A CITY FOR ALL LONDONERS

Environment Workshop 17th November 2016, 9.30 – 13.00

Resilience London Table 6 Session 1

Facilitator in bold facilitator - comments in bold

Respondents in regular text

These notes are a summary of the conversation

Cassie Sutherland (Facilitator)

David Leam - London First
Emily Hamilton - Grosvenor Britain and Ireland
Rachel Lewis - Royal Borough of Kingston upon Thames
Ken Bean - London Borough of
Cllr Alan Smith - London Borough of Lewisham
Marc Beveridge - Public Health England
Tim Reeder - London Climate Change Partnership
Matthew Frith - London Wildlife Trust
Steve Smith - Committee on Climate Change

In this session we are keen to hear your thoughts on what you want to see that is different in London by 2050? Looking at different areas and risks. We are trying to map a path to that vision and identify what the GLA's responsibly should be, where the ownership is etc. If possible we would like to identify interim targets to monitor progress.

Summary: London's climate is changing. There is more extreme weather and the need to adapt to new conditions. We need to devise policies and proposals to develop sustainable water resources, sewerage and flood and drought risk management. There are three core risks: flood, water shortage, and heat risk.

How do we make sure London and Londoners can cope with climate change? How do we monitor this? And how do we report to Londoners about whether we are becoming more resilient or whether there are increased risks?

I work with heritage buildings. I don't feel they come out strongly enough in the document when looking at Climate Change impact. There is a focus on new buildings, but highest emissions come from old buildings. We need to look at how to adapt buildings. There is a need to be more flexible. Planning constraints don't let us do that. We need more flexible planning to be able to that.

Historic England is so resistant. It is not checked or regulated. We are not able to check their decisions.

Another area is retrofit solar. It is really important. Paving over front gardens is a bad idea, especially when there is a flood. There has been reduction in drainage. We need to be able to let the public know that we need drainage spaces. We know surface water flooding is becoming worse.

It is good to have a chat about surface water flooding. An action plan will be published shortly about encouraging retrofitting drainage. But for 2050, do we need something with more teeth? Do we need regulation, e.g. you can't do this road surface unless you install X% drainage? Who is responsible?

We are doing a lot of work with social landlords on retrofitting. New homes are being built to high standards. But social housing is not climate resilient. It has been effectively turned into car parks. There are small-scale interventions but not across the piece. There is no strategic overview. There is a focus on fuel poverty but no focus on other things: design and landscape; using existing stock more effectively. Their (local authority) focus at moment is other government policies. What could be incentives to help, either some level of funding or something else? It is important because of fairness and equalities agenda, there are a significant number of people in poor health and living in poor quality environments. Lots of good stuff is going up but it is very piecemeal, needs to be up-scaled.

That is important: the crossover between environment and health, and impacts on health. We want to highlight what the benefits of environmental policy are for the wellbeing of Londoners.

What we've been trying to do in the Climate Change Partnership is look at what might happen in the event of an extreme event of climate change. Where we might be going? That is what we did in the Thames Estuary Project, we looked at a potential rise of 5 metres. We have got a plan that will cope. It would be good to have some kind of illustration of that in the strategy, so people engage with the scale of challenge. Not to scare people, but to show why the plans make sense.

It would be good to look at what impact deal will have. There is a mayoral desire to have a New York style of government. The opportunities and drivers linked with that are phenomenal.

Can you give an example of that?

For example the legislation of where fast food venues are in relation to schools. Looking at how the regeneration of infrastructure is used to generate health outcome benefits.

A lot of local government authorities are doing that now eg in the Borough of Lewisham.

There is a tension between what mayor can do and politicians in the context of a national government with increased deregulation.

There is a tension, but we have the manifesto. We're looking to 2050. We shouldn't see the national government as a barrier. What do we want to see that's different in London? What do we need to do to change it?

By 2080, the average summer temperature will be significantly higher. What are critical thresholds beyond which what we need to do might change? That's what the Dutch have done, said if X happened by then, then we need a law to change Y.

That's what we need. A 2050 vision, and then an action plan, setting out what we need to do quickly and what we need to do over the longer term.

I am interested in how London measures up against other world cities. It is a good measure to see where we are falling short.

There is a lot of city benchmarking in terms of emissions but not in terms of resilience. Some areas, like managing flood risk, there is not so much traction. That is one of the challenges: the metrics we can use. How can we compare like and like across cities?

We are part of 100 Resilient Cities programme but it has stagnated at moment.

We are working with 100 RC at the moment to identify the next steps for London.

In terms of residential dwellings, there is nothing in London to encourage private landlords to provide energy efficient buildings. It is significant, short-term leases discourage investment in properties. 1/3 of housing is privately rented, it is not a minor issue. PRs are pretty good, but spending a lot of money on new builds.

They have rolled back on a lot of things recently. The private rental sector is a major problem. There is increased homelessness. And poor conditions, education, health.

That's a huge thing, the strategy needs to link seamlessly with the inequalities strategy. Looking at air quality issues of people suffering from the highest level of inequalities. How can we put something in place quickly to start producing health benefits.

A City for All Londoners is looking at London as a whole, not just the London Plan and new developments. We will reflect interaction between strategies in all strategies particularly looking at where they complement each other.

In relation to looking at London as a resilient city, we have to look at Londoners being resilient including the business sector, communities etc. If they have not had a meaningful conversation in a language they understand, it is not going to have an impact.

How can Londoners plan for resilience when they don't acknowledge they need to? If they don't acknowledge that, they are not going to pay attention to the GLA. In the grand scheme of life, it is not a priority. It has been overtaken by economic issues. If the GLA wants to see significant change, it needs to provide strong leadership. It needs to understand what people want. The GLA needs to force action. They haven't time to tell people climate change is a thing. The GLA has to have teeth.

We talked about sustainable urban drainage. My experience is that that kind of development has declined. People can get away without it. It might be about national policies, but we have to drive those things to happen. We also need to know: is that important? Is it about a major infrastructure project?

In relation to businesses, there aren't many businesses here today. We need to engage them.

That is important. We work closely with the green infrastructure team. There is a bit of separation in terms of policy. We need a shift. We need to look at where green infrastructure can help us manage those risks. And where it doesn't. So we can be clearer about what we need to do.

I want to talk about specific risks. What measures should the mayor take to address water supply and demand?

98% of water gets flushed down the toilet. We need to recycle. Water companies have said they are not going to do anything about it until legislation forces them to do something. If the major water supplier is not going to do anything about it, who will? That is a major thing that so much water we are producing is thrown away. It goes into the drain and the sewage system is overloaded.

We work closely with the water companies in London. We have water efficiency policies in the London Plan. We are looking at integrated water management strategies; balancing supply and demand. What should we be doing in longer term, since evidence has shown that a new water resource will be needed by the mid-2020s? Maybe behaviour change, regulation of markets, and tighter regulations for new developments. Is there something we are missing?

First thing, is there funding pool for retrofitting?

Are there places in London already offering that to their customers?

There is going to be big change in the water market, it is being opened up to other suppliers. May be good or bad thing. Thames Water has provided money for retrofitting. But we need to push for something more holistic: heating, energy reduction, water-saving, in an integrated way. If you stored more water for rainwater harvesting, what would the impact be on water demand? Everyone spends money separately in different sectors. Whole benefits to London doesn't feed into investment decisions.

Does anyone know if, for example, there is research on: if water usage reduced by 10%, the impact on the water supply will be X?

Yes, we have done work with universities around that.

We are already the driest capital in world. How are we going to manage when we get a really bad drought?

In 2012 there were predictions of drought, followed by the wettest spring on record. The drought they were predicting at that time was going to have a £300 million a day impact on London.

We need to do more on the supply side, but that is not enough on its own. If you are going to win case for doing something new on the supply side, whether a reservoir or something else, you need to have a good crack at the demand side. You need to invest and show leadership there.

Yes, I feel that too. We work with water companies to manage demand and supply. Who else could we partner with to look at demand management?

Thames Water are entirely responsible for the delivery of water and infrastructure. Even smaller companies will tap into the Thames Water network.

Water is not that expensive either. You don't have to pay if you don't want to.

There is a metering programme going on. All houses will have to be metered. Something like a 15 year programme. People that have meters manage to reduce water a bit, but not a lot.

The building developers need requirements.

In the London Plan, there are requirements for water efficiency. But there is a need to monitor lifetime efficiency. For example you can install an energy efficient shower head when building but then someone will decide they want a power shower and change it. Should we have more requirements for water efficiency?

We spent some time monitoring residents; how they live. Some people didn't use much water, others are using washing machines all day. We have data on how people use appliances, water. It is important to not only give tools to reduce demand, but it is about changing culture, behaviour. Most people don't get it.

How do you have that conversation with people? Probably since Booth produced public health maps over 100 years ago, not much has changed. It is about how we are having conversations with stakeholders and the public.

We need to show what can be achieved with behaviour change. Getting across the message: every little bit does count. There is also a disconnect between utility providers – who think 5 years ahead – and planners – who think 20 years ahead. We need to start thinking better in terms of planning.

Yes, GLA has brought together utility providers to work together through the London Infrastructure Plan. In growth areas on London, how can we assist joined up working by utilities and long term resilience planning?

In a similar way, councils are in a difficult position. They are really aware of economy, budgets are so much smaller. There is an in-year budget gap, the likes of which we have never seen in Kingston. When talking about preparing for future, it is in terms of huge growth. But not with sustainability as primary aim, it aims to respond to pressures of growth in the most budget efficient way possible. We are not talking about sustainable showerheads, we are trying to find money for adult social care.

I can totally understand those pressures. Still, we need to look at the lifespan of buildings. We have the choice between do we retrofit or accept that the building won't be able to be used anymore? There are different triggers and thresholds.

You have got to make the business case. If we're saying we should be investing in this development for a lot more money, because after you are gone everything will be better.

Why would you spend money to make a building sustainable if you are not going to be around for the time it takes to build it?

It is not in GLA's remit necessarily, but it is about creating a context in which you want these things to occur.

That's the question, if we want this change by 2050, who are right people to do it? I would like to see that across all policies, thinking through what's possible, working through the budget, legislation, and powers. If we are to have a sustainable system by 2050, who is going to do that?

It is about getting onto that path, saying this is what it looks like, and what are we going to do to achieve it?

It needs consistency. Different boroughs have different planning requirements. There is also a performance gap.

The bit we need to consider is in relation to the business model, will that afford the opportunity to achieve some of this ambition.

In London it probably already impacts. There are top-ups and tariffs, we export people across London to work. Some areas distribute money out. The level of business rates is controlled by central government. We are told if we want to grow, we need to grow business base. Not going to grow that quickly. Will need to do that by borrowing it. London ships a lot of its business base out to the rest of country.

How can we better protect Londoners, and London's buildings and infrastructure from risk?

There is a wider message on the resilience side. There is a role for a London resilience strategy to tackle the unexpected. One of tools we have is emergency planning, which we could tie in better to environmental strategy. On flood risk, we need to think about residual risk.

In terms of flood risk, the most risk to most people is surface water. People don't see that until it's coming through their kitchen door. Trying to get the message across is quite difficult. Most people don't recognise it as a problem.

There seems to be perception London is safe from fluvial flood risk. Thames barrier doesn't really help. Flooding could come as a surprise.

In terms of infrastructures and vision for 2050, we need to have tributary catchments, tree beds to reduce impacts. That is an issue we haven't flagged up. Climate change will bring changes to vegetation, biodiversity. Like the tree stock. There is a longer growing season, the question of who is going to manage stuff when things keep growing. And the costs of managing, the public sector is already looking to divest responsibilities. There are going to be conflicts. There is talk of creating a solar farm, which is great in principle, but it is going to be on a biodiversity site. There are going to be conflicts. We need to plan for it, have an integrated approach.

Summary of the main points raised:

- -The issues of existing building versus heritage buildings. We need more teeth on retrofitting.
- City benchmarking. Identifying risks and gaps we have to fill.
- -Londoners being resilient, including business and communities. Engaging with businesses.
- Strong leadership. Eg partnership with Thames Water.
- Consistency across boroughs.
- Longer-term planning.

Resilience London Table 6 Session 2

Facilitator in bold facilitator - comments in bold

Respondents in regular text

These notes are a summary of the conversation

Table 6, Session 2

Cassie Sutherland

Stephen Walker - Environment Agency
Cllr Alan Smith - London Borough of Lewisham
Ellie Robinson - National Trust
Susan Simmons - Ciria
Claire Murray - Levitt Bernstein
Eloise Lobsey - London Borough of Islington
Richard Lee - Just Space
Doug McNAb - London Borough of Southwark,
Gillian Morgan - Sustain
Stephen Walker - Environment Agency
Blanche Cameron - London Friends Group Network

Summary: London's climate is changing. There is more extreme weather and the need to adapt to new conditions. We need to devise policies and proposals to develop sustainable water resources, sewerage and flood and drought risk management. There are three core risks: flood, water shortage, and heat risk.

How do we make sure London and Londoners can cope with climate change? How do we monitor this? And how do we report to Londoners about whether we are becoming more resilient or whether there are increased risks?

We need a policy for bio solar roofs. Integration of health energy outcomes with other outcomes. Paris has recently mandated for green roofs or solar. GLA is looking at that already, there is a great opportunity there.

It needs to be integrated. At the previous table we were talking about how Green Infrastructure and Eco Systems Services need to be embedded from the beginning in new developments but also when retrofitting. We can draw on European examples.

We talked in previous group about resilience embedded in planning for new buildings and retrofitting but also the resilience of Londoners. We have identified three risks: flood, heat and water shortage. What kind of resilience do we need to be building up within communities?

One way is letting residents who are more at risk from extreme events know where they can source relief. Not sure how, but maybe using technology to point out where refuge places are.

We have talked in the GLA about developing an alerts system for certain types of flooding, something that is proactive.

And creating networks that work from a resident's perspective.

My question is do you have a clear sense of problems you are trying to solve from spatial level? For example, urban flash flooding, can you see where communities are particularly at risk? How can green infrastructure be used to mitigate that risk? We are working on (unclear) cities and one of the unclear bits of data we are trying to fill in is around urban flood risk. In peer-reviewed evidence it is difficult to find. People who are doing this work are experts in catchments and natural resource management. They weren't really clear on where communities were really at risk at a spatial level. Maybe we need to ask owners of that data. When we have met Directors of Public Health, summer deaths of old people was his priority. There is a fantastic opportunity now to identify hotspots of risk.

The Environment Agency has flood maps; we can start to use that as basis. But it doesn't provide detailed knowledge and sometimes there are disparities. The other thing is being opportunistic. Design for exceedance into hard infrastructure. Understanding that as well as using green infrastructure.

On the water side, integrated water management is what it is about. There is surface water flood risk, water supply, local water, rainwater harvesting, how you dispose of dirty water. Looking at that utility together with where you are putting green infrastructure and cycle lanes.

Come to Lewisham! We have been naturalising rivers throughout the borough for a number of years. The areas where we've done it are flood storage areas. Parks etc. It can be done in a way that thinks everything through. Not just concrete tanks, but rolling areas.

Flood maps are available from the Environmental Agency. What isn't available is the risk for flash floods, extreme events.

Our experience on the ground is that integrated water management is not followed through when major developments go forward. We would like to see blue and green infrastructure much more prominent. We don't see lots of good practice, it would be great to have some stronger good practice guidance, which picks up and gives more encouragement so that people like myself in community groups, can pick up on this and use it.

TFL has SUDS in London guidance. It is quite useful, has some nice examples of different types of streets and measures that are appropriate for different types of street.

CIRIA has a website called Susdrain, which is focussed on sustainable drainage. It looks at catchment scale so goes beyond urban catchment.

There is also SWIG, the Sustainable Water Industry Group.

Microclimate of tall buildings

We have growth plans, looking at tall buildings. Is there is enough about the impact of tall buildings on cities' resilience, particularly on the microclimate? What happens when a tall

building is built a block away? There doesn't seem to be anything at planning stage to evaluate that kind of impact.

I completely agree. Not enough research or modelling done to fully understand it. It is definitely something we should take away.

I was in a meeting with City of London of a few months back, where they mentioned the limits to the wind approach in particular in relation to tall buildings. It would be good if the GLA could update their preferred approach to wind assessment. The focus is out-dated: it looks at things like outside-sitting. We need to look more at things like the impact on cyclists. With a drive towards more cycling, it is important to look at. It fits into the microclimate.

Also shade has a huge impact on microclimate. For example, the ability to create a green city if you have huge areas of shade.

It would be interesting to develop some research looking into that further eg 3D models of new developments

Something like that could be integrated into the master planning process.

If you go to somewhere like New York, and see the quality of street cover, trees etc, it is striking. It is so much better here.

If we are designing for heat gain and heat loss, having neighbouring buildings popping up that are taller, maybe helpful and maybe not helpful. We don't know.

You might be designing a huge building with large block of PV. But you have no right to sunlight on PV. There is nothing stopping someone coming in and obliterating what you are building in.

You can't plan for the future because you don't know what's going to be built next door and how tall it's going to be.

That is a big issue, the right to sunlight. Similarly London planning encourages buildings with ventilation. There is a risk to that strategy if the environment is changing around you.

Yes especially if you talk about the albedo effect, if someone comes along and puts black tarmac next door.

We will follow that up with the London Plan team.

My next question is, what measures should the mayor encourage to address water supply and demand? Research shows that we will need a new water resource for London by the mid-2020s. Looking towards 2050, water companies obviously have a responsibility, what extra should we be doing as GLA, community groups etc to ensure we are resilient to drought?

We need to look at demand reduction and how we supply sustainably, and encouraging this in every new development but also in existing builds. Recycling, rainwater collection. Replenishing underground aquifers. Toilet flushing. Zero discharge sites, like Potsdammerplatz in Berlin. Holding water and not sending it down pipe. Valuing water. Using valuation tools like Germany

has – permeability – tax your house based on how permeable it is. If you have a green roof it reduces your council tax.

We are talking about incentivising using 'carrots' and 'sticks'. We – as local authorities- only have an ability to reduce, we also need the ability to increase.

Some of points are well made already. There are two things I would like to see. One is talking to London Plan team on how to integrate water management policy. Bringing separate streams together. I would like to add something on behaviour change. Not easy power for Mayors to have but the public sector workforce in London has huge numbers of people and buildings. There are easy wins in terms of energy savings, water savings and changing water behaviour. It is not hard to do. There are key routes that the mayor could use to mandate that for London. We found that for food, sustaining it is another matter but it is an easy route to go down.

I wanted to say something about incentives in relation to water bills and water companies. Some companies provide rebates if you reduce run off from their site. It is being considered by Thames Water and some other companies. It would be interesting to explore that further. The problem at the moment is that water is relatively cheap so it is not huge incentive. If there was potential, there is also an incentive to the water company through reducing the water flow they have to manage.

I am interested in how the community sector can be recognised as an important stakeholder. At the end of day we do want to effect behaviour change, but for everybody. If we are to achieve our ambitions we need to be reaching everyone. I am not sure if civil society as a whole feels like a real stakeholder. For example, I would like to know whether people are aware of significant outreach programmes, to take the message out to community level, or to recruit people from the community to be involved in discussions. What I liked about what you said, was about not just looking at a new development, but when you have a development, what is the impact of that on the surrounding neighbourhood? There are ways to use that to improve existing buildings. There is too much focus on wonderful ways to improve new builds, but no attention to neighbourhood surrounding new builds.

In terms of community engagement, are their possibilities for a resilience task force to look at different areas? In relation to water, there are different angles to it and they are very different but tend to get lumped together. But you could look at resource guides and training packs, and training with young people. It may be an opportunity for young people to get certificate at City and Guilds. We are talking about how we engage people and how do we make people more resilient.

When we are talking about resilience to climate change. Do people actually know what climate change is? Do they know what the impact will be on the environment? I don't think there is a tangible awareness that it is happening now, and it is going to affect everything. I don't think there is full clarity now, but it is about what impact will it have on people's lives and making people aware of that.

The narrative needs to switch to say there is an altered climate now.

The 2012 potential drought situation was close to beginning to demonstrate that this was going to have a daily impact on people's situations.

It almost takes one of those extreme events to make people aware.

What measures should the Mayor pursue to address urban heat island effect? What can we do to ensure most vulnerable the Londoners are protected from heat risk (talking about transport, homes, workplace...)?

It does tie in very much to green infrastructure and retrofitting our cities.

We could decentralize employment. Everything is currently focussed on working in Central London. We need to move it out. If you move half of it to the periphery, transport goes in both directions etc...If you decentralize employment, it could have a big impact.

The Mayor has a budget for hard infrastructure. Why can't that be used for green infrastructure?

There is a gap here around new development and planning. An opportunity to look at potential requirements for planning. As we said if you are putting in a new build with lots of heat, there must be a way to model the contribution of that new development to local heat levels. If you can do that then you can talk about how you are going to mitigate that, be that through cooling or whether you integrate it into building itself. If you can't model that impact, then you are always guessing.

It is pretty weak as a policy. The ambition is there, but as designers, short of encouraging more green space, there nothing we can put in our designs to ensure policy is adhered to. Developments have huge effects not just in terms of heating external environments or overheating of residents in the building. Using air-conditioning has costs for residents.

We all know how much heat we produce. So we can estimate core heat a building can produce from number of people in it.

That is the least of our worries. The amount of glass in the building, or a communal heating system has a bigger impact.

This relates very much to design guides. This is where integration needs to happen with institutions like RIBA. GLA can't change everything overnight. Chartered institutions set the conditions for design. The GLA can't change building regulations but they can lobby for higher standards. They can't demand more than the building regulations but they can make sure they are respected.

In the last group we talked about the national policy landscape. But if we are looking out until 2050 and looking at what needs to change by then, we can start to think about what we need to do to make that happen.

And also what would happen if we don't do anything.

Yes, the Environment Agency looks at flood risk, what is the worst case scenario. And what do they need to put in place to manage flood risk. Do we need to do that with heat risk? Look at how bad it is going to be? Maybe by 2050 nobody will be able to come into London? We can start to map that a little bit and look at short medium and long-term actions.

Who are the real clients for this? Absolutely a risk approach is smart way of looking at the problems we need to solve, and who are the people to solve it. For example schools, public health managers. There will be a strand looking at summer deaths.

It will be a strength if you are looking at people other than the environment agency and looking at people outside the box. And then for a planner, looking at where you are going to make the most difference for the most people. NHS has lovely models to assess reach, it is good for making a business case. Putting together a really rough cut, pound spend in terms of value. A lot of it overestimated in terms of value though, because it takes macro level models.

We talked about main three risks, including surface water flooding.

What you mentioned is an adaptive pathways approach, if this happens with flood risk what would happen with this other risk.

So just to summaries our key points, we talked about:

- -An integrated approach, interaction with other policy areas, especially green infrastructure but also energy generation
- -Awareness of community groups, sharing good practice case studies, engaging community groups

We need communities to be recognised as stakeholders. I am hearing a lot that sounds like a top-down approach but we need to generate enthusiasm from below.

One thing about the integration aspect of policy that you might use as a support is looking at the way the EU set its ecosystems services strategy: designing for biodiversity as a way to increase climate resilience, and it had to be delivered across all the commissions. All commissions were responsible for delivering a green infrastructure strategy approach. I think it's happening at the GLA, and it's great, and also a good precedent at a much higher policy level. Your green infrastructure strategy becomes your biodiversity strategy and climate resilience strategy.

Thank you very much everyone.