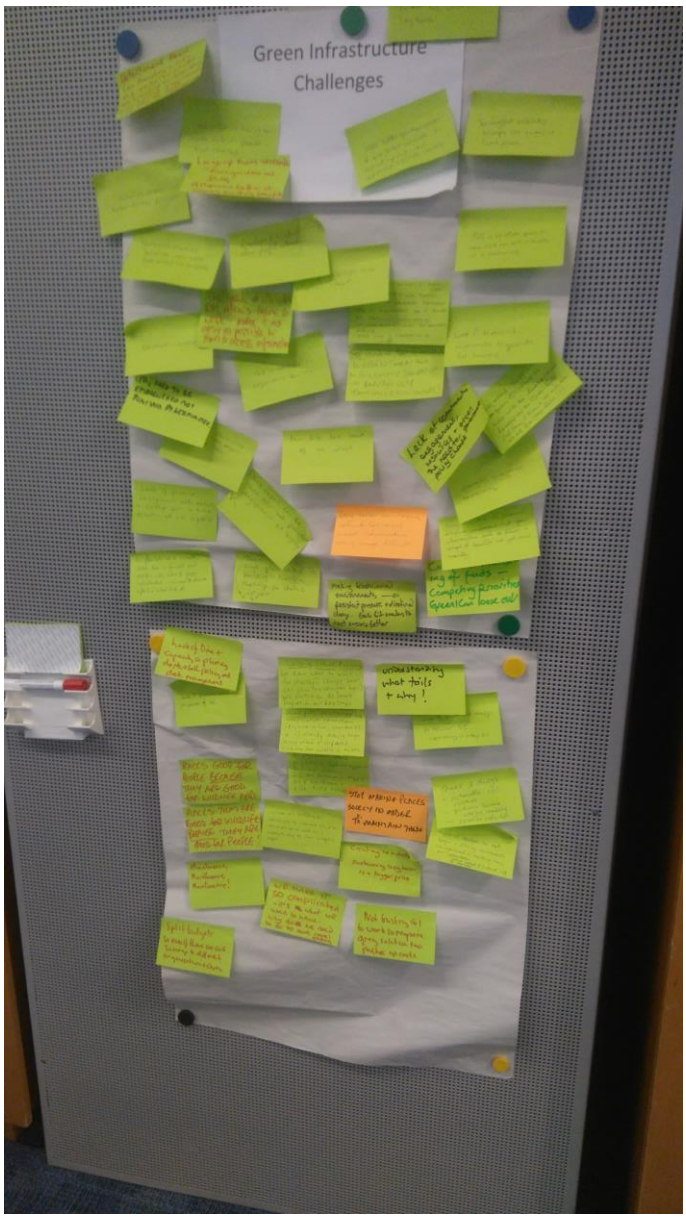
Green Infrastructure Workshop Small scale, big impact - retrofitting and enhancing green infrastructure 11th October 2017.

A series of flipcharts were used to capture participants views as to the key green infrastructure challenges and research priorities they saw. Below are the points captured on the flip charts which have been grouped into a series of themes. I have then looked at these and made some short comments as part of a wider discussion.



The following themes were identified within which specific challenges were identified.

1. **Green infrastructure as a constraint**
2. **Financing green infrastructure tools**
3. **Lack of resources**
4. **Lack of integrated training for built and natural environment professionals**
5. **The National Planning Policy Framework and direction of government policy**
6. **The need for both exemplar and cock up case studies**
7. **Putting the environment back into green infrastructure narratives.**
8. **Language**
9. **Usability and intelligibility of tools**
10. **Green Infrastructure delivery models**
11. **Beware silos including green infrastructure thinking**
12. **Lack of political imperative towards green infrastructure**
13. **Building and enhancing community engagement in green infrastructure**
14. **Current institutional practice**
15. **Negative impacts of green infrastructure**
16. **Other**

1. Green infrastructure as a constraint

- GI is often seen as an add on and viewed as a constraint.
- GI is seen as a regulatory burden
- Too often sold as a concept rather than a focussed and realistic alternative to grey infrastructure – we need to provide a focus on what it can do.
- Making sure that all professional disciplines understand that green infrastructure needs to deliver a range of benefits not just visual amenity.
- Getting developers to see the value – e.g. trees add value long term but are seen as expense to the developer initially.
- What benefits do we see when we move from protection of green spaces (Green Belt Local Green Space) to positive planning for GI?
- Not trusting GI to work so require grey solution too pushes up costs.

Comment.

The key issue here is the need to change the perception and this requires engaging with audiences that do not readily trust the benefits science or narrative. This suggests the need for more positive and demonstration sites/ plans .developments crucially with champions from the industry. The importance of peer group pressure should not be underestimated. We are talking about a culture change to see GI as an asset. The challenge therefore becomes one about improved communication and demonstration using real projects. Need to show the figures from GI developments that have occurred with long term monitoring (with measuring and tracking components built in).

2. Financing green infrastructure tools

- Our parks budget is in crisis please help.
- Detachment from Gov. funding and LA's. E.g. value in parks. No funding to maintain; LA's signing over powers to PFI to fund maintenance.
- Translating multiple benefits into cash that impact on budgets.
- Developing GI interest above profit interest.
- Lack of financial instruments to generate GI income.
- Complex matching of funds – competing priorities Green can lose out.
- Quantifying the cost-savings of Green Infrastructure v's grey e.g. SUDS
- Split Budgets - So even if there are cost savings to different organisations and Departments.
- Treasury Green book is a barrier to change.

Comment

There is a crisis in parks and the way they are counted for in local authority budgets. Whilst values can be assessed from natural capital assessments they do not create real monies that can be fed into existing budget lines. However there may be an inherent danger in trying to reduce GI to simply finance where profits made become the prime consideration as oppose to equity and health considerations. The cost forgone is difficult to feed into the costing food chain. There is however a lack of financial models to help generate GI income. Here perhaps wider application of Tax Incremental Financing offers a potential model albeit with caveats.

3. Lack of resources

- Lack of time and capacity in planning departments and both policy and development management.
- Lack of time to understand and engage with tools that are out there thus tend to gravitate to what can find or use own network

Comment

The issue of time is interesting as it prevents people steeping back and thinking about how to do things differently. The escalator is speeding along and it is difficult to get off. In such a pressured environment taking time to look at new ways of doing things is your enemy not your friend. There is a problem for anyone who is stressed for time embracing new concepts or even trying to understand them. The question is how do you break that circle.

4. Lack of integrated training for built and natural environment professionals

- Lack of planner training in value of GI.

- Lack of community engagement, resources and often the need for government policy change.

Comment

One interesting observation relates to the training of planners but does have wider applicability to the Farrell review[1] which is the need for a more generic built and natural environment training programme rather than the specialised silos that built environment professions seemingly have on their training. This also applies to the environmental sector which rarely considers the regulatory aspects and the role of the town and country planning system. Thus with greater integration the silo mentality might be reduced in practice?

5. The National Planning Policy Framework and direction of government policy

- The way that viability trumps GI quotas in local plans.
- Developer viability.
- We need support from GI ideas to help with the develop/don't develop on the Green Belt!
- LPA's need to be empowered not punished by Westminster.
- Changing governance frameworks.
- Unless its statutory for councils to implement GI it'll always be an add on and likely to drop off when budget is tight.
- We need support from GI ideas to help with the develop/don't develop on the Green Belt!

Comment

The issue of governance is key to the way GI is often trumped or not factored in. If net gain became a statutory requirement this could make great strides forward as would incorporation of ecosystem services components in the Treasury Green Book. Currently green infrastructure is not a statutory requirement being labelled as "should" within NPPF. There is a need for stronger NPPF to help this and to shape stronger GI policies in local plans. The regulatory framework does become key to fulfilling a lot of these changes when there is a severe strain on budgets and resources.

6. The need for both exemplar and cock up case studies

- What does good look like? Bio Action plans?
- Learning from projects that have been running for some time – revisiting.
- What can we learn from examples in Scotland and Wales and elsewhere
- Understanding what fails and why?

Comment

[1] Farrell Review http://farrellreview.co.uk/

There is always a focus on exemplars to show good practice but often this is at the expense of detailed studies of what goes wrong. In many ways learning the lessons from where things fail is actually really important as it helps identify ways of overcoming these. That is why the call for evidence on my web site is for these more than the good case studies which seem to abound.

7. Putting the environment back into green infrastructure narratives

- The importance of biodiversity to GI resilience.
- Climate Mitigation.
- Forest Gardens and schools.
- The invisible world of the soil biome and the rhizosphere and our power to intervene in urban soils.
- Stop insisting that it has to be GREEN and/or turn the POINTLESSLY DECORATIVE into BEAUTIFULLY ECOLOGICALLY FUNCTIONAL
- Re-wilding small urban spaces – lifecycle landscaping.
- The difference in maintenance cost between Grey - Green – Blue. Is it more expensive to green urban areas? Do interventions like wildflower banks add significant costs?
- Places good for people because they are good for wildlife and places that are good for wildlife are because they are good for people!

Comment

This was an important reaction to the way that green infrastructure is reduced to the benefits it provides but in so doing can hide the bigger picture. Equally there is also a quality issue which perhaps needs to be given higher priority.

8. Language

- Language more accessible – Raingardens, SUDS; Americans better at communicating benefits.
- Few folk have heard of the concept……

Comment

Perhaps the most common aspect of the language where green infrastructure as a concept is not always seen as helpful. For example blue infrastructure. However there are also a panoply of terms arising within green infrastructure which in themselves are not so easy to understand. However does this matter? One issue is the extent to which other initiatives like SMART cities do not necessarily engage with green infrastructure in the way it might. Thus does the language offer a barrier to such engagement.

9 Usability and intelligibility of tools

- I can't find relevant Research/Intelligence.
- Need better quantification of Ecosystem Services and natural capital into EXISTING SYSTEMS WE USE.
- Grouping tools in one place and making them compatible.
- The speed at which DM officers have to work – make it as easy as possible for them to access information. Currently too many tools and too few actually fit within the systems that DM planners actually use.

Comment

The issue of having too many tools to choose from is a common issue particularly as research tends to produce new tools and toolkits as tangible outputs. Tools can often work in bundles rather than as stand alones but who is able to see across the different platforms out there. There is a serious problem in that a lot of tools are being developed without the user being involved in the actual design.

10 Green Infrastructure delivery models

- Use countryside management partnership model as a sustainable way to deliver
- What are the key models that can be proposed to better manage GI. LA management is vulnerable.
- Developing innovative P.E.S Schemes involving GI.
- Lack of actual delivery. We don't have to wait for strategic change but can (and my colleague has) get started to do small projects on our own doorsteps which is funded through small pots, facilitated by imaginative connections (payback service, volunteers) and is already showing huge social value and improves visibility for wildlife in an area of deprivation while reigniting a natural approach to visitor economy. So the challenge is stepping out of the boardroom and conferences and into direct action!!
- Loss of front line staff to deliver GI. Too many strategies.

Comment

Delivery of green infrastructure is seen as a key challenge. This is bound up often with financial models to help realise the value of GI. However as well as the financial aspects there was also the agency aspects and it was interesting to note the idea of the countryside management approach as a way to ensure that green infrastructure is delivered though community led projects. Here the countryside manager is the link between the top down and the bottom up. Yet many countryside managers do not operate with the linkage between policy and decision makers and communities. In particular the planners are key link pin.

11. Beware silos including green infrastructure thinking

- Silos in public sector hinders progress.
- Integration is difficult to do when most systems are siloed.
- The value of green routes/connections; Added value of connecting green space with green routes; Functionality that green routes/connections provide v's routes along roads.

- Danger that green infrastructure movement is siloing itself.

Comment

At the heart of much of this thinking about mainstreaming green infrastructure is the problem of a silo mentality. This prevents substantive change and hinders integrative thinking. Thus it relies on people who are naturally predisposed towards this rather than through the system itself. Important to find examples of institutional change that have tried to operate on this level and to use this as a demonstrator and to show how gains might be delivered.

12. Lack of political imperative towards green infrastructure

- GI not as sexy as multimillion pound flood schemes.
- Long term maintenance contracts for council owed infrastructure making change difficult.
- There is not a single plant (or sign of wildlife) in or on this building that's a challenge for starters.
- Short term political agenda hinders GI which is long term.
- Making behavioural environments – persistent pressure and directional change. Each bit makes the next easier and better.

Comment

For change to happen there has to be political traction. At present the economy takes up most time with the industrial Strategy and economic growth considerations. However, air pollution and climate change are starting to provide hooks. Showing how investment in nature based solutions using green infrastructure might help this is key to engaging with councillors. At present there is limited engagement of researchers with councillors.

13. Building and enhancing community engagement in green infrastructure

- No discussion about how individuals fit into GI – what can people do for themselves?
- Getting the community onboard – Nay sayers always the most vocal. Nay sayers can be won over with proactive engagement at beginning.
- Look particularly how to structure/influence management plans for GI, given that they are increasingly falling to local communities and parish councils (via neighbourhood plans and also Local Authority policy which hands over GI and new GI to parish councils to adopt. Communities currently not well placed to cope in this context.
- How to design GI so its attractive for low income communities?

Comment

Green infrastructure can be often dominated by top down thinking rather than using the community as part of the asset base. |In many ways under localism there are enhanced opportunities for community ownership or management of green assets. However the financial and management obligations are not always understood. One key aspect is the extent to which deprived communities lacking access to green infrastructure are not being seen or heard. They need support but there is a lack of people on the ground to link need to actual delivery.

14. Current institutional practice

- Need to think about the way our current systems for land valuation are calculated.
- Long term maintenance contracts for council owed infrastructure making change difficult.
- There is not a single plant (or sign of wildlife) in or on this building that's a challenge for starters.
- Lack of genuine engagement with nature and wildlife even in these debates we are forgetting!
- Failure of developers to meet design and planning commitments. No enforcement or monitoring means poor implementation – sedum instead of biodiverse roof for example.
- Maintenance, Maintenance, Maintenance.
- Stop making places solely in order to maintain them.

Comment

Is the status quo acceptable. The way that we value, assess costs and benefits and engage with nature is still rooted in traditional economic thinking when it comes to policy and decisions. Yet there are tools and methodologies out there that challenge this but the status quo still perseveres. There are those who argue that regulatory changes are the only way and others who say that incentives are needed. I tend to think we need a bundle of tools that help guide people down a direction that maximises societal benefits. Ironically this takes us back to the roots of the planning system where the great visionaries of the time like Howard designed healthy garden cities. Perhaps it is time to revisit this.

15. Negative impacts of green infrastructure

- What about the negatives? 1) Safety 2) Allergies

Comment

Really useful observation that for some people green spaces can be a health hazard. Ironically this is worse in urban areas where dust and pollen combine perhaps. How is this being dealt with.

OTHER

- The Power of Punctuated Intervention!
- Creating is a challenge, sustaining long term is a bigger prize.

Green Infrastructure Research Priorities

- We make it so complicated. It's what we used to have. Why do we need to do so much navel gazing?
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- Mental Health and well being
- Agro ecology
- Green Infrastructure disbenefits
- Why we get hung up on maintenance when wilder areas reduce maintenance costs.
- Agroecology.
- The difference in maintenance cost between Grey - Green – Blue. Is it more expensive to green urban areas? Do interventions like wildflower banks add significant costs?
- Impact on communities – 1) Social 2) Physical 3) Health
- Climate change and health.
- Mental health for children and young people.
- Integrated delivery – how
- 1)Long-term 2) Quality 3) Maintenance.
- 3D GI!!! We need to think about vertical structure and differentiation (2m, 5m, 10m, 25m) as well as planform!

Comment

The key lesson here is the need to move away from simply developing new tools but to coproduce tools that can be used in the systems that policy and decision makers actually use. Is research engaged in too much navel gazing where we calculate square root of natural capital baked bean cans rather than open them.

Interesting that one research priority is about using visualisation techniques to help show the value of green infrastructure. Linking the issue of rewilding as part of urban green infrastructure is potentially interesting and not fully researched. It will be interesting to see how any researchers out there are working in these areas. Let me know.