lead to Christchurch Harbour becoming a sandy bay after the loss of Hengistbury Head.

(c) Protect Hengistbury Head, and maintain the existing cliff slope and beach curve - but this could prove costly.

So in 100 years, maybe consider dropping the Hengistbury Head protection completely, and adopting option (b) above.

Whatever we do, today's decisions for the SMP2 will affect the coastline in 100 years time - we need to plan now for the future.

3.2

### Presentation of present policy thinking

#### Christchurch Bay

No significant independent features or consideration.

#### Poole Harbour

The entrance at Sandbanks and Studland

The Sandbanks isthmus, under modelling, produces uncertain results

If permanently breached, it will make a second channel that could drain the interior harbour.

The existing sand banks and sand bars would naturally reform at new locations, and this combination would have a significant effect on the harbour use: shipping and leisure.

Haskoning are proposing a 'strategic decision' to manage and maintain the existing

entrance feature. This would be a high level policy to preserve this feature as a defence for the harbour.

NW reminded GG of the future predicted water level rise, which would add significant water volumes and flows into and from Poole Harbour.

GG appreciated this comment, but indicated that the protection would need to be continually reviewed to ensure total protection of the isthmus.

#### Poole and Bournemouth Seafronts

No significant comments to make, so long as there is protection at Sandbanks and Hengistbury Head.

#### Swanage

Considered to be two bays (north: from Burlington Road to Ballard Point and south: from Burlington Road to Peveril Point), and to be considered on a 'local' scale.

### 3.3 Discussion of management units and policy units

The four Policy Development Zones (PDZ) are identified as:

PDZ1 Christchurch Bay (from Hengistbury Head east to Hurst Spit)

PDZ2 Poole Bay (Bournemouth and Poole seafronts)

PDZ3 Poole Harbour Entrance and Studland (from Shore Road in the north to Studland in the south)

PDZ4 Swanage (from Handfast Point in the north to Durlston Head at the south)

#### PDZ4 Swanage

Erosion threatens the commercial area of the town so flood protection becomes important.

Swanage's beach is also an important asset for the town.

Haskoning are proposing to 'hold the line' utilising beach replenishment.

The northern part of Swanage (from Burlington Road northwards) is cliff, and without protecting the cliffs, there will be a loss of residential properties due to cliff erosion.

There will also be a loss of beach sediment here due to this northern erosion and the resultant littoral drift.

The proposal is to keep the southern part of the beach, with the seawall and groynes being maintained to retain the beach sediment.

#### Durlston Bay (castle at southern end, and Peveril Point at north).

Bay erosion currently continues, with cliff falls adding to the beach and being washed away.

The cliff crest is moving back.

With no significant cliff top development to protect, it is difficult economically to justify public expenditure, although private cliff protection may be permitted.

RL asked about the timescale for the depicted erosion lines displayed.

GG said approximately 20 to 30 years here, based on the current SMP1 decision for managed realignment with no protection - which is likely to continue in SMP2.

RL wondered if Swanage were aware, and AS admitted that he was not aware of this issue.

DH added that there have been large scale works on the cliff face in this area about 10 years ago, but did not know if this was for drainage or cliff stability.

NW said that the cliff crest retreat issue comes under land management, and believes

that properties in the Newtown area are being purchased without the buyers being aware of the near-future implications. There is a need for this to be publicised. GG stated that this information has been available since the SMP1 publication. AB informed all that the SMP2 will give better information, and there was a brief discussion about the presentation of this information as far as public relations goes. GG reiterated that accurate information needs to be provided. FC stated that this information may currently be sought by home insurance companies. There was then a brief general discussion about the level of information that insurance companies already have available to them - they were using flood risk mapping data prior to its release by the Environment Agency (EA). GG reminded all that the cliffs are in a reasonably stable condition at this point in time, and that cliff face (and therefore cliff crest) erosion continues even with cliff toe protection.

#### PDZ3 Poole Harbour

Haskoning have not looked at the interior of the harbour in great detail yet. GG said that it is likely that the scenario will be to hold the line of the Sandbanks isthmus and the training bank and Studland, as this offers the best protection of the harbour. There is a need to review the flood risk areas inside the harbour. There will be a need to compromise over the Nature Conservation Areas. There will be a need to protect Poole Town and Quay - the commercial area. On the west side and round to the south (Wareham side, towards Arne), there will be a need for managed realignment or permit areas to flood. Haskoning are aware there is more detail to be provided here. MA mentioned the flooding of Shell Bay (just south of the harbour entrance, on the open water side), and with the predicted water level rise, what impact this would have on the channel width. GG confirmed this needed to be studied more, and confirmed the area would not be 'submerged' by the flooding, just 'overtopped' more frequently. PA identified the existing lagoon on Brownsea Island would be lost or flooded with a higher water level, and TF stated that The National Trust are looking into that, with the loss of the habitat area requiring replacement (under current legislation.?) NW stated that the area by Wareham is currently bunded and managed by the EA, and that this is currently being reviewed. CS enquired about the value of the salt marshes and natural habitat - will these be protected in the south of the harbour and also the north at Lytchett Bay? GG said that it is possible that a tidal barrier could be installed at the entrance. This option is still to be considered by Haskoning. FC wondered if it was viable to protect the narrow neck of the Sandbanks isthmus. GG stated that the area is good now, and would be easy to reinforce from its present condition. FC wondered if the general public would complain if there were increased defences at this location, and not elsewhere where erosion could be seen to be more problematic. GG reiterated that the defence of Sandbanks would benefit the whole of Poole Harbour and its peripheries.

#### PDZ2 Bournemouth to Hengistbury Head

Haskoning are proposing to hold the line here. In 100 years, there will be no permanent breach, but increased overtopping, at the weak spot at Double Dykes.

With protection at Hengistbury Head and Point House Cafe, GG's presentation depicted a smooth inward curve with no outstanding feature at Double Dykes, which would be natural more robust defence, with the forming of dunes with a pebbly beach locally. GG was of the opinion that it would be better to have natural erosion than a 'hard' engineered solution.

#### Bournemouth Beaches

With sea level rise, there will be a more aggressive foreshore, with more frequent promenade overtopping. To counter this the existing 18year replenishment cycle may need to be revised to 9 yearly. So for the same cost, the works only last half the time, so maybe consider larger beach sediment size (i.e. pebbles), or consider installing a rock revetment all along the seawall.

DH stated that until the 1970's Bournemouth suffered frequent overtopping and a loss of the beach, and a subsequent loss of tourists.

GG suggested the installation of breakwaters, so that the defences are moved forward.

He also proposed to move away from the linear line seafront thinking, to break it down into smaller sub-areas. This would allow the retention of some sediment, and allow some cliff erosion for natural replenishment.

DH stated that this would require a philosophical change - it is linear, groynes break it up, and affect the sediment's natural movement. Undertaking more engineering makes it worse.

GG agreed. He expanded that due to Bournemouth's cliff top development, it is not possible to allow all cliff crest erosion

TF stated that the general public are likely to want to maintain the status quo, with the tourism sector asking for an engineered solution to accommodate sea level rise i.e. increase the promenade level.

GG said that since 1970's the policy has been OK, but we are now reviewing policy to plan for the next 100 years

DH stated that we could replenish to 2007 beach levels with continued funding and sand availability

PA identified that if Bournemouth were to keep replenishing, thus advancing the line, then it may end up with a very wide beach

GG reminded us that we need to design for the future, and this design needs to incorporate the possible desires of the developers with respect to the usage of the land.

AB stated that there are examples globally of "advance the line" projects where development has been encouraged, and pointed specifically at Dubai.

GG says it may be today's desire to replenish Bournemouth beaches for another 75 years, but it may then become unsustainable.

PB said that we would need high-income investment to generate cash.

GG explained that this should be viewed not as a problem, but as an opportunity.

AB reiterated the requirement to look at the implications of any works in one area on the neighbouring areas, with particular reference to sediment drift.

GG stated that if Hengistbury Head is held, with increased sea level, Christchurch Bay will have sediment volumes reduced. If Bournemouth only replenish to 'maximum' levels (i.e. the maximum levels that can be retained on Bournemouth beaches), littoral drift in Christchurch bay will be reduced.

But to hold Hengistbury Head, the Long Groyne would need to be raised, to which DH added that additional groynes would also be required.

The discussion continued: Bournemouth's beach recharge benefits Christchurch Bay.

When Bournemouth's beaches are full, surplus feeds to Christchurch and is a benefit to them.

All coast protection schemes need to work together and consider each other.

PA interjected that there are various options, that all inter-relate.

He is therefore concerned about releasing all this information into the public domain at this point in time, as it could be scaremongering.

AB reminded him that Haskoning are to develop the details for presentation to the public.

GG said that we can realistically replenish the beaches for the next 40 years, but then it may become unviable, bearing in mind the predicted climate changes, so we should be deliberately considering alternatives now for the future.

NW said that town planning departments need to think about future tourism management, within 'acceptable' reason, and balance what is desirable with what is affordable.

MG enquired about the costs of the features, the funding options and the availability of the funds.

GG said that it depends on what we are trying to achieve, and how can it be afforded. NOT: what can we afford, and what are we going to achieve?

He expanded: Defending small villages may not be viable.

However in this area, the towns are important and derive great benefit from the beaches.

#### PDZ1 Christchurch Bay

##### Barton on Sea

Highcliffe is defended, and has a stable cliff, and to Friars Cliff (Waterford Road) can be held and maintained.

Between Waterford Road (to the west) and Sea Road (to the east) is problematic

Most severe picture of 100year erosion line - the cliffs are soft clay, and are predicted to fail.

Some of the existing defences are affected by ground slump.

The cliff toe is currently protected well.

Hold the line for 50 years, then leave and allow to fail (with no more active intervention).

Possible increased erosion of the cliff crest for maximum erosion line.

Extent of works to stabilize for 100 years is therefore perceived to be massive.

The eastern end (from Sea Road eastwards) is more defensible.

May need works to increase defences height over 40 years as a hold the line policy.

Over 100 years, this will mean a massive intervention, so should it be continued?

FC enquired: could there be an engineered solution to stabilize the cliffs, by draining water from them?

GG stated that this is not possible in clay cliffs, but this solution may be OK in the eastern cliffs.

He also stated that this will not provide a long term or permanent solution.

NW reminded us all of the predicted increase in rainfall as well as the increase in sea level rise.

MA discussed works here in comparison to Lyme Regis.

RE and TF were able to state that the Lyme Regis scheme protected 600 metres of coastline. At Barton, it is 1500 metres.

The 2<sup>nd</sup> phase at Lyme Regis will be £19million, so a Barton scheme would be very expensive indeed.

The Lyme Regis scheme protected the sole access road, and the Barton scheme would protect only residential dwellings.  
 (This would score significantly differently on the cost benefit analysis).  
 AB confirmed that a cliff drainage scheme is buildable, but may last a maximum of 50 years.  
 GG reiterated that this engineered solution is not permanent, so therefore consideration should be given to not undertaking any works.  
 NW suggested that properties in the affected cliff top area are taken from freehold to leasehold.  
 FC wondered if cost was absolutely prohibitive?  
 GG replied that No, any scheme can be done, but in 100 years time, no-one will appreciate it.  
 Any works will be expensive, and at this location will not be government funded.  
 AB enquired about instances of ground instability nationwide.  
 GG stated that land instability is not coast protection, unless there is erosion at the toe.  
 AB wondered if funding may be available through any Land Drainage sources, with a recognition of flooding from below.  
 GG returned to Barton: Haskoning are to recommend on the west side no action, and on the east side managed erosion.  
 NW and AB confirmed that property developers in the Barton erosion area are currently aware of the 50-year zone, but suggests this is now extended to the 100-year erosion lines.  
 FC enquired whether the eastern section should be protected at the shoreline.  
 GG and AB confirmed that the cliff crest is still subject to landslip due to geology and current cliff face (steep) angle.  
 There will be lots of properties lost in the Barton On Sea area - approx 300.

Christchurch Bay as a whole:  
 Various inputs.

Milford on Sea  
 The seawall at (Westover Crescent) currently has no beach.  
 Hurst spit - probable erosion.  
 Hold the coastline at White House and elsewhere - particularly where there is a road on the cliff top.  
 This will be annotated as managed realignment / hold the line.  
 There may be a desire to build more width into seafront, to provide additional protection.  
 After realignment, sort out river drainage and flood risk.

Christchurch  
 From Christchurch Harbour north-eastwards is sustainable.  
 Hengistbury Head spit (where the huts are) will be lost - by a sudden breach that will not be repaired, as the increase sea level makes repair unviable.  
 This will lead to an increased flood risk in the harbour.  
 At Mundeford - manage the flood risk.  
 At Christchurch town - hold the line and defend.  
 SDW interjected that on strong north-easterly storms, existing spit will be a bank to

act as a breakwater i.e. not disappear.

GG replied that if Hengistbury Head is held, then Christchurch will be well protected, with no serious intervention required. These are very localized issues, that need to be researched further.

NW suggested that he considered Poole and Christchurch Harbours to be the same, but at different scales.

GG contradicted this: They are different. What makes them different is the different layout and different flows.

There was a brief discussion about timescales for the identified erosion and flood scenarios, but GG stated that the SMP2 is unable to precisely identify the possible times.

PA commented that the details being discussed are economically scaring. There needs to be great care about the presentation of these details.

GG said in summary, that we ought to be planning now for 30 years time, as by then things will have changed - build now for the decisions that will need to be made in 30 years time.

TF opened a discussion by stating that the EA has permitted building in identified flood plains.

He suggested that the areas at risk of coastal erosion also need to be stated.

It was raised that this should be built into planning regulations, and its importance stated, and there were comments that in some places this had been partially done.

With respect to building on flood plains, these developments can be designed for the predicted flood events.

Conversely, in erosion areas it is not possible to design for the erosion event.

DH stated that erosion lines were not currently in the public domain.

NW suggested a letter-drop to the affected properties.

FC reminded us of the need for accurate information to be presented to those affected.

GG advised that we should not necessarily invite the affected persons' views for a proposed solution - that's what Haskoning are for.

They should be offered help and advice for them to understand their 'recently revealed' predicament.

Hurst Spit

Some more frequent overtopping

3.4

**Overview of areas that may have a change in policy from 1999**

Milford on Sea

Barton on Sea

Both no active intervention or hold the line possibly managed realignment.

Highcliffe to Mundeford Quay

Hold the line possibly managed realignment

Mundeford Spit

Maintain for 50 years, then consider change

Readjust flood defences as required

There will be changes in the next 100 years, and further significant changes in the subsequent 50 years

Double Dykes

With managed realignment, not hold the line, this will last for 150 years

Bournemouth to Sandbanks

Hold the line - but how?

Possible areas of advance the line or managed realignment

Poole Harbour

Still being discussed

Swanage

North - cliffs - managed realignment

South to Durlston - no active intervention

3.5

**Open discussion and questions**

AB asked how does this fit with Defra/ EA guidelines?

GG replied that the guidance is too woolly and vague.

AB reminded all that there ought to be auditable route of background and decision making.

GG stated that these should discuss the economics / benefits on the proposals.

Whether there is acceptance of the proposals, or whether they are deemed unacceptable, there needs to be the provision for adjustments for improvements.

MA started a discussion for Double Dykes and Bournemouth.

Advancing the line affects the protection at Double Dykes, which could be counter-productive

GG reminded us to be aware of other nearby issues - including Christchurch.

Works at one point affect other coastal frontages. JR mentioned that the objective tables for appraising proposed policies / objectives do return realistic figures.

(GG re-presented the No Active Intervention and Preferred Plan graphics)

DH raised the issue of the proposal for managed realignment at Hengistbury Head, and considered that this would lead to a loss of the Scheduled Ancient Monument of Double Dykes.

GG replied that to maintain as existing for 100 years means the cliffs continue to erode.

The defence at the gabions at Double Dykes will be tricky. It may be better to defend at Point House Café. He considers this will give a more robust cliff and beach area.

Maybe it should be allowed to become natural (without defence) in this area.

If Hengistbury Head is defended for 100 years, should this defending be continued?

Bear in mind what the coast will be like in 100 years time.

Should our efforts now be better spent at other locations?

DH said that we should try to delay this catastrophic event, and suggested this prevention could be done for 100 years. There will be no means of recovery after event.

Previous funding has given us the seawall we now have, and funding variations have prevented more seawall.

GG will be pleased to receive all feedback, identified specific areas of concern that needs more investigation

GG reminded all that the programme says the details will not be published until October.

4.	<p>SDW asked if there would be consultation and/or seminars with all councillors at the appropriate time - prior to publicizing document? SC confirmed that this was within the programme. GG reiterated this intention, and said that the details and timescale are still to be decided. DH proposed a presentation to groups of individual area councillors.</p> <p><b>Any Other Business</b></p> <p>There was no other business raised.</p>	
5.	<p><b>Date of Next Meeting</b></p> <p>EMF next meeting 24<sup>th</sup> August 2009, 1800hrs (members) This would be after the Client Steering Group (CSG) meeting in the afternoon. Document issued 2 weeks prior to that meeting (10<sup>th</sup> August)</p>	