

BRIGHTON & HOVE CITY COUNCIL

OVERVIEW AND SCRUTINY COMMISSION AD- HOC PANEL ON CLIMATE CHANGE

4.00pm 11 JANUARY 2010

COMMITTEE ROOM 1, HOVE TOWN HALL

MINUTES

Present: Councillor MacKerron (Chair)

Also in attendance: Councillor Janio, Mitchell and Wakefield-Jarrett

Also present: Thurstan Crockett, Head of Sustainability and Environmental Policy, Tom Hook, Head of Overview and Scrutiny, Karen Amsden, Overview and Scrutiny

PART ONE

12. PROCEDURAL BUSINESS

Declarations of Interest: There were no declarations of interest.

Party Whip: There had been no party whip.

13. CHAIRMAN'S COMMUNICATIONS

There were none.

14. MINUTES OF THE LAST MEETING

The minutes of the meeting on 02.12.09 were agreed.

15. WITNESSES

a. Meyrick Gough, Water Planning Strategy Manager, Southern Water: made a presentation to the Panel on Climate Change and Southern Water (see attached paper or email Karen.amsden@brighton-hove.gov.uk for a copy). The aim of the presentation was to explain Southern Water (SW) perceived climate change and how the issue fed into their strategy. The company does not supply water to the whole of the South of England. They manage 10 Water Resource Zones in the South and tonight the focus was on the Sussex Brighton zone.

Their Water Resources Plan

<http://www.southernwater.co.uk/Environment/managingResources/publicConsultation.asp>

shows how SW proposes to secure water supplies for its customers during the next 25 years.

The final plan was published on October 1st 2009, following an extensive consultation process on the draft plan, which was first published in May 2008.

He emphasised that the water sources in the Brighton chalk block zone were all groundwater, unlike other zones which rely on sources such as reservoirs. Groundwater was a more robust water source.

Climate change had a fourfold impact on their water management:

- Reduces river flows and groundwater availability
- Increases the frequency of the hot dry summers, which in turn has an impact on demand
- Influences the future resource schemes (which they will be implementing over the next 25 years)
- The need to reduce their carbon footprint and future footprint. Otherwise it would be a wasted investment

Water was a heavy product and this had an impact on energy demanded to move it around and CO2 emissions

He explained that SW had used different international models to make different Global Climatic Models (GCM) predictions. They were currently studying UKCP09 predictions to update their forecasts. This international information was used to develop a regional picture and then predict what would happen in Brighton & Hove (B&H). The results of the modelling work indicated that the issue of groundwater supply was not as great, but there could be a stark reduction in surface water.

When assessing demand for water and how much water to put in the supply, SW looked at:

- Customer demand
- Leakage

Since privatization, leakage had been reduced through active leakage control. The per capita consumption had also decreased and the demand for water had also become steady.

In relation to their demand forecast, the major effect of climate change was hotter summers. The forecast showed a very small increase in per capita consumption between 2020 and 2050. Their primary concern in B&H would be demand for water in peak times. He explained that changes in consumption had been achieved by example changing the regulations on toilet flushes. The average toilet flush is now some 7 litres, as opposed to the 9 litres it used to be many years ago. This change has been brought about by the introduction of regulations that state that all new toilets should only flush a maximum of 6 litres of water. Other changes included the increased efficiency of white goods like washing machines and dishwashers and reduced water usage after bathroom refits, which people do every 10-15 years on average.

He explained that the graph which he had supplied on the 'supply demand balance' took account of climate change and population growth. The preferred strategy for Sussex Brighton included:

- Leakage reduction
- Universal metering
- Inter-zonal transfers (moving water out to supplement other zone supplies)

The forecast which achieved a 10-15% reduction in per capita consumption (compared to the industry average of 10%) were based on the trials in Isle of Wight and universal metering. These forecasts also showed that it would be possible to reach a point of exporting water from this region to Worthing. One of their key problems was to reconcile the demands of a hot summer with the resource availability in a drought.

Questions to Meyrick Gough

Gordon MacKerron (GMK): Thank you very much for the presentation and I think I will need to follow this up by sending you some further technical questions. There appears to be a lot of stability. However given the uncertainties in UKCP09, when modelling, is it valuable to think of the 'most likely' scenario? Is this a valuable way of thinking, and is the situation so steady that this is a valid model?

Meyrick Gough (MG): It is necessary to run with a model, but UKCP09 will come up with a breadth of possibilities. One is trying to factor in risks and climate change is one of those risks.

GMK: Is the stability due to the groundwater source?

MG: Yes, this is the reason for stability.

Gill Mitchell (GM): Will water metering reduce consumption? I understand it had a 93% coverage in the Isle of Wight and what was the impact on low income households?

MG: SW is talking to OFWAT about the social tariff and how they can help, as OFWAT approve charges on an annual basis. SW favours a 'soft landing approach' (SLA). The SLA means that over the first 18 months of metering, customers will be sent 3 bills. Each bill will set out how much they would normally be charged and how much the charge would be by use according to the meter. The customer will be charged the lesser amount, and if they have reduced their consumption they will receive a credit on their bill. This is intended to show them the effect of water metering. Alongside this, the customer will be offered water efficiency advice.

For households which are still struggling, then SW has put proposals to OFWAT based on the practices of Wessex Water who have done what is possible to help customers pay what they can.

There is also a big differentiation that must be made between those who can't pay and those who do not want to pay. This may lead to means testing.

GM: Do OFWAT negotiate with each individual water company or seek national agreements?

MG: OFWAT negotiate with each water company.

Vicky Wakefield-Jarrett (VWJ): Are the social tariffs for people who have been identified – in a similar way to categories for electricity charging?

MG: Yes.

VWJ: Then I am concerned that there would be a large group of people in this city who just miss out on qualifying for the social tariff. There is also the problem for private sector tenants, where the landlord has not carried out repairs but the tenant is blamed and/or landed with the bill.

MG: SW has come across this problem before and it is a consideration which has been included in the tariff scheme. The Customer Services team is looking at this issue now and I would be happy to provide extra information on this issue.

Tony Janio (TJ): If the majority of water is groundwater, then climate change will lead to raised sea and river levels. This in turn will reduce absorption and affect the groundwater level. Therefore there is not a lot that the council can do and you seem to be coping well. However, what about waste water? Once you get a certain volume, what will SW do?

MG: One looks at the sewer capacity and in this area there are reverse issues. It is all about the intensity of summer storms and preparing one's capacity to deal with this. The groundwater extraction rates are fixed by the Environment Agency. The company is given a fixed licence and can only extract up to this limit. This is not my area of expertise (see evidence from Barry Luck, Sewerage Strategy Manager, Southern Water on 09.09.09)

TJ: When dealing with certain areas in the South East, can you see whether there will be problems with reservoirs and droughts?

MG: There will still be hosepipe bans every 10 years. Other potential issues include:

- In a period of drought, the issue of ground water availability
- In wet periods, the level of demand will be lower
- What will be the impact of extreme drought?

SW use records which date back to 1890, to develop potential scenarios and then impose climate change scenarios on top also.

GMK: I would be interested to see a less averaged set of figures. I am interested in the export of water and the regional strategy, and whether this in theory means that we could export water to other areas. Given that we are a water stressed region, will B&H be put under pressure to export water to Worthing?

MG: Regionally based bodies have already been developed and the Water resources solutions we develop in the South East are influenced by the regional model results. The working group which looks at this is the Water Resource in the South East of England Management group. This working group is made up of OFWAT, EA, CCW, NE and water companies. The model seeks to find the optimal solution for the customers of the South East of England. As such there is the potential to include us providing water to Kent. When such a supply is made then there is a charge for this bulk supply.

GMK: The Panel would appreciate further information on your service, as you are such a valuable part of the process.

Mark Prior, Head of Sustainable Transport, Brighton and Hove City Council: explained that he managed a very wide range of transport related services, including the development of a local transport strategy. He was also responsible for highways management which was most closely concerned by climate change. This service included:

- Highway drainage
- Street lighting
- Car parking
- Parking enforcement

The key issue for highways maintenance was the drainage of flood water. He was also the lead officer for flooding and co-ordinated the Council's response to the flooding in Patcham and cliff falls above Asda in the Marina in 2000.

The key policy area he was currently working on that related to climate change was the new Local Transport Plan (LTP) in conjunction with DEFRA and GOSE. This included making smarter transport choices and sustainable transport e.g. electric cars.

Questions to Mark Prior

VWJ: At the last Panel meeting we were presented with various models of potential flooding in Brighton & Hove. This included a shocking map of both London Road and Lewes Road and one of the Marina. What plans do you have to move transport round the city if there were such floods?

MP: In 2000 the historic nature of the infrastructure meant that after the rainfall, the drainage did not work. There was insufficient capacity to deal with flooding through the current highway drainage. The recent funding awarded for the Surface Water Management Plan could be used to look at this issue.

VWJ: If flooding was to go through those roads, are there logistics/plans e.g. to divert traffic from that area?

MP: There is the capacity to divert for an emergency, but both the Lewes Road and London Road are so important that this action could only be done on a short term basis. This issue requires longer term planning.

GM: You have significant experience due to your involvement in:

- Cliff falls
- Sea defence
- Flooding

What can BHCC do through its highway renewals programme to mitigate surface water run off? In particular ice across the pavement, which shows how much water is going from the

roads into drains. With the new Flood and Water Management Bill, can we build this into our strategy and planning?

MP: The new Bill will give local authorities increased powers regarding flooding. Different types of authorities own different aspects of water management:

- *Water on highways – the responsibility of BHCC*
- *Water into drains – a waste water issue*
- *Water from aquifers – Southern Water and the Environment Agency*
- *Water from roofs*

Because there are different roles and powers for each of these different organisations regarding water, the Bill intends to increase the power of local authorities.

Martin Randall (MR): There are a range of bodies who want to receive water and pass it on. This means that there is a fundamental role for planning e.g. assessing where water lands, including roofs. Therefore some of the responsibility for mitigation rests with the planning system e.g:

- *The design of new buildings*
- *Adapting existing stock – including how to lose concrete gardens*

TJ: The purpose of the Panel is to consider the National Indicators. It is hard to plan for snow, in the same way as the flooding in 2000. I am concerned about how this can be paid for. Is there any indication that central government will be funding these changes?

MP: The funding for the new Plan of £275,000 will be very useful. The Surface Water Management Plan will define the shape and the extent of B&H's problem. It will result in a costed out action plan e.g. for dealing with the problems with the Downs. This can be used to build a business case for requesting grants.

MR: It is more cost effective to put resources into planning for new developments, than putting things right e.g. the London Road.

GMK: What is the timescale of the Plan?

MP: There is an 18 month/2 year window for the funding and it has not yet been received by the Council.

GMK: At what pace is this issue being addressed and how constrained are you by lack of resources?

MP: There will be a clearer idea, once the Bill has received Royal assent. The Plan will be used to clarify and develop major projects. We have engaged framework consultants, but will try and do as much work in-house as possible. We aim to use part of the funds to implement the key measures.

GM: How will you react to climate change generally? E.g. melting tarmac in hot summers. What adverse effect does heat have on the infrastructure? With the Scrutiny into the snow, how will this affect policy and operation in the future?

MP: Climate change will feature in long term transport planning, such as dealing with the extremes of weather. For example at 100°, we still get problems with tarmac softening and heatwaves also lead to ground movement, which can cause increasing potholes. These effects can also happen with frost penetration.

The Council's response to the recent snow and ice is to be the subject of a Scrutiny. At present the Council plans for a certain number of treatments per winter based on 5 to 10 years of actions (drawing on historic knowledge, past weather conditions and information from East Sussex). This planning has been developed over a number of years to cope with a certain winter period e.g. allowing for 30 grittings and 2 snow periods. But due to the recent cold weather, the Council has already exceeded its 30 grittings. If climate change means that we need more resources to deal with this kind of weather, this will involve:

- More salt
- Increased numbers of grittings

Martin Eade, Coast Protection Engineer, Brighton and Hove City Council: told the Panel that the Council could apply to DEFRA (through the Environment Agency) for capital funding towards coast protection schemes but that such funding was not generally available for works to the cliffs.

DEFRA are taking a closer interest in coastal erosion and the Environment Agency intend publishing coastal erosion risk maps based on studies they have carried out combined with information held locally.

Coastal studies carried out by local authorities can be grant aided by DEFRA and follow DEFRA guidance in the way they are prepared. They examine the coast now and 100 years ahead and can identify any necessary works to coastal defences. When the study is agreed by DEFRA/Environment Agency, an application for grant aid to implement such works can then be made.

The latest climate change projections were crucial in planning, especially:

- Sea level rises
- Increased storminess

Questions to Martin Eade

GMK: What is the success rate of applying for grant aid?

ME: It is a tortuous process and the review cycle for studies is generally five years. The Council is trying to begin a review into coastal defence west of the Marina and is 18 months into the application process and it is still not finished. However, they are confident of success in the end. We have never had an application refused, only delayed.

GMK: There is a concern about the A259 in relation to the cliff protection issue. Is this a key concern?

ME: It is a critical issue, since there was a series of significant collapses in 2001 that resulted in two stabilisation exercises. A research group has been set up (which has been going for four years, but has been hampered by a lack of resources) to consider safety around the cliffs and when it would be necessary to move the A259. It should be remembered that the cliffs have been collapsing for millennia and will continue to do so, we just need to know the rate.

GM: It was fascinating to find out how coastal planning was carried out, which has led to several policies for each section of B&H. This then leads to the needs of the whole city being balanced with the needs of particular areas. I understood the University of Brighton was carrying out research into the impacts of not having the A259, but I am not sure if it includes the social and economic impacts e.g. on Woodingdean. This issue had not yet been factored into planning e.g. in the Core Strategy.

ME: The coast defences east of the Marina have been reconstructed over the last 20 years with grant aid from DEFRA. . Part of the original funding application process involved justifying this on an economic basis to DEFRA., This was done by calculating the cost of putting the A259 somewhere else and comparing the cost of the theoretical new route with the cost of defending the coast.. The choice was made to defend the coast.

GM: Bits of the cliff have been bolted, but not all – is it possible to stabilise all of the cliff?

ME: The cliffs are a Site of Special Scientific Interest and any course of action would have to be agreed with Natural England. To stabilize the whole of the cliff line would probably entail a public enquiry assuming the cost of such a project could be met by the Council.

GMK: Where are the boundaries drawn? Will climate change accelerate the changes to these boundaries?

ME: The weather is worsening the damage and the increasing intensity of weather is likely to have an impact on the cliffs.

GMK: In relation to fragmentation, can you draw on any research from other sources e.g. universities?

ME: We have been drawing on work from:

- *Hong Kong*
- *Isle of Wight and others*

Although geology occurs everywhere there is a limited amount of research which we can use to assist us, which is why we are undertaking our own research.

VWJ: Given that this will also affect areas such as Worthing and Newhaven, do we have a good working relationship with neighbouring local authorities?

ME: The Council is a member of a Coastal Group which stretches from Selsey to the Thames Estuary. They take a strategic approach to the issues e.g. by looking at the consequences of local schemes on adjacent areas.

TJ: Given that the Panel is considering what BHCC should be doing in relation to climate change, are there any areas which are not going well or could be done better?

ME: Until fairly recently the councils worked directly with DEFRA, who are now using the Environment Agency to carry out their regional engineering role. The Agency is struggling to get to grips with this new role.

Thurstan Crockett (TC): I gave evidence on the potential economic impact of not pinning the cliffs. Some work was done on the effects of closing the A259 and the entrance to the Marina. The University work, which is underfunded, is on what would be the impact. What forms should any intervention take?

ME: Most of my work on the research project consists of trying to find funding e.g. from INTERREG. NERC and others. There is a need to know facts to answer questions, such as when we will have to identify a new route for the A259.

GMK: The information you provided about the west, seems to show that this does not present such a challenge, although there are issues such as augmenting the beaches/groynes. What are the potential costs and risks of taking such actions?

ME: One can always defend the coast in engineering terms if you have sufficient money. But we must remember that B&H is a resort and amenity and so we have to preserve the attractiveness of the coast as well. In probability we will always be able to justify defending B&H to DEFRA on economic grounds, but BHCC may have to find the additional cost of preserving the attractiveness of the coast line.

GMK: Out of the beach and cliff issues, which one is the most important?

ME: Both are equally important, although the cliff work is more pressing at present.

GM: When are the coastal erosion maps going to be published?

ME: After the election.

Martin Randall, Assistant Director – City Planner and Paula Goncalves, Senior Planning Officer: began by emphasising that the key purpose of planning is to encourage sustainable development. Such planning roles include:

- Sustainable patterns of land use
- Promoting bio-diversity by adaptation and mitigation

Work on the Core Strategy was progressing, and it was now ready for submission. The report they submitted to the Panel highlighted the key areas of the Core Strategy, such as planning

for growth in Flood Risk Zones (FRZ). This is because it was not possible to accommodate all developments without using FRZs, such as the Marina.

The Sustainable Design Supplementary Planning Document (SPD) 08 was moving forward to supplement the Core Strategy. It was an excellent framework for delivering sustainable design such as water neutrality and reducing the Urban Heat Island Effect. The Core Strategy aimed to reduce our vulnerability, including taking into account adaptation considerations such as sustainable transport.

Mitigation and adaptation overlap in a planning context and our report in the agenda's papers gave examples of how to include both in the planning process and cited particular developments. It was felt to be important to monitor outcomes and more research was needed in this area.

Questions to Martin Randall and Paula Goncalves

TJ: Thank you very much for the report, but it would also be useful to see the big picture and know if we are doing enough e.g. about the Urban Heat Island Effect and the absorption of increased water levels. Are there enough planning tools to deal with such issues?

MR: Planning alone is not the answer, we have to work closely with partners such as Southern Water - as well as other teams in the Council such as Highways. At the micro level we will not know, unless we monitor closely. Our planning mirrors the process used by Southern Water as outlined by Meyrick. It would be very useful to be able to draw on research into the specific effects of climate change on B&H, rather than regional figures alone.

TJ: Are we carrying out monitoring to see if we are having an effect?

MR: We are monitoring each policy in the Core Strategy to check issues such as:

- *Are we using this policy?*
- *Will it achieve anything? – and Paula is working with a Sustainability Checklist.*

The next logical step is to find out what difference our policies have made. However this can be different for each scheme, for example the Jubilee Library is being monitored on a long term basis to check issues such as heat circulation.

Paula Goncalves (PG): A whole section of the Core Strategy is devoted to monitoring. The Sustainability Checklist has led to the accumulation of fifteen months of information. This has shown that new buildings are performing satisfactorily, but conversions less so. The need to focus on conversions has in turn informed the Core Strategy.

TJ: Will the data you are gathering inform future changes to the Core Strategy?

MR: Absolutely, it is not intended just to wait until we develop another new policy. We have a duty to use this information as we go along. The Local Development Framework is an evolving framework and there is a responsibility to continuously update and expand it, so it represents a library of planning documents.

GMK: One of the difficulties of climate change adaptation is the uncertainty of what form it will take. Does the Sustainability Checklist take into account adaptation?

PG: The contents and questions relate to climate change adaptation, but do not include the wording specifically.

GMK requested a copy of this checklist. Information about the checklist can be accessed at <http://brighton-hove.sustainabilitychecklist.co.uk/>. Paula Goncalves has offered to arrange a session, or make individual appointments, to run the checklist pass any Panel members interested in seeing how it works. Especially considering access to the planner section is restricted to council officers working in Development Control and Planning Policy

TJ: All the information you are gathering sounds as though it will help us, for example in meeting NI188.

MR: This joined up working has included input into the Sustainability team. The checklist:

- *Provides monitoring information*
- *Is an easy tool for the development industry*

It was started with SEEDA and was intended as an exemplar which other authorities have started to use. The checklist provides a practical guide for developers and covers areas such as:

- *Water features*
- *Reflective surfaces*

GM: With the right policy lead and decision making, it seems to be easy to bring this into new developments. However, the struggle seems to be with retro-adaptation. Government funding has been pledged, but can there be a local lever? E.g. when considering a planning application for a new roof, to use this process to request other actions?

MR: We are not there yet, and this may need a specific adaptation Supplementary Planning Document. For example, we can tell people who come to us with applications that when we are determining it, we can use the planning system to lever finance from developers to improve the existing building stock and help to supplement existing programmes such as those designed to alleviate fuel poverty. It is important to promote best practice and the council has been active for example in the Eco Homes open day programme.

PG: The Core Strategy has a framework to inch towards and this addresses conversions.

VWJ: I am please to see that there is an overlap between adaptation and mitigation, for example with heating. Hotter summers could lead to an increased demand for air conditioning, so planning for not having it would be good.

1) Are there any plans to refresh the sustainable SPD or a timetable to improve the Eco Homes code level?

2) Is there any scope for an SPD on adaptation, for example the increased possibility of fires?

3) In relation to schools, with a new primary school planned, issues will need to be addressed such as classroom temperatures and air flow levels. Such a development would need to be a prime example of excellence

MR: One Brighton is a fantastic example of a residential development. With the Library, it was planning for one large space, but One Brighton had to satisfy the needs of 70+ apartments, along with a community area and a business space.

Regarding your question 2) An SPD on adaptation is a realistic prospect, but may be in the broader context of sustainable design. Examples of adaptation include such planning decisions as the Amex building, which is excellent on adaptation- though only a BREEAM 'very good'.

3) *The Building Schools for the Future programme (BSF)*
<http://www.partnershipsforschools.org.uk/about/aboutbsf.jsp>

places sustainability at the top of its agenda. There are a number of school additions which have promoted high standards and the involvement of our architects.

GMK: There is a potential conflict between the need to develop and the flood risk zones. How does the Council approach this trade off?

MR: When looking at areas such as Shoreham Harbour or the Marina, this relates to two key areas:

- *Looking at which different areas in those zones that have a lower risk of flooding*
- *Where best to situate the social, economic and physical infrastructure*

GMK: Given the need to make this kind of trade off when 2/3rds of Shoreham is in Adur, how closely do we work with this authority?

MR: We have a close working relationship and plan together on a joint basis. If there can be any benefit that comes from being a flood risk area, it is that at a technical level we can contain it and predict future risk more easily than if it was a river valley in Gloucestershire, for example. There is a sense of containment in such areas, such as the large scale proposals for the Marina plan for a 1:200 year storm event.

TJ: Is our monitoring and putting so many requirements regarding issues such as climate change, stifling the development of the city?

MR: It is easy to add another requirement and this is a tendency in Planning. We need to be clear that we do not over-burden the development industry particularly in the present economic circumstances. We must ensure when asking for contributions from developers, that we are clear on our priorities. Climate change cannot be other than the highest priority, which means perhaps we do not need to ask for contributions for other aspects.

GMK: Planning is one of the key adaptation areas. You have done significant work to include adaptation, has this required extra resources or can you embed it in your every day business?

MR: We have had to develop greater expertise and needed extra training. It has also meant the need to work closely with other colleagues such as Martin Eade and Mark Prior. We could do with extra money and accept that we are not all experts in this field, and draw upon the knowledge of Thurstan Crockett's team and Paula Goncalves. We need these resources to continue and may need to draw on other resources to meet new issues. It is right that Planning delivers on sustainability issues.

GM: This meeting has considered buildings, but not public open spaces, but I would like to come back to this issue and ask Martin Randall some further questions.

Mark Prior then confirmed that he would be happy to respond to further questions from the Panel.

GMK: I agree with Martin Randall that monitoring will be in issue to look at in the future and will become more important. Thank you all very much for attending the meeting.

16. ANY OTHER BUSINESS

There was no other business.

The meeting concluded at 18.00

Signed

Chair

Dated this

day of

